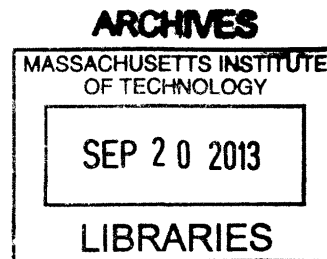


Expanding Transportation Planning Capacity in Cities of the Global South: Public-Private Collaboration and Conflict in Chile and Mexico

by

Onesimo A. Flores Dewey

Master in Public Policy
Harvard University, 2007



Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Urban and Regional Planning

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Abstract

What makes it possible for the governments of cities limited by scarce fiscal resources and weak institutions to enhance their transportation planning and regulatory capacities so as to provide the public with cleaner, safer, efficient, and reliable public transit alternatives? Such aims are particularly challenging for cities of the developing world, not just because of resource scarcities, but also because in these contexts a quasi-informal network of privately owned transport operators has been historically responsible for satisfying most of the public's mobility needs with minimal intervention from the state. As such, these are the cities where a comprehensive approach to transport planning and regulation may be most urgently needed. Congestion, air pollution, traffic accident fatalities, petty crime, and mobility deprivation of the handicapped and the elderly already define what it means to live and move in most cities of the developing world. Yet many local governments in these locales seem ill-equipped to tackle such "second order" transport-related challenges effectively, even as they continue to get worse.

This dissertation uses the cases of Mexico City and Santiago, Chile to explore this question. Both cities followed similar strategies of forcing and fostering industry compliance, and introducing bus rapid transit (BRT) as the basis for introducing state monitoring and management of private bus provision. Metrobús in Mexico City and Transantiago in Santiago unsettled the pre-existing private bus industry, composed of thousands of smallscale entrepreneurs organized around powerful associations, which were initially resistant to participate. In the course of implementation, this industry transitioned toward financially stronger, professional private players, and the capacity of authorities to pursue second order transport policy objectives increased. Urban transportation planning capacities emerged much more advanced, however, in Santiago. The question is why? Drawing on a historical analysis of the evolving relationship between public and private stakeholders as well as from 64 interviews with government authorities and transport operators, this thesis analyzes the factors that account for the different outcomes and suggests that expanding planning capacity in the context of scarce resources and weak institutions depends on the ability to nurture and sustain accountable public-private collaboration.

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Chapter 1: Introduction

What makes it possible for the governments of cities limited by scarce fiscal resources, weak institutions and a vast low-income, transit-dependent population to enhance their transportation planning and regulatory capacities so as to provide the public with cleaner, safer, affordable, efficient, and reliable public transit alternatives? Such aims are particularly challenging for cities of the developing world, not just because of resource scarcities, but also because in these contexts a quasi-informal, loosely regulated network of privately owned transport operators has been historically responsible for satisfying most of the public's mobility needs, often with minimal guidance or control from the state. As such, these are the cities where a comprehensive approach to transport planning and regulation may be most urgently needed. Congestion, air pollution, traffic accident fatalities, petty crime, and mobility deprivation of the handicapped and the elderly already define what it means to live and move in most cities of the developing world. Yet many local governments in these locales seem ill-equipped to tackle such "second order" transport-related challenges effectively, even as they continue to get worse.

These concerns raise questions about the conditions under which governing authorities will effectively expand their actions beyond merely tolerating a "traditional" private industry that delivers minimally acceptable mobility standards, to implementing a range of more systemic improvements in the city-wide supply of public transport services so as to eventually achieve broader transportation planning goals. Can governments accomplish such aims without destroying the delicate relationships forged with existing transport suppliers, particularly when such relationships are mediated by transport providers' desires for fares hikes and/or increasing public subsidies to cover the costs of such expanded service? And to what extent will the "traditional" urban transportation industry resist or adapt to both the government's regulatory demands and its concerted efforts to expand its transportation planning capacity?

Using the cases of Mexico City and Santiago, this thesis examines the protracted and conflictual negotiations between public authorities and "traditional" private operators over a series of state-imposed urban transportation reforms, seeking to understand how these negotiations and conflicts affected the government's transportation planning and regulatory capacities. Both of these major Latin American cities recently undertook significant

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transportation reforms intended to introduce bus rapid transit (BRT),¹ inspired by the early success of Curitiba, Brazil in using such policies to modernize their transport system and increase government-planning capacity. In both cases, an automated payment system was implemented; newer, cleaner and larger vehicles were introduced; and the pre-existing route grid was adapted to a trunk a feeder model, with bus priority measures established in high demand corridors and better coordination with the existing subway. In both cities, the price of fares paid by the public and the subsidy requirements from the state increased as a result of implementation of these reforms. And in both cities, these projects unsettled the pre-existing “traditional” private bus industry, comprised in both places of thousands of small-scale entrepreneurs organized around powerful trade associations, and initially resistant to participation. As part of these reforms, the bus industry “modernized,” transitioning vehicle owner associations into financially stronger, more professional, and corporatized private transport companies. Nonetheless, reforms in Mexico City only affected the areas immediately surrounding the selected corridors, while reforms in Santiago were applied citywide, thus enabling a more integrated and sustainable transport network. Moreover, despite a significantly rocky start, Santiago’s new bus network enabled physical and fare integration with the existing subway, putting this city in a much better position to tackle second order functions of transport policy: the number of traffic accidents featuring public transport vehicles, the number of criminal events taking place onboard buses, and the contribution of public transport to air pollution in Santiago have all sharply decreased, and authorities are able to enforce increasingly stringent standards on the private operators of the service. In contrast, Mexico City’s success in using BRT as a basis for achieving the government’s larger transport-planning aims remains limited. The government has been unable to extend the BRT model beyond a few corridors, and even within the new system the capacity of the government to pursue increasingly stringent service standards is limited. In other words, while both technological improvements and industry “modernization” have begun to take place in Mexico City, it is not clear that its government’s planning and regulatory capacities have expanded to its full potential in the ways evidenced by the Chilean case. Such outcomes suggest

¹ There are multiple definitions of what constitutes BRT. One that distinguishes this technology relative to the “traditional” bus operations commonly offered in cities of the global south is authored by Dario Hidalgo: “BRT refers to the systematic combination of infrastructure (e.g. busways, stations, terminals) and vehicles, with well-organized operations and ‘intelligent transportation’ technologies. By combining these various elements, BRT is able to provide better service and greater efficiency than is possible with traditional bus operations” (Hidalgo 2008).

that, despite having similar goals and sources of inspiration, including embrace of BRT, transportation-planning capacity seems to have been more territorially expansive and industry-transforming in Santiago than in Mexico City, thus signaling greater effectiveness – or greater transportation planning capacity – in Chile than in Mexico. The question is: why?

In this thesis I seek to identify the forces and conditions that account for the different outcomes in the two cities. I not only focus on a range of factors that affected the willingness and capacity of governing authorities to impose broader reforms of the transportation industry, BRT-related and otherwise. I also examine the willingness and capacity of the private transport industry to push back against government efforts to discipline them as well as to institutionalize larger systemic reforms in transportation services. In assessing the capacity of the Santiago and Mexico City authorities to impose their will on uncooperative transport providers, I explore 1) the larger political and institutional context of governance – both local and national; 2) the historical relationship of transport providers to governing authorities; 3) the nature of the bus industry structure and the role of labor unions within them; and 4) the social, spatial, and economic variables that both inspired authorities to reform the transport system and that, in turn, molded transport provider's eventual support or rejection of these efforts. Through this analysis, my aim is to understand the constellation of factors that allowed Santiago authorities to move beyond the first-order task of merely monitoring or disciplining individual transport providers so as to achieve a second-order regulatory capacity capable of sustaining larger transportation planning goals at the level of the city as a whole.

In what follows, I briefly outline the challenge of planning and regulating public transportation in the context of weak institutional and fiscal capacity, establish the rationale for selecting these particular cases, and summarize the research method employed. Subsequent chapters lay out in vast detail the phenomenology of government efforts to expand transport planning and regulatory capacities in each city, starting with Mexico City and then turning to Santiago. A final chapter draws out similarities and differences in the cases, and concludes with some planning-theoretic principles that will help local authorities in the developing world better expand their transportation-planning capacity.

Understanding the challenge of transportation planning and regulation in cities of the global south

High fares,² substantial public subsidies³ and strong regulatory capacity have enabled the governments of cities in Europe – and to a lesser degree in the USA and Canada – to achieve second-order goals of transport policy, even in the face of ridership decline due to mass motorization. The tight regulatory framework and the sheer amount of public money invested in these regions of the world are historically such that it comes as no surprise that their transit systems are overwhelmingly under public ownership or under closely scrutinized private provision.⁴ Control over rules and availability of money have provided these governments with leverage over operators, manifest in the high degree of integration between modes, routes and fares and in the widespread adoption of common tariffs and ticketing systems, which together suggest an ability to rationalize service supply and allocate resources in accordance with public priorities. This leverage also has enabled governments to mandate costly service standards (such as vehicles with lower pollutant emissions and infrastructure fully accessible to users with disabilities), and in the case of Europe also to influence the design of the network to fit land use and economic development plans. In other words, and notwithstanding many challenges, the governments of the more developed regions of the world seem to have retained a great deal of planning and regulatory capacity to direct transport policy toward non-mobility goals.

To be sure, the extent to which authorities from wealthy cities can financially sustain high quality, integrated and continuously improving public transit services is not without limits, as demonstrated in many cities of the USA. With large portions of the population independent of public transport services, local authorities have only partial power to attract the private sector into public service provision, except through the use of politically unacceptable levels of subsidy. However, what is distinct from what occurs in many of the cities in the global south is that, even

2 As mere reference, a recent report compared the price of public transportation fares in Latin American and European cities. The average price of fares in the 15 Latin American cities surveyed was US \$0.63/trip. In contrast, the average price of fares in the nine European cities surveyed was US \$1.53/trip (Corporación Andina de Fomento 2010, 85).

3 Fare-box revenue in European cities covers only a fraction of the total operational cost of their public transit systems: for example, Brussels (31%), Amsterdam (38%), Paris (40%), and Barcelona (56%). In contrast, there are few cities in Latin America that subsidize public transit operation, and subsidies are mostly restricted to subways (although more recently bus rapid transit and integrated bus systems are increasingly subsidized) (Corporación Andina de Fomento 2010, 88).

4 See Pucher and Lefevre, 1996; Jones, 2008. For a discussion on how European cities in the UK, France, Norway and the Netherlands are promoting tightly regulated private provision of transport services see Gwilliam, 2008.

after exhausting their ability to increase fares and subsidies, public authorities from cities in relatively richer and institutionally more robust nations seem to have been able to make the tradeoffs necessary to retain their capacity to pursue non-mobility goals, *even* when these choices constrain their capacity to meet their basic mobility obligation to users. Cities in the USA and Europe often respond to budgetary crises by reducing the quantity of public transport services (e.g., limiting service frequencies or shortening bus routes) and *not* by relaxing norms and standards that govern the services still in operation (e.g., lowering vehicle emission or handicapped accessibility standards).⁵ That is, on occasion, their governments are able to privilege second-order policy objectives, a key indicator of planning and regulatory capacity. In contrast, the governments in many cities of the global south face severe constraints to make even minor tradeoffs to pursue second order objectives, much less to establish a functioning public transit system that *simultaneously* and effectively pursues both mobility and non-mobility transport policy goals. In other words, the prioritization of first-order over second-order transportation policy goals in the cities of the global south does not necessarily reflect only a sensible hierarchy emerging from state-crafted plans and regulations, but the incapacity of public authorities to influence the behavior of the private sector and to hold it accountable.

Even so, despite increasing recognition among political leaders of the potential of transportation policy to pursue environmental sustainability, equity and economic development, authorities in many cities of the global south face three interrelated and apparently insurmountable obstacles, which do not haunt their counterparts in the global north with equal force:⁶ *first*, public concern in poorer nations is much more focused around poverty reduction than on “second-order” issues such as protecting the environment. There *is* a hierarchy of human needs and limited resources to satisfy them, and thus attempts to use public funds to cover more than the most basic operational public transit deficits will be politically contentious and likely dismissed as an unaffordable luxury. In addition to overburdened budgets, governments face competing (and more pressing) expenditure priorities that make spending on public transit seem

5 Partially guiding this choice are the high motorization rates, which lead government authorities to conclude that public transit can only compete against the private auto with superior quality service – even when coverage is limited to core districts. Another explanation is that national legislation imposes this choice on local authorities. However, I still consider them “choices,” at least in a broad sense. Developing world cities face similar legal mandates, but, lacking funds or regulatory capacity to comply, these laws are often ignored.

6 For a longer discussion on why the challenge of implementing transport policy is different in the global south, see Gwilliam, 1997.

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superfluous.⁷ *Second*, the weakness of the fiscal system implies that a significant share of the money necessary to sustain an ambitious transport agenda would probably need to come from fare increases. However, raising fares to the point required to sustain high quality service and to pursue socially-oriented goals is socially and politically unfeasible due to the predominance of a poverty-stricken, transit-dependent population, who would find themselves priced out of the system, and who would therefore mobilize against reform efforts.⁸ And *third*, inadequate administrative capacity limits the effectiveness of regulation. As many scholars have noted, establishing strict norms and superior quality transport standards makes little difference amidst “ineffective governance systems characterized by low efficiency, corruption, poor management” (Chen 2013, 9) and “lack of sophistication in the regulatory framework and the low capability of institutions” (Meakin 2002, 19).⁹ In sum, public authorities of many of the cities in the developing world lack control over money and rules, the critical levers to negotiate the inclusion of second-order concerns into the standards of service supplied by private operators. It is perhaps for this reason that authorities can't easily take advantage of the windows of opportunity that periodically emerge such as the election of new governments, to put more ambitious goals on the table.¹⁰

Wilkinson (2010, 387), studying bus transportation reform in the context of South African cities, describes a “regulatory cycle stalled.” He identifies institutional failure, private operator opposition, and the lack of “an appropriately mandated and resourced agency to drive forward the transformation project” as the causes progress on “wide-ranging and ambitious proposals for the comprehensive implementation of public transport systems...has been, at best, much delayed.” His framing suggests immobility – a disempowered authority doomed to disappear as a relevant actor – and is perhaps appropriate when taking the standpoint of an

7 For an extended discussion on how public transport subsidies are not necessarily “pro-poor” see Gomez Lobo, 2009.

8 See Torres-Montoya, 2008 for an example of public authorities postponing fare increases to benefit low income riders.

9 For two examples of the impact of administrative capacity on the likelihood of success of transport planning in Bogotá, Colombia, see Ardila, 2002.

10 This does not mean that government authorities and transport operators cease to negotiate with transport operators, but only that negotiation is constrained to maintaining the operation of the existing system, rather than to exploring ways to transform it into a tool for sustainable urban planning. In fact, savvy authorities working under these conditions often prefer to postpone negotiations rather than embracing them. They realize that recurring value-claiming conflict with private transport operators regarding money and rules can in fact diminish the government’s regulatory capacity, reducing rather than enhancing their ability to tackle the vexing problems confronting their cities.

external observer. However, if we analyze the challenge from the perspective of a public official, much is actually happening. Transport operators threaten to strike and demand a fare increase, which authorities cannot approve without alienating much of the public, and thus what ensues is a protracted period of negotiation in which both sides come to terms: A smaller fare increase, or better yet a small public subsidy, in exchange for the relaxation of some of the rules, such as the maximum vehicle age allowable for buses. Put succinctly, “the problem in developing countries is thus much less that of how to maintain a public transport service as an alternative to the car through the deployment of subsidies and much more that of how to best serve the needs of the poor without subsidy.”¹¹ Of course, the needs of the poor are framed narrowly, only as maintaining a minimally acceptable mobility alternative, while the second order functions of public transportation policy, such as protecting air quality, are jettisoned.

Lacking financial and regulatory “muscle” to negotiate more ambitious policies, the public transport systems in many developing world cities are pulled into what Bayliss referred to as “the para-transit domain,”¹² an apparently inescapable combination of low public funding and weak regulation. The state essentially retreats, reducing public transport services to a private transaction between consumers and suppliers. It is in this domain where the government’s planning and regulatory capacity to guarantee good quality, integrated, and continuously improving transit service is most constrained and where pursuing anything beyond mobility goals has often seemed nearly impossible.

The road to under-funded and under-regulated public transit service.

The public transport systems of the larger cities of the global south, such as Mexico City, Santiago, Bogotá, Lima, Sao Paulo and Buenos Aires, have a similar origin to systems in cities in the developed world. During the later years of the 19th century and the early years of the 20th, private businessmen identified market demand for this service, and began offering it to the public with little initial intervention from the state. Their horse-drawn streetcars were soon replaced by electric powered trolleys, typically run by privately-owned utility companies, often awarded concession contracts in exchange for public investment commitments.¹³ As competition from

¹¹ See Gwilliam, 1997, 173.

¹² See Bayliss, 2000.

¹³ For example, in the case of Mexico City, the British owned *Compañía de Tranvías* committed to pave the streets on which its trolleys operated.

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the private automobile increased, however, and as the development patterns of cities decoupled from trolley tracks, these companies started to lose ridership. Some of them attempted to migrate from trolleys to buses, but this move proved insufficient to curb accelerating decline. Soon, many of these private companies were bankrupt and the quality of their services floundering.¹⁴ While in the US this process was usually accelerated by the reluctance of public authorities to grant fare increases, in turn attributable to expected voter resistance, in the case of Latin America contentious labor relations with trolley-worker unions also played an important role. It is in this period of crisis that the public sector emerged as a more active participant in public transportation, negotiating over money and rules with transport operators with the objective of preventing service disruptions and maintaining a properly-functioning system. Governments demanded better services, and in turn private operators pleaded for financial bailouts in the form of tax breaks, subsidies, or higher fares. The typical outcome in cities across the world, including the larger cities of the global south, was a period of intense conflict, after which governments took over these private transit companies, either by purchasing or expropriating them.¹⁵

To be sure, publicly owned public transport companies faced significant problems, even when formally enjoying a monopoly over transit service. During much of the 20th century, cities in the global south grew at an accelerated pace, both spatially and demographically, and their transit companies proved increasingly unable to keep up with demand. We must of course situate this discussion historically within the broader context of industrialization, economic development, rapid urbanization (social and spatial), and the consequent debt crisis which brought inequality and reduced incomes for the poor in many cities of the global south. At least in Latin America, modernization brought further displacement of the poor to the periphery of the cities, significantly complicating transport-service delivery needs. This combined with poorly incentivized administrators, bureaucratic decision-making, complicated labor relations and spiraling financial deficits due to the difficulties to raise fares or increase subsidies, resulted in inadequate levels of service. In developed countries, auto ownership provided citizens with an alternative to escape from underperforming transit companies. In many of the rapidly-growing cities of the global south (where private cars remained scarce and unaffordable to the majority),

14 For a historic look at the linkage between dominant transportation technologies and urban land use, see Muller, 2004.

15 For detailed examples, see the case of New York City in Schrag (Schrag 2000) or of Mexico City in Davis (Davis 1994) and (Ribera Carbo 2012).

informal private operators covered the slack, offering a viable option to cover the public's mobility needs.

Transportation authorities in many of the larger cities of the global south certainly sought to retain their planning and regulatory capacities but only partly succeeded. Many concentrated their resources on replicating the experiences of cities such as London and New York, whose governments operated high quality, albeit costly and geographically circumscribed subway services.¹⁶ To be sure, several subway systems emerged in Latin America in the sixties and seventies: Mexico City, Sao Paulo, Santiago and Rio de Janeiro inaugurated theirs in this period. This focus on the subway, however, had the unintended consequence of reinforcing the fragmentation of the bus industry. As public authorities invested scarce resources to build and operate incipient subway networks, the need to tolerate an informal (but unsubsidized) private surface transport industry grew. In many cities, this industry was essentially deregulated and privatized. Existing public subsidies were redirected to the subway, and the incipient integration between modes, routes and fares abandoned. Either as a deliberate government policy or as the inevitable consequence of the decline and collapse of public bus companies, public transport in many cities in the developing world became segregated in two coexisting service regimes: one publicly owned, heavily subsidized and highly standardized, usually the subway, and the other privately run, under-financed and unregulated, usually the buses. Both systems competed rather than complemented each other. In many cities, a large number of private entrepreneurs owning as few as one or two minibuses served unmet passenger demand, offering a minimally acceptable transportation alternative to the public without initially demanding higher fares from users or requiring public subsidies from the government. Even if initially inclined to promote the bus market for formal private sector investment, public authorities could not ignore the ubiquitous presence of informal operators. Not only was there a paucity of experienced, professional and well-capitalized private sector operators willing to participate, but now both the public policy makers and the prospective entrants that existed were deterred by the likely competition from hundreds, sometimes thousands, of informal bus operators, ready to challenge regulatory oversight and predisposed to accept low fares in exchange for their services. Given this context,

¹⁶ This was partly a consequence of pressure from landowners, who thought that the subway would be much more effective than the buses in triggering rapid land valorization in the periphery, *especially* if the government picked up the bill (Davis 1994).

authorities often ended up “tolerating” informally supplied services, and gradually extending the required authorizations to them.

These private bus operators gradually coalesced as organizations to demand bureaucratic recognition and fare hikes, coordinate services, pool resources, limit competition and protect their informal property rights over transit routes.¹⁷ Meakin (2002, 19) notes how, amidst the existing “regulatory vacuum,” increasingly powerful operator associations “assume rights, which then become entrenched, and which they defend”. The leaders of these organizations soon claimed their seat at the table, becoming a critical private sector counterpart in any governmental attempt to reform transport policy. As this scholar put it, pragmatic authorities in many of these cities recognized that a viable alternative was simply to license service to these informal operators and to defer regulatory authority “to the route organizations, using them as intermediaries”. Essentially, they became a powerful cartel, “demonstrably more powerful than transit users in their ability to prevent regulation and to obtain government decisions that benefit[ed] them” (Chauvín, 2007, 14).¹⁸

Partially to prevent fare increases or demands for public subsidies, and partially to acknowledge a reality already on the ground, the number of licenses was typically not strictly limited, and the vehicle standards and norms governing service remained lax. Many leaders of bus operator organization embraced these lax rules and promoted the entry of more vehicles into the market, affiliated to their organizations of course. Such strategy certainly made the business less profitable for individual vehicle owners, but their organizations thrived. Not only did their revenues increase since these organizations collect dues and commissions from each additional member, but the added on-street competition dissuaded competing organizations and large capitalists from entering “their” territories. The combination of low labor costs and low capital investment required to participate in this market ensured that the resulting system served a large share of passenger demand despite low fares and limited public subsidy. In many cases, the low barriers to entry resulted in a significant surge in the number of buses in the streets and in the development of a dense route network that reached the farthest corners of the cities. The

17 For discussions on this topic, see de Soto, 1989, chapter 4; Gómez-Ibañez, 1992, 35; Cervero, 1998, 394.

18 This decision was of course often embedded in a culture of political clientelism and taken in a context when these countries had other pressing problems to attend to. However, the result actually amounts to a new negotiation with private operators over money and rules: low, unsubsidized fares in exchange for soft rules and little oversight.

resulting regime of low public investment and low regulation, the “para-transit domain,” is characterized by competition *in* the market, where many vehicle owner-operators engage in cut-throat, curbside competition for passengers, as opposed to competition *for* the market, where larger-scale private operators compete for area-based or route-based contracts.¹⁹

Even after being licensed, small-scale operators often retain many of their “informal” traits. In fact, part of their capacity to offer a low fare is based on their ability to avoid costs usually internalized by “formal” public or private competitors. They avoid taxes, skimp on worker’s benefits, under-maintain their units, fail to comply with vehicle emission standards, etc. As noted by several scholars,²⁰ the laxity of enforcement of labor, fiscal and other codes enables urban micro-enterprises to choose their degree of participation in formal institutions. Government authorities are usually aware of all of this but have little incentive to enforce or tighten existing regulation, since strict observance would likely put pressure on the price of fares or trigger demands for subsidies. Further, these private operator associations can soon exert a powerful influence over the system. They may shape the rules by capturing regulators, by threatening authorities with service lockouts and street blockades, or by negotiating “street-level” service standards among themselves. Further, they control the fare-box, which makes it very difficult to financially reward or punish good or bad performance, placing the government at a significant regulatory disadvantage. In fact, authorities often lack basic information regarding the current supply of services, i.e., who drives what vehicle in which route under what permit, and about the profitability of their operations.²¹ In such conditions, it is the associations of private operators and not the government that is best placed to determine transport policy.

19 For discussions about competition in the market vs competition for the market see Estache and Gomez-Lobo, 2005; Ardila, 2008.

20 See for example Maloney, 2004; de Soto, 1989.

21 See Vasconcellos, 2001.

Breaking out of the money and rules dilemma in cities of the global south: From a successful case to a replicable model?

Despite the dire scenario described above and inspired by a few high profile cases, authorities in cities across Latin America,²² Africa²³ and Southeast Asia²⁴ have recently pursued ambitious public transport reforms to address the problems of balancing money and rules.²⁵ Central to their efforts is the combination of “low-cost, high impact and rapid deployment, sustainable transport actions” (Hidalgo and Huizenga, 2013, 76) usually including the implementation of bus rapid transit corridors, with the pursuit of new, reenergized partnerships with private bus operators. Academics and practitioners alike have embraced these experiences as examples that “much-improved transit systems can be implemented around the world” (Schipper and Fulton, 2002, 49), pointing to them as powerful evidence that *despite* weak institutions and limited budgets, governments “attempt to break out of the ‘savage cycle’ of public transit” (Corporación Andina de Fomento, 2010, 24) and can “establish effective regulatory control over largely privatized transit systems” (Hook, 2005, 184). A long-absent hopeful tone returned to the field, leading some to predict a “public transport renaissance.”²⁶ The turn of the tide can be traced back to reforms first implemented in Curitiba, the mid-sized capital city of the State of Paraná, in southern Brazil, where progressive administrators “gradually institutionalized” “a style of urban development based on a preference for public transportation over the private automobile, working with the environment instead of against it” (Rabinovitch and Leitman 1996, 47).

Between 1971 and 1995, a long succession of governments in Curitiba reestablished and enhanced their ability to plan, regulate and finance public transit services, transforming a fragmented system featuring informal business practices and limited state capacity into a city-wide, integrated transit system, operated by a small number of corporatized transport

22 See Hidalgo and Graftieaux, 2008; Hidalgo and Carrigan, 2010.

23 See for example the cases of Johannesburg (McCaul and Ntuli 2012; Venter 2013), and Lagos, Nigeria (Gauthier and Weinstock 2010).

24 See Ernst and Sutomo, 2010; Ernst, 2005; Matsumoto, 2006.

25 See Hidalgo and Carrigan, 2010.

26 See Wright, 2010.

companies²⁷ that respond not only to the mobility needs of the population, but also to second-order goals of public transport determined by city authorities. To be sure, Curitiba initially developed its program under mayors appointed by a military dictatorship, which lasted from 1964 to 1985. However, as the country and the city progressed towards democratization, this ambitious vision remained in place, and was embraced by the incumbent private industry. Through protracted conflict and negotiation, the governments of Curitiba succeeded in crafting increasingly cooperative partnerships with an incumbent public transport operator industry that transitioned from “traditional” to “modern” organizational structures.²⁸ Developing this partnership included granting exclusive contracts non-competitively to the associations of incumbent operators, subsidizing and underwriting new vehicle purchases, and authorizing fare increases, while periodically threatening to take these benefits away (or offering to extend them) to ensure cooperation. With traditional private operators eventually enlisted as allies, many of the financial and political barriers for reform were significantly lowered. Soon, negotiations between authorities and operators were no longer restricted to claiming larger shares of the fare box and subsidy pies but about how to make the pie larger for all to benefit. Conflict persisted of course, but the relationship took an observable positive turn: Curitiba became a living laboratory that welcomed experimentation and spawned innovations that truly unsettled the industry.

The outcome of several decades of public-private collaboration in this city was not only a well functioning mobility alternative for its population, but measurable successes in terms of the second-order goals of transport policy. At least when compared to other cities in the continent, Curitiba remains the undeniable leader in confronting the negative externalities associated with individual transport decisions. Comparing 17 Latin American cities surveyed by CAF, Hidalgo and Huizenga (2013, 70) find Curitiba to be “the city with the smallest aggregated externalities per person” based on accidents, pollution and travel times.²⁹ The Economist Intelligence Unit refers to this city as “the longstanding pioneer in the region”, ranking it as “the clear leader” in its Green City Index (Economist Intelligence Unit 2010). In addition, Curitiba is “arguably the purest example of integrating transit and land use anywhere in the world” (Cervero 1998, 274),

27 For details on the history of bus reform in Curitiba, please refer to Ardila, 2004; Hensher, 2007; Lindau, Hidalgo, and Facchini, 2010; de Oliveira, 2000.

28 Direct references to this transition are found in Arturo Ardila’s excellent dissertation (2004, Part 2), as well as in Hook, 2005, 187; de Oliveira, 2000, 143.

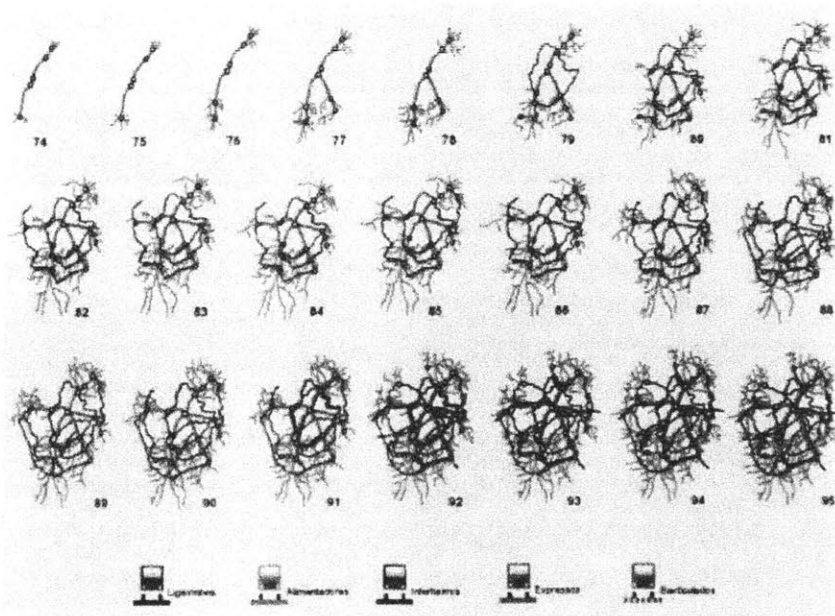
29 The cities surveyed by CAF (2010) were Belo Horizonte, Bogotá, Buenos Aires, Caracas, México City, Curitiba, Guadalajara, León, Lima, Montevideo, Porto Alegre, Rio de Janeiro, San Jose, Santiago and Sao Paulo.

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with a proactive government demonstrably able to use public transit as a tool to shape how and

where the city grows.

Fig. 1.1 Evolution of the Integrated Transit Network of Curitiba, 1974-1995



Source: URBS, retrieved from Ardila, 2004, 144.

Efforts to replicate the Curitiba success story emerged in Quito, Ecuador in 1995 and in Bogotá, Colombia in 1999. In both of these cities, entrepreneurial mayors implemented a few bus rapid transit corridors, drawing from the most conspicuous (but certainly not the only) innovation developed in Curitiba. The principle underpinning BRT is simple: Improving the appeal and performance of bus-based public

transport by enhancing it with features typically associated with more expensive rail-based transit modes -such as larger vehicles with multiple doors, dedicated rights of way, electronic ticketing, dignified stations and institutional branding. As former Mayor of Curitiba Jaime Lerner explained during a TED Conference in March 2007, the purpose of BRT is to “metro-nize the bus.” This technological innovation significantly reduced the financial investment required to

deliver high quality mass transit,³⁰ increased the appeal of the bus among the public,³¹ and perhaps more importantly, redefined the ability of authorities to regulate the system. At least in the critical corridors selected for BRT, the governments of Quito³² and Bogotá invested heavily in infrastructure (e.g., building stations, busways, etc), concentrated subsidies (e.g., underwriting loans to purchase appropriate vehicles or complementing fare-box revenue) and revamped the rules governing service (awarding new concession contracts to manage a new ticketing system and/or to operate new buses). The often tense process of negotiation to determine who would pay for what, who would be entitled to operate in the selected corridors, how the transition would be managed and what rules would govern the new services, worked as a sort of Trojan horse to reinvent the terms of the relationship linking public authorities and private transport operators. It

30 While estimates vary, the literature suggests that BRT systems cost significantly less to build than rail-based alternatives and generate significantly lower negative externalities than deregulated, artisanal bus services. For example, Zhang (2009) found that on average BRT costs \$10.24 million (in 1990 dollars) per mile to build, less than half of light rail (\$26.4 million) and less than one-tenth of mass rapid transit (\$128.2 million). In the same vein, Wright and Hook compared the capital cost of building different transit modes in Bangkok. They found that for the same level of investment, that city could build 7 kilometers of subway, 14 kilometers of elevated rail, 40 kilometers of light rail or 426 kilometers of BRT (2007, 55-56). For a review of the literature comparing costs and benefits across different transit modes also see Hensher, 2007; and Sorg, 2011.

31 One way to prove this is to assess if properties surrounding BRT stations appreciate as a result of implementation. This evidence is starting to emerge, for example Rodriguez and Targa, 2004; Rodriguez and Mojica, 2009; Cervero and Kang, 2011.

32 In the case of Quito, municipal authorities, who had only recently gained responsibility over public transport regulation, decided to use BRT to send a forceful message to both the public and the incumbent transport industry. In the words of Cesar Arias, chief planner of this project, “we needed a project capable of breaking with all past inertias, and conspicuous enough for people and operators to realize the municipality was in charge” (Personal interview, October 2010). The original plan was to yield operation of the new system to a consolidated firm formed by the historic operators serving this corridor, but this option was quickly dismissed. First, operators were not open to the project and quite openly banked on its failure (which was particularly likely as elections were near and both the national government and opposition parties offered only lukewarm support). And second, the weak managerial capacity and unwillingness of operator organizations to corporatize posed serious questions about their ability to manage the route efficiently and hampered their credit worthiness and thus their ability to purchase the vehicles directly. Opposition was such that operators paralyzed the city with a two-day strike and did not stand down until the army threatened to intervene. Facing significant time constraints to deliver visible results, Mayor Jamil Mahuad decided to proceed with the construction of the first 17-kilometer corridor on the center-most avenue of the city, purchase the vehicles directly, and operate the new service through a publicly-owned company. However, once the municipality asserted its authority, the cooperation of incumbent private operators gradually reestablished: operations in the second and third corridors, built in 2001 and 2005, were in fact awarded to private consortia of incumbent bus operator organizations. According to Chauvin’s detailed case study, “the faction of operators that clinged to the previous situation was ousted. However, in order to consolidate a new status quo, a second moment had to emerge, in which the strategy ceased to be contentious... a new public institutionality gradually gained ground -personified in the municipality- that not only accepted the interests of the users, but also of the transport operators that decided to participate.” In addition to Chauvin, readers may consult former Mayor Mahuad’s own testimony, in a text he coauthored (Christie et al., 2010); or read Dario Hidalgo’s (2006) case study.

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was through this step-by-step process of conflict and accommodation, establishing stricter standards, but at the same time giving incumbent operator associations a chance to “modernize” and participate, that “a broader institutional, organizational and managerial change” was introduced, “with the aim that in the future it may embrace most of the urban area.”³³ The Institute for Transportation and Development Policy’s BRT Planning Guide soon highlighted such transformative potential, noting the “unique political opportunity to implement a regulatory reform agenda that otherwise has tended to prove difficult to implement.”³⁴

Soon the world was paying attention. The former mayors leading these reforms, particularly Curitiba’s Jaime Lerner and Bogotá’s³⁵ Enrique Peñalosa, attained celebrity-like status in urban circles. They traveled around the globe sharing their experiences, and many of their former aides became successful international consultants.³⁶ Non-governmental organizations and consultancy groups, such as the World Resource Institute’s Embarq and the Institute for Transportation and Development Policy (ITDP), as well as bilateral aid agencies, such as the German Society for International Cooperation (GIZ), prepared and circulated bus reform toolkits. “Missions” of public officials and transport operators from around the world

33 See Orrico Filho, Guilherme de Aragao, and Medeiros do Santo, 2007.

34 See Wright and Hook, 2007, p. 560.

35 In the case of Bogotá, authorities were initially unsure of how to proceed with regard to “traditional” bus operators. In fact, Ignacio de Guzmán, chief planner of this project, acknowledged the importance of incumbent operator participation, but compared the challenge of incorporating them as BRT operators as “recruiting candy-vendors at a streetlight and inviting them to establish a supermarket” (Gómez 2004, 39). According to Mayor Enrique Peñalosa, “the main challenge facing the project and the main achievement of Ignacio de Guzmán was maintaining a working relationship with traditional transport operators, and particularly, getting them to transition into contractors-stockholders of the companies that would operate Transmilenio” (Gómez 2004, 90). Rather than forcefully evicting them, government authorities set up a tendering process that gave preference to bids that demonstrated experience operating transit *in* the city. This preference to incumbent operators was nonetheless coupled with a simultaneous requirement for *international* experience in bus operations, and with a non-trivial minimum capital requirement. This structure had several outcomes. First, it led incumbent operators to compete against each other, significantly dividing opposition to the plan. Second, it led incumbent groups to seek partners able to supply international experience and capital. The result was the emergence of new players in the industry that featured partnerships between incumbent operators and better-capitalized partners from other industries. In fact, in the first implementation phase, one of the companies awarded a BRT contract included over 500 individual bus owners (*SI-99*), while a second incorporated a couple of hundred (*Express del Futuro*) (Ardila 2004, 364-365; Gilbert 2008, 449; Gómez 2004, 55). To be sure, participation of incumbent operators in Transmilenio operating companies was only recommended, and many individual bus owners were displaced amidst protests. Nonetheless, since public transport in the rest of the city continued to operate without change, displaced bus owners probably found opportunities to accommodate their vehicles elsewhere. Such alternative diminished as the city expanded the system in a much more contentious second phase, implemented in 2004. Facing emboldened protests, *bogotano*, authorities changed the bidding rules, now *requiring* that at least 10% of the stock of bidding companies be controlled by transport operators owning at least two buses from the prior system.

36 See Matsumoto, 2006 for examples of the influence of Lerner and Peñalosa in Asian cities.

visited these “model” cities. Bus manufacturers and technology suppliers developed new product lines to serve the increasing numbers of cities interested in bus reform. And probably not coincidentally, international development agencies (such as the World Bank, the IADB and the ADB) shifted their financial and technical assistance portfolios to support these efforts, Particularly BRT projects, recognizing bus reform as “an instrument of great potential to reach modal split, environmental and poverty-related objectives, and the establishment of institutions to regulate urban public transport” (Mitric, 2013, 32) In other words, the expansion of government planning and regulatory capacity, not only to improve the transportation choices available, but to effectively address second order goals of transport policy, suddenly became a viable endeavor.

Unsurprisingly, well-packaged transportation innovations like BRT rose quickly in the decision agendas of cities throughout the global south. On the one hand, they helped transform the very complex challenge of public transportation reform into a set of manageable projects that could be tackled effectively despite limited technical support, competing priorities and constrained budgets (all while also satisfying the need of government administrators to leave a lasting and conspicuous legacy).³⁷ On the other, the apparent success of Curitiba, Quito and Bogotá provided a focal point³⁸ that suggested to potential investors, incumbent private operators and to the broader public that government authorities had an available alternative for everyone to seriously consider. To be sure, BRT met Kingdon’s (2003, 142) criteria as “a solution ready to go, already softened up, already worked out,” which probably explains its rapid adoption. The positive reaction was certainly understandable. In contrast to decades of conflictive negotiations with transport operators that often resulted in barely noticeable, marginal improvements to the existing service, the relatively simple and affordable transport innovations used in Curitiba, Quito and Bogotá promised radical transformations in a relatively short time.³⁹ Elements of the new business model adopted in these cities (such as electronic and centrally controlled fare collection), and the physical characteristics of the required infrastructure, such as left-door buses and exclusive corridors, helped achieve cost-efficiencies while also facilitated regulation,

37 This is not a minor issue, as organization theorists like March and Olsen, 1989 would attest.

38 “Focal points” facilitate concerted action by aligning the expectations of stakeholders and signaling inevitability. For more on the strategic role of “focal points,” see Schelling, 1960, 57-59.

39 In this regard, Wright and Fjellstrom, 2002, 20 argue that one of the benefits of these low-cost innovations to city mayors is that they “can oversee a BRT project from start to finish”, claiming credit before the end of their terms in office.

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reducing the financial viability and practical appeal of informal and fragmented “traditional” transport operations and minimizing many of the risks previously associated with investing in this sector. Finally, structuring transition processes that rewarded cooperation, not only with promises of permanence, but also of higher profits, contained the expected resistance of potentially displaced private operators. The menu of options was so wide that public authorities could practically define the alternatives,⁴⁰ since now “the gains of the business could be distributed among many hands.”⁴¹

Tempted by the magic bullet implied by BRT, authorities in hundreds of cities aggressively launched modernization efforts, implementing bus rapid transit corridors, electronic ticketing, integrated systems, etc. At the time of this writing, 156 cities around the world (most of them located in Latin America, but also increasingly in Africa and Asia) have already implemented some version of BRT.⁴² Despite initial achievements, none of these cities, not even Bogotá, has to this day truly replicated the broad achievements of Curitiba, particularly when measured in terms of second-order transport policy functions. In fact, very few Latin American cities (one can count Sao Paulo, Santiago, Cali, Medellín and León) have a truly integrated transit system that transcends a few BRT corridors and that has served as a backbone of the government expanded role as transport planner and service regulator. Quito long abandoned such larger aims, in fact, the contract with the private operator of its second BRT corridor fully failed after two years of conflictive negotiations,⁴³ and Bogotá only recently began to integrate the still overwhelmingly dominant informal bus industry into its celebrated Transmilenio system, which 10 years after its successful launch only accounted for 26% of transit trips in the city.⁴⁴ But even worse, only in Curitiba did the government emerge sufficiently empowered to consistently and for a sustained period of time offer high-quality public transport while *also* using it as a tool for urban planning, guiding the way the city grows, containing negative externalities associated transport decisions and deliberately harnessing positive spillovers associated with public transit. This could of course simply suggest that Curitiba is “exceptional.” The relatively small size of

40 Seminal scholars like Schattschneider long identified this ability as the “supreme instrument of power” (1960, 66).

41 Claudia Scheinbaum, former Minister of the Environment (SMA) in Mexico City, cited in CTS-Mexico, 2009, 100.

42 ALC-BRT, 2012. The full database is available at <http://www.brtdata.org>. Definitions of BRT vary widely.

43 Hidalgo, 2006.

44 10 years after the implementation of Transmilenio -Bogotá’s BRT 74% of public transit trips in this city were still served by hundreds of fragmented, weakly regulated and highly informal bus operators (Transmilenio 2010).

this city and its initially authoritarian governing regime are certainly factors that support this hypothesis. Perhaps these characteristics combined to establish the required public-private synergy at a sufficiently early point of the urban development process, setting the stage for later path-dependent successes.

In any case, it appears that the adoption of disruptive technological innovations and of the BRT in particular is not sufficient to expand the state's planning and regulatory capacity. That is, the low-cost and profit-making promises of projects like BRT certainly open a window for projects to be built, but something else must account for the ability to transform the adoption of a few demonstrative projects into a deeper and sustainable public-private collaboration that enables the government to pursue an ambitious transportation agenda. While relevant achievements when analyzed on their own, much celebrated BRT projects often remain isolated islands amidst a larger sea of informal, deregulated, "traditional" private operation, and most local governments continue to be limited in their ability to implement more ambitious public transport policies. Inevitably, after the dust settles, governments are still faced with expanding demands for money and renewed pressures to relax regulation that often corner authorities into compromises that reduce their ability to expand the scope of the reform or to maintain now-expected standards of service. Perhaps implementers have failed to grasp the true complexities of the money and rules dilemma, focusing too much on the "hardware," building infrastructure, and not enough on the "software," reinventing their relationship with private operators of service, and have been therefore unable to move beyond the adversarial dynamic that so often characterizes their relationship with the deregulated private transport industry. If what interests us is indeed the expansion of the state's planning and regulatory capacity to pursue a much more ambitious transportation-planning agenda, we need to look beyond the introduction of disruptive innovations like BRT, and explore a larger array of decisions, policy actions, and urban conditions under which these or other transportation policy interventions facilitate the establishment of a more accountable partnership with the private providers of service.

In sum, the implementation of BRT and other innovations in Curitiba may have shown that it is indeed possible to manage the rules and money dilemma, but the limited expansion and adoption of the full model in other cities of the world suggests that this is not enough to expand the government's planning and regulatory capacities. Thus, the question remains of how do urban authorities that must rely on private operators to offer essential urban transportation services ensure that the services offered to satisfy the mobility needs of the public also complement or are

consistent with larger transportation goals? Under what conditions can governments working in a context of weak institutional and fiscal capacity pursue second-order transportation planning goals? Does the answer have to do with the socio-spatial structure of the city, its size, mode share, population demographics, etc? Is it the nature of the bus industry, the way it is organized? Is it the successful alignment of the interests of private actors with the interests of the broader public? Is it the relative autonomy and legitimacy of decision-makers, perhaps enhanced by democratization, or by the context of rising public concern about social and environmental challenges? Is it the technical capacity of planners working within the government or the entrepreneurial zeal of forward-looking private actors?

In the remainder of this thesis, I seek to answer these questions with a focus on Mexico City and Santiago, Chile, two large cities where public authorities recently used the implementation of BRT and other transport innovations to discipline and to “modernize” the incumbent private transport industry so as to expand planning and regulatory capacities.

Case Study Selection and Research Method

This thesis uses a case study of Santiago and Mexico City, because, despite following similar strategies of forcing and fostering industry compliance, and despite introducing BRT as the basis for introducing state monitoring and management of private bus provision in both cases, urban transportation planning capacities seem to have been much more advanced in Santiago. Such outcomes require a more focused analysis of other factors that explain why Santiago was more successful than Mexico City in expanding the state’s regulatory reach and overall planning-effectiveness. The two cases selected here allow a more systematic examination of several mediating factors, including transport industry structure, city size, and relations between local and national levels of government, and the timing of democratization.

In terms of industry structure, the decline and collapse of Mexico City’s public bus company, and the economic liberalization policies implemented by the Pinochet Regime in Chile, resulted in the emergence of two essentially deregulated and fragmented private bus industries in both settings. Ownership of public transport vehicles in both Mexico City and Santiago was deeply atomized (most operators owned only one or two), with owners often driving and maintaining their own vehicles. As a result, a dense public transit network developed organically, reaching every corner of these cities and providing users with an affordable mobility alternative, without requiring significant public subsidy from the government. Users could hail a

public transport vehicle after waiting only a few minutes, and reach most destinations with minimal transfers, although the negative consequences of these systems were soon evident. Aging vehicle fleets, undertrained drivers, reckless driving, congestion on the most profitable routes, rising air pollution, and unreliable services in the periphery became the staple features of public transportation in both Santiago and Mexico City.

Likewise, a democratic transition experienced by both cities, heralded by the elections of President Patricio Aylwin in Chile in 1990 and of Mayor Cuauhtémoc Cárdenas in Mexico City in 1997, set the stage for a sustained effort to reestablish the state as planner, regulator and financier of public transportation, and to “modernize” the incumbent private bus-operator industry, abandoning artisanal operation of buses and transitioning bus operator associations into corporatized transport companies capable of larger investments and professional management. Because of this, in neither case was radical change initially a possibility, as the autonomy of public authorities was bound by fiscal constraints, by a long deteriorated state capacity to establish and enforce rules, and by calculations about the electoral impact of the reforms.

Finally, in both cases BRT was a main tool deployed by the government to restructure transport provision and assert the state’s regulatory capacity. Mexico City launched its new BRT system in 2005 (Metrobús), while Santiago inaugurated its integrated transport system, called Transantiago, in 2007. Both of these projects soon garnered international attention. However, despite the fact that both cities adopted the same transport modality, progress seems to have stalled, or at least remains encapsulated, in the Mexico City case. In contrast to Chile, in Mexico plans to integrate the BRT with the subway have not moved forward, the expansion of the BRT network is increasingly slow and complex, and tens of thousands of quasi-informal, loosely-regulated and under-financed buses continue to offer most public transport services in the city. In Santiago, a difficult implementation process initially made way for a constant flow of negative headlines, but considerably more transportation-planning goals were readily achieved. Today, specialists looking closely at the Chilean reforms suggest that a major positive transformation is underway. In lieu of over 3,000 individual bus owners, the government now negotiates with a handful of professional, well capitalized firms-and is able to enforce increasingly stringent rules. The buses and the subway are now organized to complement rather than undercut each other, and there is a political consensus about the importance of maintaining public transport subsidies.

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Because the Chilean government seems to have been better-able to articulate and implement its transportation policies in ways that have reduced traffic fatalities, pollutant emissions and congestion associated with buses, with services having become more reliable and total travel times on the decrease, an examination of the Chilean and Mexican cases allows us to theorize what it takes to move from merely monitory transport providers to achieving more fundamental transportation planning capacity to effectiveness, particularly as represented by the introduction of a fully integrated, city-wide transport system that both accommodates private transport sector needs while also serving the public's mobility demands.⁴⁵

To be sure, the varying outcomes were shaped by the distinct historical legacies and resulting governance ideologies in Chile and Mexico, which in many ways predetermined the strategies chosen by public and private stakeholders involved in negotiating these reforms. Scholars like Jorge Castañeda (2011, chapter 3) refer to a “Mexican aversion to conflict” developed since the revolution, noting the existence of a widespread preconception that conflict necessarily breeds violence, a cultural inclination to feel sympathy for potential victims and an entrenched belief that a good settlement is always better than a bad fight. Similarly, the Chilean national psyche has long highlighted respect for authority, as suggested by the motto engraved in the national seal: “by reason or by force.” The years of military rule surely deepened such belief,⁴⁶ and peppered it with a commitment to free-market principles. These cases allow us, however, to look for something more than a confirmation that Mexicans are different than Chileans. They also share enough similarities to allow a more systematic investigation into why the implementation of similar transport innovations (BRT and other similar transport supplier regulations) promoted under the common rubric of public efforts to “modernize” the incumbent private-transport industry more successfully enhanced the government's planning and regulatory capacity in Santiago than they in Mexico City. That BRT seems to have brought greater state oversight of private-transport provision but that cannot necessarily be considered the magic bullet or most effective tool for enhancing state transportation planning capacity and further

45 None other than Enrique Peñalosa, the former Mayor of Bogotá who implemented the famous Transmilenio BRT system, declared in a 2010 interview published in *Plataforma Urbana* that Transantiago “will be the best bus system in Latin America in 4 or 5 years.” (Vergara Petrescu, November 10, 2010). Transantiago is also beginning to receive international accolades. For example, the transport system in Santiago already ranks “well above average” in the Green City Index (Economist Intelligence Unit 2010).

46 As one Chilean friend explained, “every citizen of this country has a Pinochet within.”

sustains the value of the Mexico-Santiago comparison. After all, many cities across the global south are actively attempting to tackle a multifaceted urban-transport problem and increasingly look at cases such as Metrobús and Transantiago for models to craft their reform strategy. With the contrasting outcomes seen in Mexico and Chile, despite the common adoption of BRT, those interested in understanding what it takes to expand transportation planning and regulatory capacity in cities of the global south can find in this case-study comparison a set of principles and guidelines for understanding whether and why certain patterns of forcing or fostering private-transport industry compliance will eventually lead to greater and more comprehensive transport-planning capacity.

In researching and analyzing the Mexico City and Santiago cases, I adopted the research methods advanced by Alexander George, a leading theorist of case-based research: “process tracing” and “structured, focused comparison.”⁴⁷ The former emphasizes prior investigation of the links (or lack thereof) between plausible causes and observed outcomes. It specifically recognizes that some plausible links may be false or weak, so that fieldwork has an orientation toward hypothesis-assessment, even though one cannot compellingly “test” hypotheses in qualitative research. Thus, part of the preparatory work implied assembling and analyzing an extensive archive of articles published in major Mexico City and Santiago newspapers in the periods before, during and after the implementation of Metrobús and Transantiago. The second part of the preparatory work consisted on assembling and analyzing official documentation, such as feasibility studies, financial statements, corporate bylaws and concession contracts. Many of these documents were not publicly available, and several “access to information” requests had to be formally submitted and, in the case of Mexico, litigated to obtain them. This work resulted in a tentative “reconstruction” of the sequence of conflict and collaboration that linked government authorities with the leaders of vehicle-owner associations in anticipation to the plans and regulatory reforms that culminated in the implementation of Metrobús and Transantiago. This process generated a preliminary sense of the key debates, concerns and obstacles as probably perceived by the public- and the private-sector perspective, with particular focus on how the protagonists reacted to a) the potential displacement of individual vehicle owners, b) the potential entry of new competitors to the market, c) the financing alternatives discussed, and d) non-transport related political events, such as elections.

⁴⁷ See George and Bennett, 2005, 6-7 and 205-232. For more on the case study method see Trachtenberg, 2006; and Flyvbjerg, 2006.

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In conducting case-study research aimed at “structured, focused comparison,” considerable effort was made to organize data collection around a consistent set of questions, to ensure that the cases as finally written will be comparable for purposes of analysis. Building on the acknowledgement that no case history can portray every aspect of what happened, it is essential for each of the cases to focus on roughly the same aspects. In the present case, a main concern will be the protracted conflicts and evolving negotiations between government authorities and transport-operators over the state’s expanding regulatory reach.⁴⁸ With this aim in mind, I interviewed the same kinds of actors in both cases: government officials and their advisors, leaders and members of bus-operator associations, consultants to both sides, and local experts in the field of transportation. Questions centered on the reform processes, as experienced from the perspective of both the private and the public actors that participated. I especially sought to understand how each actor behaved strategically, not only with respect to the other “side,” but also in relation to his/her peers.

Most of the interviews for the Mexico City case took place January-March 2011, with a few others during shorter trips during 2012. I completed most of the Santiago interviews during a trip to this city June-August 2012. A few additional interviews were conducted remotely, using Skype. In total 64 individuals were interviewed, with each lasting an average of 1 hour 30 minutes, and the longest lasting 4 hours 30 minutes. The list is included as an appendix. Questionnaires were semi structured, as a deliberate strategy to allow informants to expand their answers and highlight what they think is critical, and a checklist of key topics maintained to ensure everything was covered. Information obtained while “process tracing” was used to nudge respondents into expanding their answers and to clarify controversial or obscure events. Interviews were recorded with permission of informants, transcribed and analyzed using Nvivo, a qualitative research software that facilitates the identification of common themes and topics. Based on this information, a first draft of the cases was written and shared with a few individuals whose comments greatly improved on the original.⁴⁹

48 See George and Bennett, 2005, 67-72.

49 Part II of the case of Mexico City was read by Paulo Custodio, and presented in a synthesized form at the Conference for Advanced Systems for Public Transport (CASPT12, held in Santiago in July 2012). The case of Santiago was read by Juan Carlos Muñoz, Professor at the Engineering Department of the Catholic University of Chile, and Director of the VREF BRT Center of Excellence.

Chapter 2: Governing public transport in Mexico City

The democratically-elected authorities of Mexico City anticipated that the incumbent private industry represented the most likely source of opposition to Metrobús. They would go out of their way to minimize potential conflict. In fact, public authorities shepherded the transition of vehicle-owner associations into transportation companies, and then awarded them with the contracts to operate the BRT system without subjecting them to competitive pressure. Further, the government would guarantee substantial profits to every affected vehicle-owners, who would emerge from this process as stockholders of the new companies. Going into the field, I hypothesized that this “fostering” strategy could explain why Metrobús was originally implemented amidst little noticeable political conflict, why the expansion of the system has been slow and gradual, and why the vast majority of the informal bus industry remains unchanged until now. This strategic approach appeared to offer a clear contrast from the more “forceful” strategies chosen by authorities in Santiago, where authorities intensely promoted the entry of national and international competitors to the public transport market, and where incumbent operators were explicitly threatened with eviction from the market. I hypothesized that the Chilean “forceful” strategy could explain why after a significant period of conflict -that included a two day blockade of more than forty major intersections in Santiago, and the incarceration of the protest leaders- authorities gained the ability to freely determine who should operate public transport services and how. As we will see, however, the distinction between “fostering” and “forcing” proved much more muddled than anticipated, and an indicator of more important explanatory factors rather than the key to understanding the differing outcomes in both cities. In fact the selection of strategies in both cities was shaped by past interactions, that both enhanced and constrained the ability of authorities to modify the terms of their relationship with the private bus industry, and that predetermined whether or not private stakeholders found it worthwhile (or feasible) to cooperate. To clearly unveil and detail this, we must situate both Metrobús and Transantiago in a historical context, which is why we begin the case study of Mexico City by outlining how the relationship between public and private stakeholders evolved over time.

Part I. From the trolley to the bus: A history of conflict and compromise

On August 3, 1981, the president of Mexico established *Autotransportes Urbanos de Pasajeros, Ruta 100 (AUP-R100)*-, a public agency charged with directly operating public bus services in the Mexico City Metropolitan Area (MCMA). A few weeks later the regent of Mexico City⁵⁰ revoked the approximately 7,500 individual bus operating permits and concessions held by the members of a private bus operator organization known as the *Alianza de Camioneros*,⁵¹ clearing the way for full government control over this critical service. Such forceful move was certainly reminiscent of similar decisions taken several decades before, first to intervene (between 1914 and 1919), and later to take over (in 1946) the *Compañía de Tranvías*, the foreign owned electric trolley company operating in Mexico City since the turn of the century. At the time of these presidential decisions the relationship of both the *Alianza de Camioneros* and of the *Compañía de Tranvías* with their Mexican government counterparts had hit a wall, completing a deteriorating transformation from a once thriving (and politically instrumental) partnership into an adversarial relationship damaged by disputes over money and rules. Evicting the private sector from public transportation, and consolidating services under one tightly regulated agency seemed like a rational alternative to reorient the system toward serving the public interest.

However the most important lessons to be uncovered from studying the complex history of public transportation in Mexico City are not primarily centered in these contentious interstices, but in the varied ways the relationship between public and emergent private actors evolved in the interim periods. The reason is that the cancellation of the concessions held by the *Compañía de Tranvías* and later by the *Alianza de Camioneros* -decisions supposedly taken to increase the government's planning and regulatory capacity to use public transportation as a tool to pursue broader urban planning goals- were both preceded and followed with policies that negated much of the intended effect. Public companies like the intervened trolleys or the *AUP-R100* proved unable to meet or sustain the high standards of service at the low costs sought by authorities, not only as a consequence of problems typically associated with government-run services, but also because the needs of the city expanded rapidly. Constrained by institutional

⁵⁰ The Mexico City Metropolitan Area is composed of the Federal District (DF) and the neighboring municipalities of the State of Mexico that were gradually engulfed by the city over the 20th century. Between 1928 and 1997 the DF was an administrative department of the Federal Government, and governed by a regent directly appointed by the president.

⁵¹ Translated as the "Bus Operator Alliance".

weaknesses and fiscal constraints, Mexican authorities soon felt they had little choice but to complement direct service provision with the toleration of informal operators; to temper their aims of a tightly regulated and carefully planned system by coming to terms with a competing system that grew organically; and to square efforts designed to consolidate services in few or even one accountable actor, with an increasingly fragmented industry-structure. In other words, Mexican government authorities felt compelled to complement the limited reach of their publicly-run services with an informal, weakly regulated and fragmented private industry, and in doing so opened the door for a new set of private players that needed to come to the table if public authorities truly desired to influence service delivery.

This process was of course embedded in a political context, in which political elites strived throughout history to use emerging private bus operator associations as a base of political support. As we will see, the Alianza de Camioneros had its own roots in the improvised service providers that spontaneously entered the market to offer an alternative to the foreign-owned electric trolley company. These entrepreneurs adapted their vehicles for passenger use and created their own routes, soon coalescing as organizations that demanded formal authorization from the state. These incipient organizations then became a powerful tool for the state to demand better performance from the private electric trolley company and to weaken its radical and politically active worker union. Later these improvised operators continued to serve a useful purpose, expanding the limited reach of the Servicio de Transportes Eléctricos (STE), the public agency that finally took over the Compañía de Tranvías, at no cost to the state. Similarly, the associations of “collective taxi” operators that emerged dominant after the 1995 bankruptcy of AUP-R100 are partly the legacy of government toleration of their services, again undertaken to weaken a radicalized and increasingly powerful AUP-R100 worker union, and to maintain an affordable transportation option available amidst deteriorating services of the government-run company.

While this process of simultaneous and perhaps competing approaches to planning and regulation resulted in a minimally acceptable transportation alternative that demanded little public investment from the state and secured the political allegiance of the private operators of service, it gradually constrained the ability of the same state to pursue second-order goals requiring more planning, more regulation and more investment, even after the development process expanded Mexico’s fiscal capacity and strengthened its institutions. In fact, when

Cuauhtémoc Cárdenas was elected mayor of Mexico City in 1997 -becoming the first democratically elected mayor since 1928-, he found his capacity to implement policy in the transportation sector constrained by the historical legacies of a gradually consolidated relationship between bus operators and post-revolutionary governments, “where political and social support offered by the former was directly compensated through subsidies to fuel, spare parts and tires, as well as with licenses, concessions, loans and other forms of gratification.” (Navarro Benítez 2005, 179) While estimates vary, the MCMA had at the time approximately 130,000 public transport vehicles, most owned by individuals, organized informally around roughly 100 associations with varied types of government authorizations. How could the government address major, second-order challenges like air pollution, congestion and high accident rates in the city without challenging this deeply fragmented, weakly regulated and privatized industry-structure?

The constraining effect of this industry-structure had in fact become evident prior to the democratic transition of the city. In fact, the immediate predecessor of Cárdenas, -Oscar Espinosa- failed in his explicit plan to draw on the formal private sector to reduce the cost and improve the performance of the bus system after the demise of AUP-R100. As we will see, his plans to consolidate service and attract investment to the sector by awarding 10 area-based contracts to the same number of operators floundered in the mid nineties due to the failure of the state to guarantee the property rights of the incoming private investors vis a vis the incumbents nurtured by the state in the past. Lacking the ability to select its private counterpart, and lacking the funds required to expand the reach of public/regulated services (now practically constrained to the subway network), Cárdenas and his democratically elected successors realized that they had little choice but to resort to an incremental, non-threatening, fostering strategy, that sought to gradually expand the state’s planning and regulatory capacity *without* alienating the incumbent private operator organizations. In short, they would conclude that incumbent operators could not be ousted from the system, and that their collaboration was required to succeed in any effort to transform the sector.

Nonetheless the historical legacies that led Mexico City authorities to prefer “fostering” rather than “forcing” strategies are critical to understand the choices made by Cuauhtémoc Cárdenas (1997-2000) and later by his successors Andres Manuel López Obrador (2000-2006) and Marcelo Ebrard (2006-2012), particularly as the latter two attempted to expand the incipient network of BRT corridors, partly inspired by the successes of Curitiba and Bogotá. Thus, before

looking at the strategy chosen by Mexico City authorities to gradually foster a transition from operator associations based on individual vehicle-ownership into corporatized firms -the subject of the second part of this case study-, we begin by outlining how the relationship between public and private stakeholders evolved throughout the history of public transportation in Mexico City, from the demise of the privately-owned electric trolley company, to the collapse of the publicly owned AUP-R100.

From a foreign-owned monopoly to a locally controlled cartel

The revolutionary moment that ousted President Porfirio Díaz in 1911, was preceded by short period of technological innovation and sustained investment that placed Mexico City's public transport network among the best in the world. In 1896 the Díaz regime awarded a British finance investment company -Wernher and Bait- with a concession to electrify and expand the existing rail network, and to operate it with the electric trolleys that would replace the steam and animal powered vehicles previously offering service.⁵² This concession resulted in the creation of the *Compañía de Tranvías de México*, which by 1906 ran an integrated and organized, "modern" service, featuring 343 kilometers of rail tracks -176 of these electrified-, stops roughly every 300 meters, and a fare payment system that allowed free transfers between the 14 lines that crisscrossed the city in all directions.⁵³

Nonetheless, the market power and undeniable political clout⁵⁴ of this company was not without its negatives. In exchange for continuous private investment in infrastructure -which included, for example, a commitment to electrify and pave the streets running along the rail tracks- the government turned a blind eye to increasing fares and exploitative labor policies. This resulted in a system deeply segregated by class (with the better-off enjoying novel electric trolleys and the poor majority either priced out or restricted to animal-powered cars) and in an increasingly dissatisfied labor force. The Díaz regime contained -often violently- the incipient

52 Wernher and Bait had a global presence, with interests in the mining, real estate and transportation industries. It owned and operated electric tramways in several countries, including Chile, South Africa and Portugal (Fraser 1987). In 1909, the British investors sold 75% of the stock in the *Compañía de Tranvías* to a group of Canadian and American businessmen -led by Fred Stark Pearson- who also owned the Mexican Light and Power Company, achieving vertical integration (Ribera Carbo 2012).

53 See Ramos García 2010; González and Vidrio 2011.

54 Among the board members of the *Compañía de Tranvías* figured Julio Limantour, brother of the Finance Minister; Coronel Porfirio Díaz, son of the president and Pablo Macedo, president of the Congress (Ribera Carbo 2012).

Mexican labor movement emerging across the country, but the performance of the Compañía de Tranvías increasingly suffered due to contentious relations with its workers. Not only did trolley workers lack formal representation, but they resented the low wages, the inhumane working hours, and the multiplicity of internal regulations that affected their income (such as fines imposed for damage to the vehicles or requirements to purchase expensive uniforms).⁵⁵ Trolley workers certainly expected the ousting of President Díaz in May 1911 to result in a radically different government policy toward the foreign owned private monopoly. Perhaps for this reason only two months after Porfirio Díaz fled the country, trolley workers organized the first major public transit strike in the history of Mexico City -suspending service for almost a week.

However, the interim revolutionary government urgently needed to restore the urban economy, and had no resources to resort to nationalizing this company. For this reason, it sided with the company's management to forcefully end the strike, resulting in “more than 50 people detained... close to a

hundred injured and a large, undetermined number of workers fired” (Robles Gomez 1981, 45).⁵⁶ The new authorities were in no rush to change previous agreements with the trolley company.

Figure 2.1 Mexico City residents celebrate the triumph of the revolution on an electric trolley (June 7, 1911) (Photo credit: Manuel Ramos)



⁵⁵ See Lara, 2007.

⁵⁶ See also Lara, 2007.

Not only did they want to avoid a standoff with foreign investors, but perhaps more importantly, they urgently needed to maintain economic activity in the nation's capital, swiftly mobilize supplies in case another revolutionary faction invaded the city, and bolster the new government's popularity among residents. Restoring critical services and rebuilding damaged transport infrastructure was indispensable for these tasks. "With pressing needs and limited fiscal resources, governing officials and local administrators had to seek other strategies to redress the problem, including the imposition of strict work regulations on those providing urban services... to ensure that Mexico City workers would work long hours at low wages" (Davis 1994, 30).

In other words, during the early years of the revolutionary war the Mexican government protected the profitability of the *Compañía de Tranvías* by deliberately maintaining lax (or non-existent) regulations established under the dictatorship of Porfirio Díaz.⁵⁷ In exchange, the company not only kept the trolleys running, but in fact continued to expand the system. President Madero himself inaugurated some of the company's new lines in 1912.⁵⁸ However, this president was assassinated soon after, and the renewed dispute for power among different revolutionary factions rapidly collapsed the Mexican economy. Inflation spiraled and the exchange rate plummeted. Amidst the revolutionary turmoil, the *Compañía de Tranvías* faced tax increases, threats of concession cancellation and frequent imposition of "voluntary" loans.⁵⁹ Furthermore, the faction that finally secured control of the city - the "constitucionalistas" - faced pressure to adopt more progressive policies than its predecessor. Partly to appease supporters, the new government led by Venustiano Carranza decreed a maximum working day of nine hours (a revolutionary measure given the standards of the time). The *Compañía de Tranvías* expressed its discontent with this regulatory change by postponing fleet maintenance, cutting salaries by 30% and firing employees.⁶⁰ Trolley workers could not remain passive. On October 8, 1914, they formally constituted a union - the *Federación de Empleados y Obreros de la Compañía de Tranvías de México* - and struck, once again paralyzing Mexico City.

⁵⁷ In fact the *Compañía de Tranvías* thrived economically during the early years of revolutionary turmoil. Profits reported by the company in 1914 were 44.2% higher than those reported in 1910. See Ramos García, 2010.

⁵⁸ See Ribera Carbo, 2012.

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*

This time the local government, led by a military official appointed by Carranza, sided with the workers. The company initially offered to increase wages and to meet some of the demands of the worker's union if the government authorized significantly higher fares, but authorities refused. According to Toledo Martínez' 2010 thesis (quoted in Ribera Carbo 2012, 15), the company's representative in the negotiations -the economic attaché from the British Embassy- asserted "a confiscation would be preferable" to heeding to workers' demands without compensation. The Carranza Administration temporarily intervened the company and seized all of its assets "to guarantee urban transport services" in the capital (Rodríguez 1980, 101). A Colonel was appointed to manage the company, who immediately decreed a 25% wage increase and hired back many of the fired workers. In fact, during government intervention, the employee rolls of the Compañía de Tranvías grew by 255%.⁶¹ It is impossible to know how the Mexican government financed such policy⁶², but the decision significantly bolstered support for the constitucionalista faction among the more radical wings of the rising labor movement in Mexico. In fact, when a rival revolutionary faction occupied the city, many of the trolley workers abandoned their posts and joined the constitucionalista army in Veracruz, as part of its "red battalions".

By the end of 1915, the constitucionalistas regained control of the city and began to pacify the rest of the country. The government had to decide what to do with the intervened Compañía de Tranvías. Carranza was a staunch nationalist, but at the same time committed to private enterprise and to the quick redevelopment of urban areas. He wanted to return the company to its owners, but recanted when stockholders sought to dictate terms, such as insisting on the fare increase and tough labor standards. Partly because of disagreements about the terms, State intervention of the Compañía de Tranvías continued until May 7, 1919 -when the government finally agreed to: (a) cover debt incurred on behalf of the Company (particularly for electricity), (b) to deregulate the fare for suburban rail lines, (c) to temporarily peg the price of urban fares to the value of gold (to hedge against continuing inflation) and (d) to extend by 15

61 According to Ramos García, 2010, the number of employees working for the Compañía de Tranvías grew from 504 in 1914 to 1,286 in 1919, when state intervention ended.

62 Ramos García (2010) analyzed the financial statements from the Compañía de Tranviarios, before and during state intervention. He concluded that the raise was financed through savings achieved by substantially lowering the profit margin previously imposed on the company by its foreign stockholders. While this may have been the case, we can't ignore the fact that the administration preparing these financial statements had an interest in portraying their foreign predecessors under a bad light.

years a concession to build and operate the Mexico-Toluca and Mexico-Puebla suburban rail lines.

Despite government control of the company for five years, or perhaps because of it, the relationship between the Carranza government and the more radical faction of trolley workers soured. In fact, the broader national labor movement -united until then around the Casa del Obrero Mundial- split up during this period over whether or not to continue to support Carranza. Many of the labor leaders “felt the organization was selling its ideological purity in return for marginal concessions to better urban conditions and for limited political power within government circles” (Davis 1994, 45). In July 1916, the *Casa* called for a general strike paralyzing all public utilities and public services in Mexico City, trolleys included. In total, more than 82,000 workers joined. Now fully in political control of the nation and keen on getting the economy back on track, the government violently repressed this strike, and decreed that acts of sabotage against public services and utilities would be punishable by death.⁶³ Carranza and his allies would not jeopardize economic recovery to satisfy the radical wing of the labor movement. When the *constitucionalistas* passed a new Constitution in 1917 formalizing worker's right to strike, they expressly *excluded* public services like transport.

The Mexican national labor movement soon split into two competing organizations -the radical and strike-prone Confederación General de Trabajadores (CGTr) and the collaborationist and state-sponsored Confederación Regional de Obreros Mexicanos (CROM)-. Both organizations dueled to enlist trolley workers to their cause, with encounters frequently ending violently.⁶⁴ However, the field for this fight was far from leveled. The alliance linking the CROM and the governing regime was so deep, that this organization had Mexico City's bureaucracy fully on its side. CROM members served as councilmen and high ranking officials, and one of its founders -Celestino Gasca- was even appointed mayor of Mexico City during the period 1920-1923. The enormous amount of resources and legal power available through these positions bolstered CROM's efforts to sway (or scare) trolley workers away from the CGTr. Actions

63 See López Zaldívar, 1997, 44.

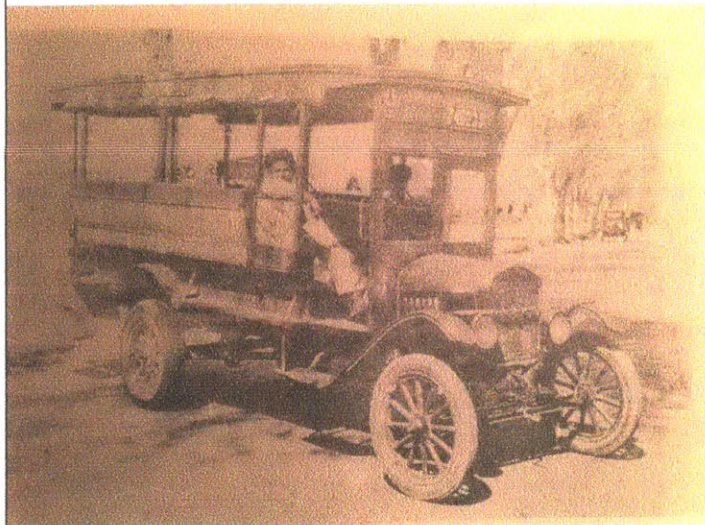
64 CROM affiliated workers frequently tried to break CGTr-sponsored strikes, and these efforts would result in fights. The most tragic of these encounters was dated February 1, 1923, which resulted in 3 workers killed and 5 severely injured (Lara 2007).

included police surveillance of CGTr affiliated workers, and forceful intervention against increasingly frequent CGTr-sponsored strikes. While these actions certainly made their mark, a subtler, government sponsored strategy would finally break the CGTr.

As Diane Davis summarized, “with the CROM's controlling Mexico City politics, local authorities continued to finance and actively support the development of urban bus services in an effort to reduce the city's reliance on electric trolleys and thus limit the CGTr's and trolley workers'

bargaining power in strike actions” (Davis 1994, 30). This was not difficult. Small entrepreneurs already operated improvised transport services using vehicles retrofitted with wooden benches and improvised tarp roofs, popularly known as “fotingos” (figure 2.2).⁶⁵ The government now encouraged fotingo operators to join the CROM and offer their services permanently. Starting 1918 -even as the trolley company remained under the control of the state- the city government selectively awarded permits to vehicle-owners, allowing them to design routes and schedules at their convenience.⁶⁶ These emergent service providers soon organized as “líneas”, typically identified by the points of origin and destination they served.⁶⁷ The low investment required to adapt a vehicle for service, the freedom of not being tied to rail tracks and the staunch support of government authorities lowered the barriers of entry and ensured the success of the buses over the trolleys, sealing the fates of both the Compañía de Tranvías and its radical union. And associated with the inevitable technological transition, the public transport industry in Mexico

Figure 2.2 Improvised “fotingo,” circa 1920. Source: (Departamento del Distrito Federal 1930 p. 135)



65 The vehicle shown in figure 2.2 is identified as an “autobús antiguo” (Departamento del Distrito Federal 1930, 135).

66 Permits “did not establish routes nor schedules, so that the vehicle-owner could design its route to his convenience” (Autotransportes Urbanos de Pasajeros-Ruta 100 1993, 46).

67 For further descriptions, refer to Legorreta (1995, 23) and Islas Rivera (2000, 251).

City experienced an *organizational* transition, from services provided by one consolidated and investment intensive actor, into services provided by individual vehicle-owners, loosely organized as associations. This did not preoccupy authorities at the time. After all, with minimal public investment, the government achieved a multi-pronged political victory. It could be labeled as nationalistic and revolutionary (it had weakened a foreign monopoly with longstanding ties to the Díaz dictatorship), as supportive of private enterprise (it had distanced itself from radical labor organizations) and as committed with social equity (it was promoting a technology better suited to reach areas previously under serviced by the trolleys). In a last effort to compete, the Compañía de Tranvías lowered its fares and petitioned for a permit to operate buses, which was unsurprisingly granted on the condition of only hiring drivers affiliated to a union organized by the CROM and not by the CGTr. Despite this attempt for survival, the bus-branch of the Compañía de Tranvías soon folded, and the trolleys continued to languish, partly because the Mexico City government continued to grant bus permits to operators that competed for passengers on the same routes.⁶⁸ As the Compañía de Tranvías lost market share, its radical union also lost power and importance, and was eventually absorbed by the CROM.

The outcome of this period was the forceful replacement of a foreign owned, consolidated, professionally managed and investment-intensive private monopoly, with “unions of owners” formed by hundreds of small-scale entrepreneurs who owned and directly managed improvised vehicles.⁶⁹ These organizations were not only pre-disposed to collaborate with government authorities -their members understood that they owed their livelihood to a government decision to limit the trolley industry-, but also found little reason to adopt the class struggle rhetoric that had characterized the trolley worker union. Authorities from this period felt empowered. They had successfully established a new kind of negotiating counterpart that allowed them to reclaim authority over public transport services from both the foreign private company and its increasingly radical worker union. However, this industry-structure also came with a cost. The new operators’ lower fiscal capacity and unaccountability resulted in lower quality of service, and perhaps more importantly, the state’s future ability to establish

⁶⁸ In addition to not having to invest on infrastructure to run their services, bus operators always had a competitive edge. During this period, the city offered subsidized gasoline to bus operators organized by and affiliated to CROM. By 1925 there were 1,637 vehicles authorized to offer public transport service within Mexico City (Islas Rivera 2000, 251).

⁶⁹ An official tally from 1926 suggests that during that year, there were 30 bus routes in Mexico City, operated with 1,637 vehicles (Legorreta 1995, 23).

transportation policy became limited by the institutionalization of a profoundly transactional relationship linking authorities with the leaders of these organizations.

The emergence of the organization leader as negotiating counterpart

Moving from a system structured around one consolidated supplier of public transport to a system featuring hundreds of small-scale entrepreneurs who owned and directly operated their vehicles did not initially hinder the ability of the Mexican Government to regulate transport services. Rather than negotiating directly with the managers of the *Compañía de Tranvías*, the government now looked to the leaders of the owner-unions as negotiating counterparts. This had the simultaneous effect of strengthening and checking the authority of these emerging leaders. On the one hand, these leaders would become the conduit to obtain subsidies and permits, and for this reason could control the members of their organizations. On the other, they were structurally dependent on government access to effectively defend the interests of their membership, which meant that public authorities felt they could weaken or replace them at the slightest sign of rebelliousness. In addition to retaining control, public authorities could now be more blunt when placing non-transport, extra-contractual items on the negotiating agenda. In exchange for decisions over money and rules that benefited private operators, such as lax standards or fuel subsidies, authorities felt entitled to request -to demand, actually- political loyalty (and vice-versa).

While several owner-unions initially flourished, one group emerged as dominant by the mid-twenties: The *Alianza de Camioneros*, affiliated to the CROM. The dominance of this group was partly owed to the direct access enjoyed by its leaders to the president, the political actor in Mexican politics with the most leeway over money and rules. The leaders of the *Alianza* -using Mayor Celestino Gasca as conduit- lobbied President Alvaro Obregón for fuel-tax exemptions, and got him to personally negotiate a fuel supply deal on their behalf with the Standard Oil company.⁷⁰ In 1922, President Obregón decreed a “closure of routes,” restricting local authorities from awarding more bus permits⁷¹, and granting incumbent organizations a monopoly over service. In 1924, President Obregón promoted the creation of a Fuel and Lubricant Cooperative and later instructed the Bank of Mexico to finance the creation of a Transport Bank, placing both

⁷⁰ See Lettieri, 2010.

⁷¹ See *Autotransportes Urbanos de Pasajeros-Ruta 100*, 1993, 46-47.

institutions under the direct control of the leaders of the emerging Alianza.⁷² Unsurprisingly, the members of the Alianza de Camioneros corresponded with loyalty -not to the revolution, but to President Obregón personally. This allegiance was manifest, for example, by recruiting members to join Obregón's army when the nation became engulfed once more in war,⁷³ and by abandoning the CROM when this organization failed to support Obregón's reelection attempts⁷⁴. This tradition of client-patron relations would continue for several years, and later become institutionalized within the dominant political party in Mexico, particularly as intra-party negotiations replaced bullets as the principal way to retain power in Mexico.

As the Alianza de Camioneros consolidated its dominance over the public transport market in Mexico City, the dependence of its leaders on high ranking political leaders diminished. The leaders of the Alianza did not limit themselves to representing organization members, but personally controlled a significant number of bus permits -often using family members as straw men. They became stockholders of the Transport Bank, of the insurance company and of the production and distribution facilities established by the Alianza to supply

⁷² These revelations were made in congress by former mayor and former CROM leader Celestino Gasca in 1939, who would eventually become a fierce opponent of the Alianza. For a transcription of his accusation, see *Cámara de Diputados*, 1939. For a broader discussion of the benefits granted by authorities to the Alianza de Camioneros, see López Zaldívar, 1997, 47-48.

⁷³ See Navarro Benítez, 2005.

⁷⁴ The national leader of the CROM, Luis Morones, aspired to the presidency and attempted to organize his own political party. By 1927 Morones had become a clear political rival of the governing elite, and when Alvaro Obregón was assassinated, many suggested that Morones was behind the crime. Such insubordination resulted in the fall of grace of the CROM, and the Alianza de Camioneros abandoned the organization to protect its good relations to the government. For details on this part of the story see Davis, 1994.

and service members. The Alianza negotiated contracts with the emerging automotive industry⁷⁵ -which allowed leaders to supply members with larger and better adapted vehicles, known as “julias” (figure 2.3) -, and partnered with land owners -often military and government officials- to expand bus routes to selected housing developments. All of these actions carried a commission, and increasing economic independence came associated with increasing political autonomy. The Alianza diversified its political connections, establishing

linkages with a wider net of local politicians and bureaucrats able to solve day to day regulatory problems, such as route alignment and terminal location conflicts. With increasing fiscal and political power, the Alianza leadership achieved a significant degree of autonomy vis a vis the government, and of control vis a vis its members.

The useful partner becomes a powerful and hard to control opponent

When General Lázaro Cárdenas -the father of future Mayor Cuauhtémoc- became president in 1933, he found that the Alianza not only controlled “almost all *camioneros* in the Republic,” but “had become an entity that protected the interests of the bus owners and the route presidents, more than the workers” and that “essentially constituted a capitalist, monopolizing enterprise” (Lettieri 2010, 5). The reach of the Alianza was so expansive, that the media began to refer to it as the “pulpo camionero” -the busing octopus. General Cárdenas was troubled by the concentration of the public transport market in a few hands, and felt that the existing arrangement was not compatible with the regime's revolutionary credentials. For this reasons, he instructed his transportation minister -Francisco Múgica- to suggest a new regulatory framework for the sector. The Cárdenas administration was about to engage in the costly and politically

Figure 2.3 Privately operated “julia”, from the Juárez - Loreto line (circa 1930). Source: Guerrero Family



⁷⁵ The first auto assembly plant in Mexico opened in 1925.

perilous quest of nationalizing the oil industry, and perhaps for this reason did not consider a similar approach for public transit in the capital. Instead, Múgica advocated changing the structure of the industry: opening and fragmenting the public transport market once more, forcing the entry of transport cooperatives independent from the Alianza. By 1936, Múgica had prepared a legislative reform package that would:

- establish that only cooperatives or individuals “belonging to the working class” could hold bus operating permits,
- limit the number of permits that each individual could hold to one, and limit the number of vehicles associated to each permit to one.
- require individuals serving the same route to form a cooperative, and all cooperatives to belong to one federation, “which will be the only entity between the government of the Federal District and the cooperatives” (López Zaldívar 1997, 50)
- reduce the life of each permit from 20 to 5 years, with renewal conditioned on maintaining status as a cooperative.
- require the inclusion of all workers associated with the activity -drivers, mechanics, fare collectors, etc, as members of the cooperative.
- open the market to as many cooperatives and as many routes as required by “the public interest.”

The leaders of the Alianza de Camioneros understood that this proposal constituted an attack on their growing economic power and political influence, and set out to defend their interests. The fate of this bill illustrates how even under a strong presidential regime, the Mexican Government was gradually losing its ability to shape transportation policy and to control at will the private suppliers of service. On December 16, 1939 -one day after the Chamber of Deputies (House of Representatives) approved Múgica's reforms⁷⁶ and sent the bill to the Senate for ratification- the Alianza de Camioneros paralyzed Mexico City with a strike, in a move widely interpreted as a direct challenge to President Cárdenas' authority. Violence erupted when members of a government-sponsored transport cooperative -Sociedad Cooperativa 18 de Marzo-⁷⁷ attempted to break the strike, leaving a toll of several damaged buses and 27

⁷⁶ Múgica's reforms are contained in the Ley General de Vías de Comunicación. For the full text, see Secretaría de Comunicaciones y Obras Públicas, 1940.

⁷⁷ Interestingly, the name of this cooperative paid homage to President Cárdenas, as March 18, 1938 is the date in which his administration nationalized oil companies operating in Mexico.

workers injured.⁷⁸ However, much had changed since the time of Carranza. This time, a violent strike did not result on the cancellation of permits nor on anybody thrown in jail. In fact, it resulted in a meeting between the leaders of the Alianza and the president himself, in which the former “convinced Cárdenas that it was not worth it to force changes in the industry” (Lettieri 2010, 8). To be sure, the Alianza came out of this meeting publicly apologizing for stopping service -attributing the strike it to communication problems between its leaders and more militant members- and pledging its political allegiance to the president. At least in the media, the story presented to the public was about a kind but firm president that heard the Alianza's concerns but forced it to return to work without conceding much. However, the reality was entirely different. Despite the undeniable power of the presidency, Cárdenas was aware that his pro-labor and pro-peasant policies had “disadvantaged a broad spectrum of urban populations in Mexico City,” and resulted in “substantial, growing opposition to his administration” (Davis 1994, 97). He could not afford to fully alienate this interest group, especially as the election to succeed him was looming near. Despite his personal distaste for the Alianza, the events that follow demonstrated that his administration did not emerge victorious from this standoff.

While the Senate ratified Múgica's proposals soon after this meeting, the Alianza succeeded in derailing the cardenista reform efforts. It is no coincidence that it took three full years for the plan to make its way from the minister's desk in 1936 to congressional approval in 1939, and even more intriguing that the version finally ratified by the Mexican Senate gave incumbent operators an additional year to comply. This filibuster ensured that a different presidential administration -and a new transportation minister- would be charged with enforcing the new rules. This benefited the Alianza, whose lobbyists took advantage of the fact that the looming presidential election -set to take place in July 1940- promised to be the most contested in Mexican history. Official party candidate Manuel Avila Camacho failed to carry the election in the capital, and his national triumph was tainted by suggestions of fraud. Concerned for his legitimacy in the capital and for the long term viability of the regime, President Avila Camacho felt inclined to re-establish political alliances with many of the organized groups in Mexico City that felt disenfranchised by Lázaro Cárdenas' policies. Not surprisingly, one of these groups was the Alianza de Camioneros.

78 For a description of the event, see the congressional debates of the session held on September 19, 1939 (Cámara de Diputados 1939).

From forcing competition to (again) fostering a cadre of political allies

It is hard to identify a transportation policy enacted in Mexico City in the period between 1940 and 1952 contrary to the interests of the Alianza de Camioneros. After the failed attempt to break the monopoly held by the Alianza, the governments of Manuel Avila Camacho (1940-1946) and Miguel Alemán (1946-1952) made a 180 degree turn and set out to cultivate a good relationship with the only organization able to supply political muscle and decent transport service in the capital. As early as 1942, the Government of President Manuel Avila Camacho enacted a new transport law, “eliminating any reference to the cooperatives” (Ibarra 1983, 41), and in 1945 elevated the Alianza to national policymaking, inviting its leaders to participate in a commission officially created to “study the problems of the auto-transport industry.”⁷⁹

To be sure, in 1946 Avila Camacho also seized the assets of the Compañía de Tranvías (which still survived with a few viable trolley routes), but this action seems to have had more to do with ridding the city from the frequent strikes of the trolley workers and with severing the city's relationship with the disengaged owners of the company, than with a deliberate effort to reinvigorate an alternative to the Alianza's buses. The administration's preference is evidenced by policies that strengthened the buses and debilitated the trolleys. Since the early forties, the Avila Camacho administration burdened the Compañía de Tranvías with “comparatively more onerous obligations”⁸⁰ -such as increasing the requirements to build and improve street infrastructure along the tracks-, while authorizing operational subsidies and fare increases to the private bus operators, including a 1944 presidential decree authorizing the Federal District “to grant economic help to concessionaires” (López Zaldívar 1997, 60).⁸¹ Furthermore, the Mexican government did not put the seized trolleys back in operation until the early 50s, partly because of the legal battle that ensued with the deposed owners, but probably also due to the financial implications of running them. Perhaps President Avila Camacho realized that the government

79 See Fulwider, 2009.

80 See Ibarra 1983, 41 and López Zaldívar 1997, 52.

81 Both President Avila Camacho and Alemán also instructed PEMEX -the national oil company- to continue to subsidize the price of fuel to private bus operators, and appeared to have no significant qualms about frequently authorizing bus fare increases. Fare increments were frequent during the early forties, and were partly associated to an inflationary spiral associated with World War II, that affected the price of key inputs used by bus operators, such as imported (and increasingly scarce) spare parts. These circumstances also worked in favor of the Alianza, as the organization began manufacturing its own spare parts, sold among members. See Mendoza Cruz, 2001.

lacked the necessary resources to compete with private buses, and figured that even if these resources were available, he obtained no political benefit from jousting with the pulpo camionero. Whatever the reason, by the mid 1940s, there were 2,502 authorized buses operating in Mexico City, and only 500 trolleys remained (Navarro Benítez 1984, 86).

In only a few years the political relationship between the Alianza de Camioneros and the President of Mexico had fully repaired. Just like in the past bus operators had joined the army to support their revolutionary patrons, starting in the mid forties Alianza members became militant activists for the candidates of the governing party. Their support was so evident, that during the campaign to elect Miguel Alemán as president, bus tickets in Mexico City had the candidate's picture printed, and according to Rubén Figueroa (who later became one of the Alianza's leaders), the organization assigned 300 buses to accompany the candidate's entourage nationwide, helping mobilize people to his political rallies.⁸² However the most valuable campaign contribution was of a slightly different nature. On election day, the Alianza was responsible for taking voters to the booths, and for sabotaging attempts by opposition candidates seeking to do the same.

Political support did not go unrewarded. In fact, the most significant policy changes in this period took place on December 31, 1947, when the Alemán administration sponsored a package of reforms to the Transport Law based on the recommendations of the commission previously appointed by President Avila Camacho.⁸³ The changes had the purpose of facilitating the consolidation of the industry, while at the same time protecting incumbents from outside competition. The reforms established concessions as an alternative to permits as the contracting instrument used to formalize the relationship of the government with private bus operators. This apparently harmless change in legal terminology had profound future implications: Concessions grant *a right* to operate, while permits only grant *an authorization* to operate. The reform simultaneously raised the bar required for the government to open the market to new operators, and reduced the feasibility of evicting operators already authorized. The reform also included a significant term extension, as the previous permits were valid for only 5 years and concessions would last 10, renewable of course. And most importantly, the alemanista reforms attempted to shift the industry-structure. They eliminated the limits on the number of concessions that each

82 See Lettieri, 2010.

83 See Fulwider, 2009, 144-145.

individual could hold, *and* on the number of vehicles that could be associated with each concession. Instead of the one-permit, one-bus maximums set under General Cárdenas, the new law established that individuals could hold any number of concessions, *as long* as the total number of vehicles owned

by an individual concessionaire did not surpass five *in the same route*. Finally, the new law established that any type of legal entity - including mercantile societies (corporations)- could obtain a concession to operate public transport services.

All of these changes directly benefited Alianza

leaders that had illegally accumulated permits using straw-men, feared the entry of more competitors to the market and wanted to avoid the cooperativization of their industry. In stark contrast to the standoff only a few years earlier, this time the Alianza celebrated the approval of these reforms while the few surviving transport cooperatives tried -unsuccessfully- to stage protests. In fact, cooperatives operating on permits awarded under Cárdenas were instructed to reorganize as mercantile societies and required to petition for a concession before the expiration of their current permits. Such transition proved so conflictive, that many of them -including the iconic *Sociedad Cooperativa 18 de Marzo*- were evicted from the system within a few months, in what represented a final nail on the coffin of the failed Múgica experiment.⁸⁴

Figure 2.4 Privately-operated buses, in front of Mexico's Palacio Nacional (circa 1945).
Source: Skyscraper City.



⁸⁴ See Lettieri, 2012.

But in addition to sponsoring rules that both protected and enriched the Alianza, both Manuel Avila Camacho and Miguel Alemán ensured high ranking leaders from this organization rose quickly in the bureaucracies of the party and of the local and national governments. The most notable example is Antonio Díaz Lombardo, the leader of the Alianza from 1923 to 1953, who in addition to becoming a wealthy and powerful businessman in the prior years (in the 30s he had produced blockbuster movies and founded a national airline⁸⁵) now became a national political figure. In fact, Alemán appointed Díaz Lombardo as Director General of the Instituto Mexicano del Seguro Social (the national social security institute) from 1946 to 1952. Several other leaders of the Alianza, like Manuel Peña, Narciso Contreras and Rafael Pimentel, became representatives and senators to the national congress under the governing party ticket. As one of its members stated succinctly in a press interview, “the bus owners union is a political organization. We have struggled to maintain a political presence; even though at times it was an anonymous presence it was always active in national politics. We are politicians and have achieved, thanks to our organization, important posts in national politics.”⁸⁶

From a political alliance to consolidate power to a partnership to advance an urban vision

Under Avila Camacho and Alemán, private bus operators re-enlisted as part of the regime's political machinery, and the Alianza's marriage to the governing party -the PRI- seemed ironclad. For a time, governing public transportation in the Federal District meant negotiating with only a handful of Alianza leaders. However, as Mexico City expanded demographically, spatially and economically, the limits of this approach would become evident, particularly to local policymakers concerned with the problems associated with fast, unregulated urbanization. Unauthorized taxis began appearing in the periphery and soon began offering “collective” services into downtown, meaning they stopped along the way to pick up more passengers. As these services grew, these emergent private actors battled the Alianza for control of the streets. Authorities initially attempted to prevent these illegal services from taking place: In addition to fines, taxi drivers surprised offering “collective” service spent a night in jail.⁸⁷ However they

85 In 1934, Díaz Lombardo founded Aeronaves de Mexico, which later would become Aeromexico, one of the two flagship airlines in Mexico. In 1936, he produced the movie “Allá en el Rancho Grande” (“Away at the big ranch”) (Elena and Díaz Lopez 2003, 27).

86 “El monopolio camionero, en 8 líneas,” *Excelsior* (Mexico City), December 1, 1971.

87 See López Zaldívar, 1997, 56-57.

were so ubiquitous and convenient, that collective taxis became impossible to contain. Soon, they became known informally as “tolerated” services -they broke rules that the state did not enforce. Political alliances alone would not suffice to inject the system with a minimal degree of order and rationality, especially as the goals of authorities began to shift from simply retaining power and meeting minimal mobility needs, to using transportation as a tool for urban planning.

The broader strategy of Presidents Avila Camacho and Alemán to accelerate the country's industrialization was based on combining large investments in public infrastructure -highways, airports, ports- with low tax rates and subsidies to industry. This strategy was quite successful, particularly when evaluated through a “national” lens. The country grew at accelerated pace and private investment returned with an intensity not seen since the Revolution -leading some to talk of a “Mexican Miracle”. While many of the benefits of this transformation concentrated in Mexico City, so did the costs. Industrialization triggered a massive rural migration from the hinterlands into the MCMA, as thousands flocked to the city looking for jobs. The population growth rates in the city averaged 5.6% per year during the fifties, and it was during this decade that the urbanized area of the MCMA first sprawled out of DF and into the neighboring municipalities of the State of Mexico.

Unsurprisingly, new residents demanded access to basic services -such as transport- and the city found itself ill equipped to deliver. On the one hand, many of the new industries and housing settlements located outside the boundaries of the Federal District, creating significant travel demand while generating no additional tax revenues for the city. On the other, the broader national policy of combining increased expenditures with generous fiscal incentives resulted in a growing national deficit, which constrained fiscal transfers to local governments and triggered a devaluation of the currency. Social services were cut back, at the same time that an inflationary spiral ate into the purchasing power of new residents. The constant inflow of population, the fast geographical expansion of the city and the severe constraints on government finances, overwhelmed local planners and regulators. As a result, the demand for public services and new settlements began to be satisfied -once again- by improvised private actors with little state planning.

In this troubling context, Ernesto Uruchurtu was appointed regent of Mexico City in 1952. In his public appearances, Uruchurtu stressed the importance of “pre-planning the growth

and provisioning of [Mexico City]”, calling for proactive government intervention to avoid “the disordered and indefinite growth of the capital” (Davis 1994, 132). His successful tenure as regent -that would extend until 1966- was defined by his staunch efforts to reclaim local state capacity to engage in urban planning amidst fiscal and institutional constraints. He championed rent control to protect the middle classes and small commerces in downtown Mexico City, imposed strict limits on the expansion on squatter settlements in the city's periphery, and denied services to settlements formed through squatter invasions. He fought off informal vendors and collective taxis and restricted their business activities to outside of the city's downtown, while simultaneously launching massive efforts to beautify the city, focusing on parks and public spaces. And he did all of this while governing as a strict fiscal conservative, balancing the city budget by expanding the tax base and keeping public expenditures down rather than by increasing rates. While many chastised Uruchurtu for being authoritarian and anti-poor, this regent became the last line of defense of the middle classes and small commercial interests that inhabited the city’s core.

When it came to transportation, Uruchurtu militantly opposed both road widening and the construction of the city's subway -a project that was on the drawing board as early as 1952. He believed that these projects ran against his growth control and fiscal discipline objectives. If approved, land in the peri-urban areas would be developed at a faster rate, and thousands of downtown residents and small commercial establishments -his own political base of support- would be evicted to clear land for construction, or priced out from the area due to gentrification. Furthermore, the cost of these projects promised to be so large, that they threatened to cancel the progress made by his administration balancing the city’s budget, and to siphon resources away from other urgent priorities -such as building drainage infrastructure. Uruchurtu proposed to improve the buses as a fiscally responsible and less disruptive alternative to subway construction. His strategy exemplifies how financial and institutional constraints shaped the “negotiating table” during his administration: On the one hand, weak city finances prevented him from relying solely on city-owned trolleys and trolley-buses (now organized under the STE) to revamp the bus network. On the other, the culture of arms-length regulation that defined the government's relationship with the Alianza de Camioneros had accustomed private operators to run their services with little state meddling. In other words, Uruchurtu *needed* to reinvent the relationship of the city with private operators to advance his urban vision.

The plan put forth by Uruchurtu was based on what Diane Davis (1994, 139) defined as “a two pronged approach to public transportation.” The regent allocated available funds to expand and modernize the STE fleet, concentrating electric trolley-buses in the city's most important corridors.⁸⁸ At the same time, he became much more involved in regulating private buses, attempting to reshape the network so that authorized private operators would complement rather than compete against public trolley-buses, and accept his low-fare policy. Uruchurtu's plan was certainly contentious. On the face of it, his plan implied that some of the Alianza's members would be displaced from the most profitable routes in the city -ideally reserved to the STE's trolleybuses-, and reassigned to areas already claimed by other Alianza operators. Uruchurtu wanted to shorten unnecessarily circuitous routes, eliminate redundant routes, and reorganize the location of bus terminals⁸⁹ to reduce congestion and shorten travel times. Each of these measures affected the informal property rights of hundreds of private operators. His plan to rationalize the bus network by negotiating with the Alianza's leaders implied that the interests of many individual operators would be affected, particularly given the fragmented industry structure that prevailed in that period.

Quite notably, the private bus industry did not unite in opposition to Uruchurtu. Several factors can help understand this. First, the displacement of private buses from central corridors was never fully completed -perhaps the proposal never represented a credible threat. Due to the costs of maintaining the existing fleet and the complications involved in importing new vehicles from abroad, the STE had only 173 trolleybuses on the streets by 1965⁹⁰, a minuscule number compared to the thousands of private buses roaming the streets. Second, the redesign of the network allowed Uruchurtu to make winners as well as losers from his reform agenda. By negotiating who could stay and who had to relocate, as well as which routes would remain and which would be cancelled, Uruchurtu successfully divided opposition to his proposals -and empowered the Alianza vis a vis collective taxis. Third, Uruchurtu maintained and increased fuel subsidies to the private buses during his tenure, officially to compensate for the low fares

⁸⁸ While the concession to operate electric trolley buses had been cancelled in the prior decade, it was not until October 1952 that the assets of the company were formally transferred to the city government.

⁸⁹ 72 different routes had their terminals in the downtown, with boarding stations around the central Plaza de la Constitución (Ross 2009, 229).

⁹⁰ See Servicio de Transportes Eléctricos del DF, 2013.

imposed by his administration -but probably also to reduce the financial autonomy and political independence of private bus organizations. As a growing share of operator's income came from the government rather than from the fare-box, the leverage of authorities grew. As Uruchurtu himself explained in an interview, "they do not miraculously sustain themselves, government pays."⁹¹ And finally, Uruchurtu made sure to explain to bus operators that the changes he advocated were necessary to protect the private bus industry from the looming threats of the automobile, the collective taxis, and the subway. In short, Mexico City authorities in this period seem to have successfully leveraged the legal and financial resources at their disposal to increase their ability to shape public transport services. As Davis concluded in her own review of this period, Uruchurtu's "foresight and special skills in politically accommodating providers of urban transport gave him maneuvering room to successfully administer and service Mexico City" (Davis 1994, 139).

Nonetheless, Uruchurtu's regulatory power (and personal interest) diminished as distance from his cherished downtown increased. At the outskirts of the growing metropolis, "fixed route collective taxis" known as "peseros"⁹² provided public transport services "without any permit or authorized concession" (Legorreta 1995, 26), and without public subsidies of any kind. As long as they kept out of the city's core they had little interaction with the state. To be sure, planners and regulators kept plenty busy. In fact, for most of the early fifties, the Alianza devolved into an internal civil war, that magnified after Díaz Lombardo was ousted as leader in 1953 -a decision encouraged by government authorities concerned over his personal control of the industry. Lacking a coherent organization to build consensus and enforce discipline, many of the private bus operators negatively affected by Uruchurtu's policies reacted by disobeying the new regulations, "invading" routes or unilaterally increasing their fares. Uruchurtu's office soon became the site to settle disputes among quarreling factions of bus operators, and between bus operators and groups of disgruntled users.⁹³ On occasion, the regent had to resort to extreme measures to maintain credibility. For example, in 1959, he ordered the intervention of one of the most popular routes in the city -the Línea Lomas de Chapultepec-Reforma- in response to the private operator's failure to respect the authorized fare. However for the most part the "Iron

91 Arturo Páramo, "Pasó medio siglo y la solución no llega," *Excelsior*, June 2, 2013.

92 The name references the price they charged to passengers: One *peso*

93 Students often mobilized against unauthorized fare increases during this period. See Autotransportes Urbanos de Pasajeros-Ruta 100, 1993, 18.

Regent” -as Uruchurtu came to be known- had a limited ability to closely monitor services, and depended on the support of organized operators to enforce his own rules.

To enhance the enforceability of regulatory decisions and to channel public subsidies -in other words, to insert the state into the the void left behind by the Alianza's internal turmoil-, the Mexican Government sought to create a forum to centralize negotiations with the private bus industry. A new regulatory reform, signed by President López Mateos on December 28, 1959 established the Union de Permisionarios de Transportes de Pasajeros en Camiones y Autobuses en el Distrito Federal (UP) - as “the only body through which the Federal District Department (DDF) will establish relations with individual permit and concession holders about anything to do with the delivery of their services” (Cámara de Diputados 1958, article 1). The Law, certainly reminiscent of Múgica’s early efforts to consolidate transport cooperatives under a single Federation, established mandatory affiliation and payment of membership dues to the UP, and gave the Mexico City regent ample powers to appoint and remove the UP leadership. But most importantly, the UP provided Uruchurtu with a mechanism to mediate his relationship with roughly 4,000 individuals that held approximately 7,500 operating permits and concessions to operate buses in the city⁹⁴, while also controlling the costs of this relationship to the public purse.

Since the informal collective taxis operated outside of the orbit of the UP, they were legally barred from formally making claims on the state. In other words, the UP became a useful “thermostat”. When Uruchurtu desired to increase the reach of the regulated network, he could extend membership to informal collective taxis. When he wanted to decrease the cost of subsidies, he could expel some members. Since participation in the UP was mandatory to access subsidies, Uruchurtu was empowered to enforce regulations that distinguished his administration -such as mandating that all buses be painted the same color, or charge the same fare. Without resorting to nationalizing public transport and despite maintaining a fragmented industry structure -with hundreds of individual entrepreneurs as negotiating counterparts-, Uruchurtu used public transport as a tool to advance his vision for Mexico City, at least within the city’s central district. For a brief period of time in the late fifties and early sixties, Mexico City's downtown

94 While I have found no official sources, the congressional debate records suggest that at that time there were 7,500 bus operating permits in Mexico City, held by approximately 4,000 different individuals or organizations. This number is consistent to figures reported by Jimenez Bautista, 2009.

“came as close to flowering as it did any other single period of time since 1900” (Davis 2005, 215-216).

To be sure, the UP became a powerful instrument to govern private bus services in the city, playing an important role settling conflicts, standardizing services and legitimizing decisions. It became the “table” where all important negotiations took place, and operators who were not invited were at a serious disadvantage. However, the UP also locked Uruchurtu “in a strong give-and-take relationship with the urban bus industry that required his political responsiveness in return for their accommodation” (Davis 1989, 9). In such way, the UP paradoxically served to re-energize and legitimize the Alianza de Camioneros, “as a principal institutional player in behind-the-scenes negotiations over urban policy in Mexico City” (Davis 1994, 142). As the largest organization of bus operators in the city, its leaders automatically became the most authorized voice representing all of the private operators of transport services negotiating with the state within the UP. Even operators that once attempted to compete against the Alianza in the streets saw the benefits of joining. After all, problems of Alianza members seemed to get resolved more quickly, and this organization had a systematic upper hand in inter-operator conflicts mediated by the UP. Furthermore, once internal disputes over the Alianza's leadership were settled in favor of Rubén Figueroa -a political ally of Uruchurtu⁹⁵- the practical usefulness of the UP diminished significantly. Authorities directly negotiated with the Alianza leadership, with the role of the UP limited to formalizing their agreements. Scholars documenting this period have noted how the UP gradually became an irrelevant middleman, “given that the Alianza could count on the support of public officials” (González Ruiz 1996, 29).⁹⁶ However, Uruchurtu certainly outdid his predecessors. Beyond positioning himself as patron of a politically important interest group (as President Obregón had done in the 1920s), Uruchurtu united a fragmented private bus industry in support of a vision for Mexico City's future that focused on more than the immediate transport needs of the population. Even if for a brief period of time, quality of service improved, and the interests of public regulators and private bus operators seemed aligned in the pursuit of compact urban development, mixed residential and commercial uses, and affordable transit services.

95 Rubén Figueroa who later serve as senator and governor of the State of Guerrero under the PRI.

96 Also on this topic see Loyzaga de la Cueva, 1987; and Figueroa, 1990a.

The Metro: Nice but expensive

However, just as Uruchurtu consolidated his partnership with private bus operators -and well before the benefits of his transportation policies could extend outside of his cherished downtown- a renewed effort to build the subway emerged. The original proposal, floated in 1952 by Ingenieros Civiles Asociados (ICA), a private engineering consortium with landed interests in the outskirts of the urban area, had been previously derailed over questions regarding the technical feasibility of building tunnels in Mexico City's unstable and earthquake-prone soil, and of course over the associated financial implications.⁹⁷ Since then, Uruchurtu had succeeded in convincing the two presidents that retained him as regent that the subway was neither good urban policy nor a sound public investment. However, by the early sixties Uruchurtu was serving under a third President, Gustavo Díaz Ordaz, and subway proponents led by ICA' President Bernardo Quintana made a new push for the project. This time, they anticipated critics by previously enlisting the support of french engineering firms and banks,⁹⁸ who promised to supply the required technology and financial support⁹⁹.

President Díaz Ordaz had close links to the financial and real estate interests promoting the subway,¹⁰⁰ and considered this project an extraordinary opportunity to leave a personal legacy. But in addition to this, he sided with those who questioned Uruchurtu's negotiated approach to urban transport policy, perhaps interpreting it as a sign of weakness. As Oscar Figueroa (1990a, 224) concluded, "the absence of initiative on the part of operators, added to the weakness shown by authorities attempting to influence their behavior, led to the search for a exogenous formula able to provide an opening for some direct participation of the public sector in modeling the supply of service." The president likely believed that the subway could solve the congestion problem of the capital and make downtown attractive for redevelopment, succeeding

97 See Borja Navarrete, 1997.

98 Technical support was offered by the Société General de Traction et d'Exploitation and by the Société Française d'Etudes de Realisations de Transports Urbains. Financing was provided by a consortium of institutions led by the National Bank of Paris (BNP) that included Credit National, The Merban Co, Rothschild and Sons, Ltd. and the Export Development Co. For details see Legorreta 1995; Navarro Benítez 1984; and Davis 1989.

99 See Navarro Benítez, 1984, 90; and González, 1988, 65-66. Some accounts, like Henry and Kuhn, 1996, suggest that the seeds of french collaboration with ICA were planted during the visit of General Charles de Gaulle to Mexico on March 1964, only a few months before the election of Díaz Ordaz as president.

100 In addition to family connections, President Díaz Ordaz's efforts to clinch the PRI nomination had been supported by ICA (Davis 1989).

precisely where the trolleybuses had failed: driving unseemly private buses out of the city's central core. Since the subway promised significantly better service than surface options, private operators of buses were expected to lose patronage and be cornered into accepting relocation. The original Metro Plan, published in 1977 (quoted in Navarro Benítez and Cadena Perez-Campos, 1990, 4), was quite explicit in this goal, offering "to service the most congested areas, *eliminating* surface public transport modes" (emphasis added).¹⁰¹ In other words, this was not a project originally conceived to integrate multiple modes and to foster collaboration, but more precisely to simultaneously spur real estate development and to evict private bus operators from the central core of the city.

Adding a sense of urgency to the project, Díaz Ordaz committed in 1964 to build the subway in time for the 1968 Mexico City Olympics. This event would be hosted by a "developing" nation for the first time of history, and Díaz Ordaz wanted to showcase a modern and up and coming country to the world. Uruchurtu's opposition to the subway was uncomfortable and uncommon, and would soon make his tenure as regent unsustainable. However, Díaz Ordaz could not simply dismiss the popular regent that had saved the capital from financial chaos and ungovernability. First, he had to diminish Uruchurtu's credibility, and weaken his claim that the city's transport needs could be effectively met through a partnership with private bus operators. Over the course of 1964 and 1965, the president sparred behind curtains with the regent over the subway project, to the point of accusing him of sabotaging the Olympics and putting national pride in jeopardy. Many of the long-standing opponents of Uruchurtu's anti-growth policies coalesced in support of the president, while the middle classes and small commercial interests from downtown provided the regent with a mantle of protection. However, Uruchurtu had tied his fate so tightly to the buses, that when when the negative features of the Alianza were evidenced to the public, and when some voices within the bus lobby suddenly clamored in support of the subway, his position was significantly weakened.

While it may seem obvious that stakeholders linked to surface transport would unite in opposition to the subway, two groups broke ranks. First, bus drivers that did not own vehicles hosted a series of strikes in 1965 and 1966. This group had been continuously exploited by the Alianza de Camioneros: Working 16 hours per day, forced to work weekends, paid a meager salary and a small commission per passenger, denied of any social security and forced to sign

¹⁰¹ Interestingly, the original subway plan barely mentioned inter-modal integration (physical, financial or operational), and only as a long term objective (Covarrubias 2004, 70).

their resignation letter on the day they were hired.¹⁰² Many of them endured this as part of the job: A tortuous road into bus ownership and organization membership. For a long time, they kept grievances under the lid, using national labor syndicates aligned with the PRI as conduit to alert authorities of the Alianza's "fraud against the workers and violations of the labor laws" and of its "failures to fulfill its commitments" (Fulwider 2009, 179). However Mexican authorities turned a blind eye to workers' complaints, and even collaborated in defusing them. This is perhaps unsurprising. How could Uruchurtu simultaneously negotiate low fares and limited subsidies with private bus operators while at the same time attempting to enforce labor standards that would inevitably drive labor costs up? The close linkages between the national labor movement and the governing regime explains why worker strikes had been previously almost non-existent in the private bus industry. However this time the fallout between the president and the regent gave workers an invaluable opening to raise their claims. Of course, we can conjecture -as Diane Davis (1994, 164-165) did in her own account of this period- that the suddenly frequent strikes were actually promoted from within the state to diminish Uruchurtu's standing among the public. With the city constantly paralyzed by an apparently ungovernable private bus system, and with the Alianza portrayed as an exploitative and irresponsible employer, the regent's case against the subway certainly suffered.

The second group of surface transport stakeholders that supported the subway was composed of organizations representing collective taxis. While for some years Uruchurtu had tolerated "informal" collective taxis as a useful complement to the public transport network,¹⁰³ he continued to deny them formal recognition as a wink to the Alianza, as a strategy to maintain subsidy costs down, and as an urban growth control measure.¹⁰⁴ These organizations found no reason to oppose the subway, as they were already banned from servicing routes affected by the project. In fact, their leaders soon realized that they actually stood to profit from the subway. Not only would they be able to feed from its massive passenger flows, but they could "sell" their support for the subway to negotiate recognition from the state -and thus to become eligible for

102 Francisco Muñoz Aprezza wrote a vivid account of this period, based on interviews with former Alianza workers. This text is included as Chapter 7 in González Ruiz, 1996. I highly recommend it.

103 See Darido, 2001, 34; Gakenheimer et al., 2002, 243.

104 One of Regent Uruchurtu's most effective -and questioned- urban growth control policies consisted on denying public services to squatter settlements appearing in the city's periphery. He treated collective taxis in a similar fashion to informal vendors, banning them from entering downtown.

subsidies and better able to defend territorial claims from unauthorized competitors. By mid 1966 “several representatives of small and medium sized bus lines broke ranks with the Alianza and came out with a public statement supporting the Metro” (Davis 1994, 170). Curiously, it is exactly during this period that the previously independent and politically marginalized collective taxi associations coalesced as federations. In fact in November 1967 a new organization representing 80% of the collective taxis -the Coalición de Agrupaciones de Taxistas (CAT)- was created, and Uruchurtu’s successor authorized it in 1969 to extend its services into the most profitable routes outside of the city's downtown: *Ruta 1* would service Calzada de Tlalpan, *Ruta 2* would service Reforma and *Ruta 3* would service peripheral services.¹⁰⁵ Several other organizations would soon follow. While it is impossible to know if these events are related, Jorge Legorreta provides an interesting clue. He personally interviewed Enrique Leon de la Selva, the elusive leader of the CAT, who candidly explained that this organization “could only exist thanks to support offered by important leaders of the PRI” (Legorreta 1995, 156).

With bus services paralyzed during the strikes, and with the surface transport industry divided, Ernesto Uruchurtu lost much of his political support and resigned in September 1966 as regent of Mexico City. The new regent appointed by President Díaz Ordaz announced his full endorsement to the subway project only a few weeks after taking office. In April 1967 a new government agency -the Sistema de Transporte Colectivo-Metro (STC)- was established to build and operate the subway, and construction of the tunnels started in June. The first subway line would not be ready in time for the Olympics, but on September 4, 1969 President Díaz Ordaz achieved his dream of boarding the first train, with mariachis greeting the underground train at every station.¹⁰⁶ During the inauguration, the president proudly declared: “Safe, fast, and continuously extending below the surface of our city, the Metro will forever abolish, each time at a greater extent, the annoyances and the risks of any massive transportation on the surface”¹⁰⁷ A fury of Metro construction overtook the last two years of the Díaz Ordaz administration -building

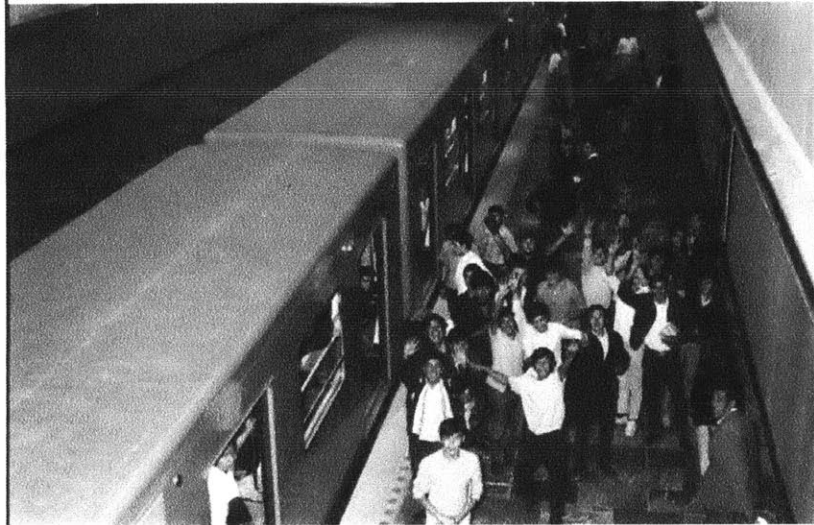
105 For a brief history of the creation of the CAT see López Zaldivar, 1997, 61-64.

106 See Ross, 2009.

107 Quote extracted from the video documentary by Sedano, 2003.

one kilometer of underground tunnels per month.¹⁰⁸ By the end of his term in 1970, a network of 3 lines and 39.1 kilometers of tracks circling and crisscrossing the city's downtown had been completed, and the system was already carrying 659 thousand passengers per day.¹⁰⁹ The stark comparison with the old buses was evident, and the popular feelings of the period were forever captured in a song written by Chava Flores:

Figure 2.5 Mexico City Subway, one day after inauguration day (September 5, 1969). Source: Asociación de Aficionados al Transporte de Pasajeros en México



“I’m riding the metro, so big, so fast, so clean, what a difference from my mate Filemon’s bus, who is riding to the tomb.”

However the warnings made by Uruchurtu soon haunted not only the finances of Mexico City, but of the country as a whole. The original Metro plans did not contemplate a direct subsidy for the city to operate the system, and its advocates optimistically estimated that the revenues from the system would compensate construction costs only ten years after the first three lines began operations¹¹⁰. In reality, the actual construction cost of the first three lines exceeded the budget by 45%, and system revenues barely sufficed to cover operating expenses,¹¹¹ partly because authorities established a tremendously low fare to ensure political support for the

108 See Figueroa 1990a.

109 See Islas Rivera, 2000, 289.

110 See Legorreta, 1995, 126.

111 See Dosamontes, 1969; Sadot, 1970. The overestimation of benefits and the underestimation of costs is a typical feature of urban mega-projects, as demonstrated in Flyvbjerg, Bruzelius, and Rothengatter, 2003. In this case, ICA’s involvement in crafting the feasibility study probably played a major role, as one analyst observed, the principal intent of the studies used to make the decision were “to sell the idea of the METRO rather than to analyze alternative transport solutions” (Sutherland 1978, 75).

project. This situation would only worsen over time, as the low fare became practically untouchable, laying the seeds of a growing operational deficit. Soon, the subway was aptly portrayed by Davis (1989, 5) as “an unmitigated economic disaster” -by 1981 Mexico City devoted more resources to the subway than to health services, drainage services and drinking water combined. Eventually, subway construction and operating expenses would absorb a third of the city's yearly budget (Legorreta 1995, 124).¹¹² and the national government would need step in periodically to cover outstanding debt with foreign creditors. This outcome is perhaps unsurprising, as the subway not only represented a more expensive technology than the buses, but also forced the state to internalize many of the costs that went unaccounted in the private bus system. Not only did the government pick up the tab for building the tunnels and stations and for purchasing and maintaining the vehicles, but in contrast to the private bus operators, the state could not easily skimp on labor costs and service-standards.

Luis Echeverría -Díaz Ordaz successor in the presidency- made no secret about his concern over “the Metro's enormous costs, its high import value, and its contribution to foreign indebtedness” (Davis 1994, 203). Interestingly, rather than talking about the subway as a tool to “eliminate” surface transport, the new president pledged to “carefully study the coordination (of the metro) with buses, trolleys and trolleybuses to find integral solutions to the problems of urban transport” (Echeverría Alvarez 1971). This change of emphasis was probably also influenced by Echeverría's commitment to national industry -buses were manufactured locally, and subway cars imported from France-, and by political alliances linking the PRI with the Alianza de Camioneros,¹¹³ and the president personally with Rubén Figueroa.¹¹⁴ Despite the ambitious plans laid out by ICA and the recent defeat of Uruchurtu's downtown coalition, the financial and political context that surrounded the subway led Mexican authorities to halt the expansion of the system from 1970 to 1977.¹¹⁵ In the interim, Mexico City authorities turned

112 Also see González, 1988.

113 According to one of the sources interviewed for this research, Isidoro Rodríguez (one of the leaders of the Alianza) liked to say that “bus operators owed so much to the PRI, that they had to be its most committed and loyal soldiers”, and often gloated that in Mexico “politics travels by bus”.

114 Ward (1990, 12) suggests that family ties linked Echeverría with the Alianza. But in addition, Ruben Figueroa was profoundly indebted to Echeverría. His political posts as senator (1970-1974), and as governor of the State of Guerrero (1975-1981) were partly owed to presidential support. Further, Figueroa had been kidnapped by a guerrilla group in 1974, and the president personally intervened to ensure his liberation (Ross 2009, 273).

115 Subway expansion would resume when the oil boom filled government coffers in 1977, and stop soon after the debt crisis in the eighties.

again to private operators to cover the transportation needs of the vast majority of its residents. Collective taxis were authorized into even more corridors and the Alianza de Camioneros recouped much of its influence in city hall -albeit this time without a towering figure like Uruchurtu to align private interests with public goals.

Private bus operators *in* government

In 1971 President Luis Echeverría appointed Octavio Senties as regent of Mexico City. No other individual could better personify the renewed relationship of the Mexican government with the private bus industry: Senties was married to the Echeverría's sister, and had served for decades as the principal legal counsel to the Alianza de Camioneros (Camp 2001, 907). Just like in the 1920s Celestino Gasca had used the mayor's office to promote the bus industry vis a vis the electric trolleys, Regent Senties now used it to protect the Alianza from the threat of subway expansion. To be sure, pro-subway forces were strong and well connected to the president, and a plan to expand the system for 50 additional kilometers loomed throughout this administration. Unable to entirely blockade the subway, Senties suggested a viable compromise, soon adopted by Echeverría. Rather than extending the network, they should first "mexicanize" subway trains, by manufacturing them locally. Such proposal fit well with Echeverría's nationalistic leanings, seemed to appease pro-subway advocates, and at least promised to reduce the costs of the subway in the long term. In 1973, the Mexican government established the Constructora Nacional de Carros de Ferrocarril (CNCF),¹¹⁶ and announced plans to produce 345 subway cars in the country by 1976. In the meantime, bus operators gained valuable time to adapt to a system that now inevitably included a strong, publicly funded competitor, and Senties could continue to lobby against future expansions of the system.

116 See Bauer et al., 1990.

But even as this period is characterized by a renewed partnership between the private bus industry and the Mexican government, the policies advocated by Senties differed markedly from those that had characterized Uruchurtu's. Rather than warring against "informal" settlements and against "tolerated" service providers who served the periphery, the period of Senties in office is also defined by deliberate efforts to "regularize"

their situation.¹¹⁷ Senties granted formal property titles to squatters, and extended formal permits to hundreds of collective taxis that connected their settlements into the city, always in exchange for political support to the PRI. This may seem a contradiction from his commitment to the Alianza de Camioneros, but in fact was not. Mexico City continued to grow, and both the informal settlements and the transport services that brought its residents into the city were already there. Mexican authorities could not go on ignoring this fact, focusing their energy and resources on a formal bus and subway network constrained to the vicinity of downtown. By bringing the collective taxis into the mantle of the party, Senties ensured that he had control over the areas they could exploit, and certainly made such decisions with the interests of the Alianza in mind. Furthermore, the collective taxis operated small sedans in terrains not well suited for the Alianza's new buses -the unpaved, narrow streets of squatter settlements- and albeit growing, their participation in the transportation market continued to be marginal. In 1972 at least, buses were responsible for 50% of the trips in the MCMA, vs. only 3.3% served by collective taxis (Islas Rivera 2000, 161).

Figure 2.6 Privately operated bus, 1973 (source: John Lebeau)



¹¹⁷ See Alvizar Sánchez, 2005.

Lacking the resources necessary to extend STE and Metro services throughout the city, Echeverría bought into Senties' suggestion that the transportation needs of the city were best served by working with, rather than against the private entrepreneurs controlling the bus and collective taxi industries. However, Regent Senties' dual commitments to the Alianza and to the president constantly blurred the line separating his role as regulator from his role as lobbyist, with detrimental results to the users of public transport, and to the public interest in general. Calls to improve vehicles and to use less pollutant fuels were reduced to simply suggestions, and never forcefully enforced.

The leaders of the Alianza -such as Rubén Figueroa, Hector Hernández Casanova and Isidoro Rodríguez- were savvy businessmen. They knew that to thrive amidst the competition posed by metro and the collective taxis, they could no longer function as member based organizations, with a fragmented ownership structure. They needed to optimize the number of buses assigned to each route, reduce or increase frequencies, shorten routes, purchase newer and more fuel efficient buses, etc. and it was difficult to make these decisions by consensus. Rationalizing their supply of service had not been critical when they had almost exclusive control over the profitable downtown services, but it was critical now. Indeed, between 1972 and 1975 many private bus associations in Mexico City registered an observable turn towards more technically and economically efficient operations (Figuera 1990a, 223). Having an ally as regent certainly facilitated the required organizational “modernization”: Senties used his authority to

Figure 2.7 "Delfín" pictured in Mexico City's downtown, circa 1970s (source: unknown)



brokered the deals necessary to transition the 86 owner-unions affiliated to the Alianza into only 20 firms,¹¹⁸ and to redistribute among them the routes that fed from, rather than competed against, the subway.¹¹⁹ To get conservative and risk averse Alianza members to buy into both proposals, Senties promised to significantly increase their profitability. He offered government-backed and partially subsidized loans to

purchase newer, larger vehicles

-70 passenger buses called "delfines" (dolphins) (figure 2.7)- which ran on significantly cheaper (although more polluting) diesel.¹²⁰ Second, he continued the policy of subsidizing fuel and spare parts to Alianza members through the UP. Third, he authorized a significant fare hike to bus operators running "first class" services -i.e. the newer buses just purchased by the Alianza.¹²¹ And fourth, he authorized and facilitated a route redesign -eliminating redundant routes, and shortening average route lengths from 29.5 to 14.5 kilometers.¹²² In short, Senties cut their costs

118 See Legorreta, 1995, 27; and González, 1988, 73. To be sure, this transition was not flawless. While some of the owner-associations truly transformed into corporations, others simply created shell companies and continued to function as always. Perhaps this is why the government resolution that revoked their concessions in 1981 refers to twenty "groups", not to twenty firms.

119 While metro proponents thought that bus operators would automatically seek their relocation outside of downtown, there were areas of downtown where buses competed well against the subway. This was particularly the case of line 3, where ridership was much lower than original ICA estimates.

120 See Navarro Benítez and Cadena Pérez-Campos, 1990, 12.

121 The label "first class" was granted to services that supposedly would not accept standing passengers. This rule was never enforced, revealing that the label was really intended as a fare increase (Figueroa 1990a, 225).

122 See Ibarra, 1983.

and increased their revenues¹²³, *even* when doing so resulted in more expensive, less convenient commutes for users, and in a more polluting bus fleet.¹²⁴

All of the previous measures benefited both the private bus operators (who according to Trueba Lara (1995, 17) doubled their yearly earnings) and the financially struggling subway. By tweaking the network so that both modes would complement rather than compete against each other, the subway tripled the ridership registered during its first year of operation without laying additional kilometers of track. In fact, Metro ridership in 1976 reached an average of 1.8 million passengers per day,¹²⁵ surpassing the theoretical maximum capacity of 1.5 million.¹²⁶ Nonetheless, the intermodal complementarity established by Senties did not extend to fare integration. In order to maximize revenues for both modes, users paid twice for a combined trip that previously required no transfers and a single fare. The result was on the one hand that trains *and* buses were intolerably congested, and on the other that trips more expensive and time consuming.¹²⁷ To increase capacity, subway trains were forced to operate with minimal headway -to the point that a simple conductor distraction resulted in October 1975 in a fatal Metro accident that killed 26 people and left 69 injured.¹²⁸ The buses, in turn, were increasingly scarce as a consequence of the Alianza's newly found ability to cut costs. According to Islas Rivera (2000, 256), "multiple and daily complaints over (bus) service included: Worker exploitation, official fare violations, insufficient routes, scarcity of buses, etc". In short, the same state that lacked capacity to guarantee good transport services had the capacity to make the business profitable. After all, it was the state -embodied by Senties- that forced all citizens to pay for the compromise brokered between the buses and the subway.

At that point government regulators had no exact idea of how many buses were actually running in the street. In fact its monitoring capacity was limited to only 22 inspectors, charged

123 This transition was of course facilitated by the fact that the ownership structure of the Alianza owner-unions was not as fragmented as before. Many leaders had by then accumulated concessions and ran as "flotilleros" -*fleet-men*-, controlling 20-30 buses. However, Senties' intervention was critical to convince more traditional-minded and risk-averse members to make the transition willingly.

124 For a detailed description of this period, see Ibarra, 1981.

125 See Islas Rivera, 2000, 289.

126 See Navarro Benítez, 1984, 91.

127 In 1981, 97.5% of subway passengers took multiple modes per day (Davis 1994, 231).

128 See González, 1988, 68.

with supervising services city-wide (López Zaldívar 1997, 65).¹²⁹ This information asymmetry had not been a problem in the past -given that there was an oversupply of buses-, but it was now. The Alianza deliberately withheld services particularly outside of the most profitable routes and at non-peak hours, leaving many passengers stranded. Anyone who could afford to purchase a car or travel by taxi escaped from the formal public transit system, solidifying the belief that public transit is a mobility alternative reserved to the poor, and disproving claims that investing in transit could reduce congestion.

In 1977 José López Portillo replaced Echeverría in the presidency, and Carlos Hank replaced Senties as regent of Mexico City. Since his electoral campaign, López Portillo faced public demands for “municipalizing” bus services, for building wider streets, and for renewing expansions to the subway. Action seemed urgent. Popular dissatisfaction with public transit was such, that bus hijackings had become a frequent way for citizens to voice their frustration.¹³⁰ Unsurprisingly, soon after his formal appointment Carlos Hank began referring to the transportation chaos as “the gravest capital sin” of the Federal District (Navarro Benítez 1984, 93). However, the external debt facing the country seemed to be an unsurmountable obstacle to attempting any comprehensive solution. In fact, only by winning the lottery could a highly indebted country like Mexico undertake any of the three above mentioned projects that promised to ameliorate that urban transport situation in the capital.

Unlimited money, unlimited regulatory strength?

Fortunately for López Portillo and Hank, Mexico won much more than the lottery. In the initial months of the new administration, news broke about massive oil discoveries in the Gulf of Mexico. Proven oil reserves in the country surged from 16,800 million barrels in 1977 to 40,200 million barrels in 1979. Potential reserves were estimated at 200,000 million barrels, a number that promised to make Mexico an oil exporting powerhouse overnight. This finding concurred with a tremendous increase in the international price of oil, triggered by the 1973 and the 1979 energy crises. López Portillo explained the impact of these discoveries to the nation, asserting that: “Mexico, as a nation of contrasts, has been long accustomed to administer needs and crises. Now with oil, we must get used to administer abundance.”¹³¹ With this newly found wealth,

¹²⁹ Unsurprisingly, when the service was municipalized years later authorities discovered that only half of the vehicles supposedly operated by the Alianza were in working condition.

¹³⁰ See Legorreta, 1995, 28; and Loyzaga de la Cueva, 1987.

¹³¹ See Krauze, 1999.

López Portillo undertook a plethora of expensive public works projects throughout the country. Solving the urban transportation problem of the capital was of course high on his agenda.

In 1978, the president instructed the national finance ministry to absorb Mexico City's debt, mostly composed by loans taken to build the original 3 lines of the subway.¹³² In addition, he pledged to prevent subway fare increases, committing a yearly subsidy to Mexico City's subway system, funded by the national government. This subsidy explains why Mexico City was able to maintain fares frozen at Mx \$1 peso until 1986, despite surging inflation,¹³³ making this the lowest-priced metro system in the world. Between 1977 and 1982 public subsidies allocated to the subway increased 440%, while revenues only increased by 94%.¹³⁴

Lacking financial constraints, Mexico City authorities made no small plans. Regent Hank presented a public works plan to build 34 “ejes viales” -multiple-lane, single-direction boulevards- forming a 500 kilometer asphalt grid throughout the city. This street plan also included the completion of the city's ring roads and the construction of 20,000 new parking spaces.¹³⁵ A few months later Hank presented a Metro Master Plan, promising an expansion of the network to 19 lines and 400 kilometers of track by 2010 (Legorreta 1995, 90).¹³⁶ Finally turning to surface public transport, Hank ordered the purchase of 118 new trolleybuses for the STE, and announced that the previously minuscule Línea Lomas de Chapultepec-Reforma (intervened by Mayor Uruchurtu, and operated by the UP since 1958) would be reconstituted as a public agency called Autotransportes Urbanos de Pasajeros-Ruta 100 (AUP-R100) and strengthened with a fleet of 1,000 new buses.¹³⁷ These vehicles would run on lanes reserved for public transport on each of the ejes viales. A public works and procurement frenzy began almost

132 See González, 1988.

133 For reference, Mx \$1=US \$0.08 in 1969, US \$0.04 in 1978 and US \$0.001 in 1986. Expressed in terms of 2010 Mexican pesos, the real value of the subway fare in 1969 was \$6 pesos. Real values decreased steadily as a result of inflation, until reaching a real value of \$0 in 1985. Periodic increases since then have maintained the real value of subway fares between \$2 and \$3 pesos (Medina Ramirez 2013, 80).

134 (Legorreta 1995 p. 126)

135 See Navarro Benítez, 1984, 94.

136 ICA continued to be the leading force promoting the subway in Mexico. For details on the role of this company see (Ziccardi 1991).

137 See Navarro Benítez, 1984, 94; and González Ruiz, 1996, 33. This decision was formalized by a presidential decree signed August 3, 1981. For the full text of this decree, see Departamento del Distrito Federal, 1981.

immediately, financed almost exclusively with foreign-currency loans, backed with the promise of future oil revenues.

Unsurprisingly, the members of the Alianza the Camioneros found the plans presented by Mexico City authorities deeply disturbing. Their leaders complained that STE and AUP-R100 presented unfair competition. Public companies received far more public subsidy, and government authorities made no secret of their intention to allocate public transit lanes on the *eyes viales*, *exclusively* to the STE and Ruta 100,¹³⁸ causing growing concern about the market that would be left for private operators. Much had changed since the time Senties protected the interests of the Alianza at city hall. Their demands for increased subsidies or fare hikes were now met with disdain, and the input of their leaders was no longer considered when laying out plans for subway and trolleybus network expansion. Operators attempted to negotiate with authorities, pledging to match the vehicle and service specifications of the AUP-R100 in exchange for tax exemptions, subsidized loans, increased fuel subsidies, and a fare increase to \$6 pesos (US \$0.26). As Alianza leader Hernández Casanova explained in an interview, “beyond any patriotic spirit we may have, it is not possible to offer the level of service required by the DF without the authorization of a fare increase” (Hernández, 1980, 23).¹³⁹ When Mexico City authorities flatly denied the fare adjustment, a few private operators in the eastern suburb of Nezahualcóyotl increased fares unilaterally. This measure incensed passengers, and the event escalated into a full blown riot. “Men and women waiting at the bus depot attacked the buses and their operators. Rocks and sticks were thrown on the vehicles... somebody turned to using fire... anti-riot police arrived, equipped with shields and billy clubs” (Trueba Lara, 1995, 18).¹⁴⁰ The result: Several people injured and 23 buses burned. Regent Hank's response was fulminating: he used the occasion to justify the decision to revoke all of the concessions held by the Alianza and to disband the UP, promising that in less than 12 months the city would enjoy “efficient and sufficient transportation,” provided directly by the government (Monge 1995c, 9).¹⁴¹

138 See Islas Rivera, 2000, 254; Figueroa, 1990a, 226.

139 Other accounts suggest that the Alianza previously agreed to purchase new vehicles, modify their routes, improve frequencies and adopt lower emission fuels without any additional subsidy, but failed to deliver. For example, see Autotransportes Urbanos de Pasajeros-Ruta 100, 1993, 17.

140 Mendoza Cruz (2001, 59) and Loyzaga de la Cueva (1987) also reference this episode.

141 Later critics would point out that many of the buses purchased by Mexico City for Ruta 100 were actually supplied by Mercedes Benz, a company whose distributor in Mexico was owned by the Hank family, and by Mexicana de Autobuses (MASA), owned by the Zabludovsky family, also with close links to the regent. For example, see Trueba Lara, 1995, 21.

There is no evidence of a full blown, concerted, protest to defend the Alianza from such forceful government intervention. This may have been a consequence of the profound symbiosis linking the Alianza the Camioneros and the PRI -which provided the government with alternative means of rewarding or punishing its members: Leading Alianza leaders occupied important positions as these events unfolded: Rubén Figueroa was Governor of the State of Guerrero (1975-1982), and his son served as congressman (1979-1982), in a seat previously occupied by Hector Hernández Casanova (1977-1979). In the PRI's world of political symbolism, it could be no coincidence that Hank's decision to municipalize bus services in Mexico City was signed precisely on September 25, 1981, the same date Miguel de la Madrid was "uncovered" as the party's nominee for the presidency. Another reason that may explain why the Alianza did not revolt against Hank may be that the previous consolidation of bus owner-unions into few firms controlled by a few individuals effectively reduced the number of individuals interested in protesting. Perhaps the leaders of the "pulpo camionero" realized that the fully funded subway, trolleybus and Ruta 100 ventures were inevitable, and concluded that it was a good time to cash out. Nonetheless, the tone of the resolution formalizing the decision to municipalize bus services in the city signed by Hank suggests that the event was anything but amicable. The regent not only revoked "unilaterally and in advance" their concessions, but also seized all of their assets. The resolution established that the buses, real estate, and any other property used by the Alianza to provide its services "are heretofore the property of the Federal District Department", and instructed city officials to "proceed to the administrative occupation and eviction of those that may resist the diligence" (Departamento del Distrito Federal 1981). President López Portillo minced no words when he referred to the municipalization of bus services in his last Informe de Gobierno (a formal, yearly address to Congress), dated September 1, 1982. He explained: "the city had 4,000 buses in operation. In november we will have 8,000. We duplicated supply and did away with anarchy."¹⁴²

It is impossible to know the details of the negotiations that preceded or followed the municipalization of bus services in Mexico City. After all, the ramping up of STE and Ruta 100 fleets in 1977-8 was a clear indication of what would be coming in 1981. There is some documented evidence that the decision was largely expected by the leaders of the 20 private

¹⁴² See López Portillo, 1982, for a transcription of this speech.

groups conforming the Alianza, and that Regent Hank even called on them “requesting their cooperation.”¹⁴³ Scholars have mentioned that the government paid “a generous liquidation” to the largest Alianza stockholders¹⁴⁴, and in fact some of these leaders soon reemerged as thriving operators of interurban transportation services -with companies that survive to this day, like Flecha Roja-, or reinvested their capital in collective taxis operating outside of the DF, in the neighboring municipalities of the State of Mexico.¹⁴⁵ As part of the negotiations, city authorities agreed to rehire all of the workers of the Alianza -drivers, mechanics, etc-, publicly inviting them “to join this new era in the history of metropolitan mass transport with enthusiasm sense of civic duty”.¹⁴⁶ They also offered to pay financial compensation to the owners of seized property, although certainly noting that only 3,500 of the 6,300 seized buses were in operating conditions¹⁴⁷. The transition, even if forceful, was not cheap.

In any case, the wildest dreams of government transportation planners -and of those who profited from the transport industry- seemed within reach by the end of the López Portillo administration. All of the principal modes of public transportation in the city were placed under the direct control of one government body -the road and urban transport commission (COVITUR), created in 1977-, and there was clear political will from the president and from the regent to use an apparently unlimited stream of public money to fund public transport capital investments and to subsidize fares.

The (short lived) “Golden Epoch” of public transportation

President López Portillo justified the decision to municipalize bus services pointing to the need to “optimize public services”, and asserting his desire to “contribute to the general restructuring of transit, roadways and transport spearheaded by the Federal District Department” (Departamento del Distrito Federal 1981). To be sure, the establishment of AUP-R100 as the only authorized bus operator in Mexico City was, according to transportation

143 See Arenas, 2012.

144 See Loyzaga de la Cueva, 1987; Márquez López and Pradilla Cobos, 2007, 151.

145 See González, 1988, 74-75; Márquez López and Pradilla Cobos, 2007, 160.

146 See Fernández, 1995, 37; González Ruiz, 1996, 36.

147 These figures from Islas Rivera (2000, 256, footnote 14). To be sure, many of the buses seized by the AUP-R100 from the Alianza were old and badly maintained. Between 1983 and 1986, the company purchased 3,864 new buses, but was forced to retire 4,534 older units (Legorreta 1995, 78).

experts, part of a larger effort to “provide clean and efficient service, operating at fixed stops, with good maintenance practices, an integrated fare policy, and well defined routes and hierarchies,”¹⁴⁸ and to “coordinate service supply segments” (Figueroa 1990a, 227). In December 1982, when a new president was sworn in, Mexico City planners seemed clearly on track to deliver on these promises. The subway network had expanded to 5 lines, 79.5 kilometers of track and 80 stations.¹⁴⁹ Further extensions to the first three lines and the construction of a sixth line were ongoing. All of the 34 Ejes Viales promised by Hank and López Portillo had been built, with a combined length of 500 kilometers.¹⁵⁰ The STE operated 14 trolleybus lines, serving 317 kilometers with 310 vehicles¹⁵¹, and the administration of AUP-R100 had 4,300 vehicles in operation, with plans to increase its fleet of new and refurbished vehicles to 9,360 by 1988.¹⁵²

With these instruments available, planners at COVITUR felt empowered. They were no longer forced to negotiate “tweaks” with private operators, and could now credibly put on the table a city-wide transformation, ambitious enough to advance second-order goals. Public ownership, after all, “allowed the government of the city to put into practice a policy of planning and control for the city as a whole” (González, 1988, 73), and to reduce “the *ad hoc*ery of yesteryear” (Ward, 1990, 110). Planners went to work, and soon proposed the implementation of an “orthogonal network.”¹⁵³ The mere fact that transit routes in the city were now designed in accordance to geometrical cannons and not through lengthy negotiations with private operators marked a significant departure from the past. This network was composed of feeder services (sistema alimentador-SARO), and high frequency trunk routes (servicios especiales de frecuencia intensiva-SEFI). In accordance to the new grid design, services previously offered by the Alianza were streamlined from 534 routes covering 12,131 kilometers in 1979, to 114 routes covering

148 This quote is from Angel Molinero, cited in Gakenheimer et al. 2002, 240.

149 See Islas Rivera, 2000, 287.

150 See Márquez López and Pradilla Cobos, 2007, 150. Construction of the Ejes Viales resulted in the eviction of close to 25,000 families (Davis 1994, 248).

151 See Islas Rivera, 2000, 299.

152 (Legorreta 1995 p. 78). The figures about the actual number of buses operated by Ruta 100 are rather inconsistent. For example, President De la Madrid mentioned in his first state of the country speech that the company was running 3,800 buses in September 1983 (de la Madrid 1983).

153 In 1984, AUP-R100 hired London Transport International (LTI) as a consultant to guide the implementation of the orthogonal network, to optimize operations and to design maintenance facilities. For a conceptual discussion of the advantages and disadvantages of orthogonal networks, see Molinero and Sanchez Arellano, 2003, 215-224.

4,400 kilometers in 1982 (Islas Rivera 2000, 260). Each of the new routes was on average longer, and better connected. In fact, 45% of the new bus routes had a direct link to the subway and to four inter-city bus terminals (Legorreta 1995, 76), and promised convenient transit access in 86% of the urbanized territory of the DF. Furthermore, SEFI routes enjoyed exclusive access to dedicated lanes on the ejes viales, a feature that increased travel speeds significantly. The cost to operate these bus services was originally estimated at \$18 pesos per trip (US \$0.38), but authorities fixed bus fares at \$3 pesos (US \$0.06), covering the difference with subsidies.¹⁵⁴ Fares for the subway and the trolleybuses were set even lower, at \$1 and \$0.60 pesos, respectively (US \$0.02 and US \$0.016). The image of buses across the city became standardized, featuring bright yellow and brown colors. Soon, a pre-paid multimodal transit ticket was available -allowing the public to transfer between AUP-R100, STE and Metro services-, and “money-boxes” installed onboard buses,¹⁵⁵ providing authorities with more control over revenues.¹⁵⁶ As one of the best chroniclers of this period wrote in an article for *La Jornada*, this was “the golden epoch of public transport service” in Mexico City (Legorreta 2004). However, unchecked control over money and rules would soon prove to be little more than an illusion. In fact, the signs of a massive debt crisis -triggered by the pharaonic excesses of the López Portillo years- were clear since the early eighties. Between 1977 and 1982, Mexico contracted debt in foreign currency totaling US \$51,788 million dollars.¹⁵⁷ These massive financial commitments may have seemed sensible when the international price of oil was on its way to reach US \$100 dollars per barrel, but by the early 80s the price was in free-fall. The international price of oil would dip until hitting a floor of US \$20 dollars per barrel in 1986, leaving the Mexican economy in shambles. As Patricia Connolly (1999) rightly stated, this collapse marked “a definitive turning point in the Mexican economy”.

President de la Madrid (in office 1982-1988) was forced to implement severe austerity and stabilization measures throughout his administration. In fact, 40% of the national budget for fiscal year 1983 was allocated to service the national debt, up from the 32% in the prior year¹⁵⁸.

154 See Legorreta, 2004. These bus fares would remain unchanged until 1986.

155 Users soon dubbed these money-boxes “arturitos”, as they reminded of R2D2, the character from Star Wars.

156 See Legorreta 1995, 75 and 82. This multimodal ticket offered unlimited service across the subway, trolleybus and buses for 15 days, and by 1987 accounted for 19% of the ticket sale revenues of the subway system (Figueroa 1990a, 230).

157 See Krauze, 1999.

158 See Lajous et al., 1988.

Austerity measures included cuts to subsidies directed to subnational governments, particularly to Mexico City. These cuts not only limited the margin of action of local authorities, but also created a political environment highly opposed to transit fare increases. Between 1982 and 1985, unemployment rose from 5% to 15%, real salaries fell 65% and housing shortages hit a new high.¹⁵⁹ How could authorities recant on their subsidy policy precisely when the public seemed to need it the most? With public expenditures cut across the board, scarce employment and rising costs of living, the popularity of the PRI in the capital plummeted. While in the past Mexican authorities had tempered urban discontent by expanding city services and programs, the debt crisis limited such alternatives now.

The financial situation of AUP-R100 quickly deteriorated. Fare-box revenue from public buses accounted for only 14% of total AUP-R100 expenditures throughout the eighties.¹⁶⁰ However, subsidies and government transfers (local and national) to this company were slashed by 38% in real terms between its peak in 1984 and the end of the presidential term of Miguel de la Madrid in 1988¹⁶¹. Maintaining fares low and sustaining a large employee roll amidst subsidy reductions, implied that plans to increase, renew and maintain the bus fleet were shortchanged or continuously postponed. In fact, the number of AUP-R100 buses actually operating in the street would peak at 4,238 in 1986, never matching the number of buses serving the city under the Alianza, and never coming close to López Portillo's promised 8,000. While a limited number of buses was purchased, particularly from national companies such as MASA,¹⁶² "more than 3,000 buses were soon out of service, stopped by technical difficulties like insufficient spare parts and workshops, and obsolete tools to repair them" (Lajous et al., 1988).

Similarly, the gap between subway revenues and system costs increased from US \$29.2 million dollars in 1973, to US \$79.7 million dollars in 1983, to over US \$112.3 million dollars in

¹⁵⁹ See Tello, 1986.

¹⁶⁰ Own calculation, based on data available in Islas Rivera (2000, 266, table 6.4).

¹⁶¹ Expressing values as 1980 Mexican pesos, Islas Rivera (2000, 273, table 6.6) estimated government transfers to AUP-R100 at \$8,354 million pesos (US \$367 million dollars) in 1984, and at \$5,173 million pesos (US \$227 million dollars) in 1986. (Conversion to US \$ by author, using 1980 exchange rates).

¹⁶² This company was owned by the Zabludovsky family.

1987.¹⁶³ Attempting to close a deficit of its own, the federal government sought to transfer the responsibility of covering this financial gap back to local authorities, who found little alternative but increase fares and take on more debt¹⁶⁴. After much internal debate, Mexico City authorities finally increased the price of subway, trolleybus and bus fares to \$20 pesos (US \$0.025)¹⁶⁵ on August 1, 1986. As a result of this initial fare increase, and of two subsequent increases in May and December 1987 that brought the price to \$100 pesos (US \$0.044), the share of the per person costs of operating subway services increased from only 5% in 1984 to 40%¹⁶⁶ in 1988, still leaving 60% to be covered by subsidies. Studies revealed that transport's share of family expenditures had risen from practically zero to 15%.¹⁶⁷ Unsurprisingly, the subway became the largest debt-producing item in Mexico City's budget, siphoning resources from other urgent priorities, despite serving only 20% of the trips. Quality of service in the subway continued to deteriorate. Trains remained fully congested, despite the completion of extensions to Lines 1, 2 and 3. In these lines, 9-car trains designed to carry 1,500 passengers were carrying up to 2,500 passengers, a situation that resulted in two highly publicized accidents in 1985, caused by busted tires.¹⁶⁸

Despite the costs, the subway network grew 61 kilometers under President de la Madrid's tenure. Many of the subway expansion projects completed in this period can be attributed to the inertia of the López Portillo years: The extensions to Lines 1, 2 and 3, and the construction of line 6 and 7 had broken ground or had secured foreign financing before the change of government. It was too late (or too costly) to cancel them, and in any case these projects allowed the national government to immediately boost employment levels and reduce the likelihood of

163 The sources of these figures are González 1988, 79; and Legorreta, 1995, 127. Conversion to US \$ by author. Figures in original sources: Mx \$365 million pesos in 1973, Mx \$11,846 million pesos in 1983, and Mx \$151,500 million pesos in 1987.

164 Of course, the financing terms available to the city were deteriorating. For example, loans offered to Mexico City to finance the original subway lines carried an interest rate of 4-7% per year (Navarro Benitez 1984 p. 90, footnote 3). In contrast, loans acquired in 1981 from the national development bank (BANOBRAS) carried an interest of 11% per year (Legorreta 1995, 126).

165 See Figueroa 1990a, 229. Of course this massive nominal fare increase partly reflects the high levels of inflation registered in this period.

166 See Legorreta, 1996, 127; Medina Ramírez, 2013, 191-193.

167 See Figueroa, 1990a, 232, footnote 9.

168 This was, at least, the official explanation given by the director of the STC-Metro. The first accident occurred on October 27, 1985, and resulted in 1,500 people injured. A second one, much smaller, took place on November 13. See Lajous et al., 1988.

social unrest in the economically depressed capital, despite the future financial burden of operating them.¹⁶⁹ Other planned expansion projects were postponed (like the construction of line 8, urgently needed to decongest lines 1 and 3)¹⁷⁰, or built at a slower pace using cheaper, locally sourced technologies (such as using trains with iron wheels rather than with rubber tires.¹⁷¹) While covering the cost of metro expansion projects was formally a responsibility of the local government, in 1985 the national government had to absorb Mexico City's debt for a second time. This decision was perhaps inevitable, particularly as the deadly earthquake registered in Mexico City on that year focused the eyes of the country on the capital, but nonetheless contributed to the nation's feeble financial standing. Unsurprisingly President de la Madrid also called in 1985 for a revised, more conservative version of the Metro Master Plan. This version reduced the long term goal from 400 to 306 kilometers, and from 19 to 15 subway lines, to be fully built by 2010. By the end of 1988, the subway network had a total of 140.4 kilometers, many less than the 257.5 expected to be completed by this date in the plan heralded by Carlos Hank in 1978.¹⁷²

To get a sense of the cost of Mexico City's public transit system, consider the following: According data presented by Ovidio González (1988, 81), in 1987 the combined expenditures for all of the DF's non-transport "priority social programs" (US \$283.3 million dollars),¹⁷³ were roughly equal to public transport expenditures (US \$283.8 million dollars).¹⁷⁴ In that year at least, public transportation outlays accounted for 37.8% of a *total* city budget of US \$749.4 million dollars (including own revenues and federal transfers). The local share of this budget was so low, that if the city decided at that point to maintain the same level of public transportation

169 I thank Salvador Medina for suggesting this point.

170 See Lajous et al., 1988. This project was cancelled in 1983 when it became evident that appropriately ensuring the preservation of Mexico City's historical center would significantly impact costs. This line would not be built until 1994. Other projects postponed in 1986 were the southbound extension to line 4 and to line 7.

171 See Henry and Kuhn, 1996, for a discussion on "metro variants" used to maintain metro expansion plans despite the financial crisis.

172 See Legorreta, 1995, 103.

173 Figure includes: Health services, public markets, tax administration, planning, public safety, drinking water, drainage, waste water treatment, land titling, housing, environmental services, and trash collection. Conversion to US \$ by author. The amount reported in original source is \$643,145 million pesos.

174 Figure includes: Operational cost of Ruta 100, STE and STC-Metro, metro expansion costs, and administrative expenses by COVITUR. Conversion to US \$ by author. The amount reported in original source is \$644,255 million pesos.

expenditures without resorting to federal transfers, it would need to triple its own revenues and cancel all expenditures in other areas, including the salary of its workers and the electric bill for its buildings. This massive burden, combined with previous debt incurred to build the subway and the ejes viales, and to renew the fleets of STE and AUP-R100 was “fiscally devastating” (Davis 1994, 249). What Navarro Benítez (1993b) described as the “the most permanent, systematic and consistent effort taking place in any Latin American metropolis” came to an end as the money dried up, shattering the dreams of a comprehensive, integrated, high quality transit system. The availability of the multimodal ticket was increasingly restricted, and the scheme eventually cancelled, “because it reduced revenues for the public agencies, at a time when the dominant policy goal was to increase the financial coverage afforded by own revenues” (Figueroa 1990a, 230). An internal document from AUP-R100 sums the situation well: “From an effort aimed toward consolidation in 1982, we turned in 1988 to an effort aimed toward survival” (Autotransportes Urbanos de Pasajeros-Ruta 100 1993, 60).

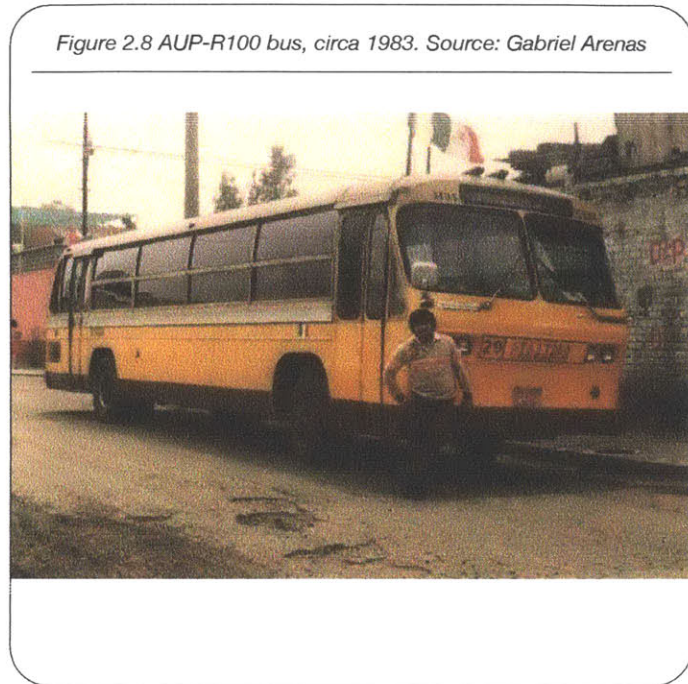
The public transit system in Mexico City could barely sustain its existing operations thanks to generous federal transfers, making the system vulnerable to external shocks, and financial constraints prevented its transit agencies from extending the reach and frequency of their services to serve passenger needs in this rapidly growing city. However, the problems faced by government authorities were not purely of a financial nature. In fact, as soon as AUP-R100 was formally constituted, the dream that authorities would freely govern a publicly-run system also proved to be overly optimistic.

The SUTAUR-100: From negotiating with private bus operators to negotiating with public worker unions.

The Mexico City government formally took over the provision of bus services in 1981. However, authorities soon found that negotiating with the unions of public employees, particularly at the recently created AUP-R100, was as taxing as negotiating with the Alianza de Camioneros.¹⁷⁵ Unsurprisingly, soon after the municipalization of bus services, workers organized to make claims on its new employer. Authorities spent the months following the establishment of AUP-R100 negotiating the conditions under which former Alianza workers would be rehired as public employees. The first dispute was over who would represent the

¹⁷⁵ To be sure, conflicts with STE-Metro and STE workers were important, albeit perhaps not as intense. Since their unions were aligned with the governing regime, conflicts found faster resolution. In this research I will not abound on the relation of government authorities with these unions.

18,000 workers of the new company. Mexico City authorities wanted to encourage a union affiliated to the Confederación de Trabajadores de Mexico (CTM), the worker central with ties to the PRI that had replaced the CROM.¹⁷⁶ Having a loyal union at the STC-Metro and at the STE provided significant leverage to authorities, which they wanted to extend to the buses. However, a militant group of workers -led by Ricardo Barco and Gabino Camacho- resisted this decision and created a rival independent union.¹⁷⁷ When on November 17, 1981 the management of AUP-R100 signed a collective contract with the CTM, 2,000



unsatisfied workers protested in front of the National Palace, demanding that President López Portillo personally review their claims.¹⁷⁸ After receiving no response, workers partially paralyzed bus services on January 13 and 27, and then again on February 19, 1982.¹⁷⁹

These strikes put the government in an uncomfortable position. Constitutionally, public sector employees have a very limited and circumscribed right to strike.¹⁸⁰ However, in the negotiations preceding the 1981 municipalization of bus services, government authorities had offered to treat former Alianza workers as private sector employees for this purpose. Such agreement was in fact included in the decree that established AUP-R100, signed by President López Portillo himself. Now faced with the consequences of this deal, Regent Hank recanted,

176 See Loyzaga de la Cueva, 1989.

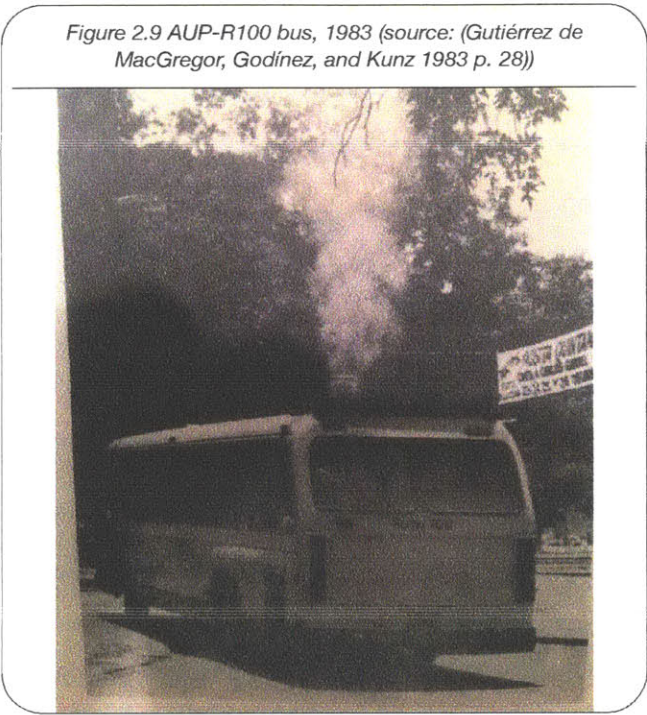
177 See González Ruiz, 1996, chapter 5; and Cisneros Sosa, 2006.

178 See Trueba Lara, 1995, 30.

179 See Juárez and Trejo, 1990.

180 Brief legal explanations of this important point are available in Loyzaga de la Cueva, 1989; and in Fernández, 1995.

and on the same day of the February 19th strike obtained a new decree¹⁸¹ that established that AUP-R100 workers would be treated as public sector employees, significantly diminishing their capacity to pressure the government (Legorreta 1995, 83). This action resulted in the incarceration of Barco, Camacho and other union organizers, leading to significant conflict escalation, and galvanizing workers' support for the independent union. Ultimately, the government decided to split the difference. Workers would accept the legal implications of their condition as bureaucrats, but the government would free protest leaders, recognize the Sindicato Unico de Trabajadores de Autotransportes Urbanos de Pasajeros-Ruta 100 (SUTAUR-100) as only representative of AUP-R100 workers, and agree to review the worker's collective contract every year, instead of every three years as was the norm for other public service unions.¹⁸²



To be sure, AUP-R100 workers had a lot to fight for. Working conditions under the Alianza had been pitiful, and for decades implicitly tolerated by government authorities. Salaries were so low that drivers had to work longer hours, compete against each other for passengers, and accept passengers beyond vehicle capacity to earn sufficient the commissions to make ends meet. Drivers had to sleep on their buses, and often pay for spares. Attempting to negotiate better conditions under their previous Alianza employers had been a quick route to permanent unemployment. “Conflictive” workers were not only fired, but placed in “black lists” shared throughout the organization.¹⁸³ At the same time, workers rehired by the AUP-R100 did not want to entirely relinquish their independence, nor to sell their multiple skills on the cheap. Under the

181 For the full text of this decree, see Departamento del Distrito Federal, 1982.

182 For more on the negotiating logic of the workers, see Loyzaga de la Cueva, 1987, 67.

183 See Autotransportes Urbanos de Pasajeros-Ruta 100, 1993, 19.

Alianza, they were much more than mere drivers. They were mechanics, electricians, in-vehicle accountants, etc. They *managed* day to day operations of their vehicle, even if they were not compensated for this.¹⁸⁴ A former driver, interviewed by Cuéllar Vázquez (2001, 183) shared how the situation changed for them after municipalization: “Before we had many employers, many of which we didn't even know. Now the employer was the state, and we had a single entity to demand our rights, one salary, one just work conditions, one fair treatment.” In a very short period of time, the workers' situation fundamentally changed, from having no rights to practically controlling the company.

As agreed, the collective contract signed on March 17, 1982 between the AUP-R100 and the SUTAUR-100 would be revised every year on that date,¹⁸⁵ each time “incorporating new benefits and incrementing the existing ones... so that few years after the creation of the new public agency the benefits paid to workers were comparable to those conquered by privileged unions after many years” (Alvarez del Castillo 1995, 9). Perhaps worried about swiftly reestablishing service after municipalization, management sought to avoid conflict with the workers by “being excessively permissive” (Ibid.). Only in 1986, SUTAUR-100 workers received four wage increases¹⁸⁶, and each year until 1988 successfully obtained wage increases that were on average 11% higher than government decreed increases to the national minimal wage. But much more importantly, the union's leadership gradually gained the ability to govern the company. Among many other things, union leaders were contractually empowered to selectively award benefits to members, authorize “retroactive payments” and “extra hours” without the involvement of management (Cuéllar Vázquez 2001, 186), condition employment in the company to union membership, and make temporary hires permanent after six months.¹⁸⁷ One of the negotiated clauses established that disciplinary measures imposed on workers for faulty performance could only be enforced if authorized on a case by case basis by the union.¹⁸⁸ Union leaders were able to use the financial contributions of union members with ample discretion. According to union dissident Leonel Villafuerte (quoted in Cuéllar Vázquez 2002,

184 For a description of the challenges posed by this transition from the perspective of workers, see Hanono Askenazi, 1989.

185 This in contrast to revisions taking place every 3 years in other government sector worker unions.

186 See Lajous et al., 1988.

187 See Mendoza Cruz, 2001, 83.

188 Ibid.

79), “the Executive committee could do whatever it wanted with that money, it distributed freely and of course paid *aviadores*.”¹⁸⁹ Soon, the implementation of the detailed operational and maintenance plans elaborated with the input of London Transport International (LTI) consultants had to be rubber-stamped by the union. As one former employee of the company confided with the author, “I saw signed papers, in which union leaders basically instructed the general manager of the company what to do.”

Between 1982 and 1988, the salaries of AUP-R100 workers doubled¹⁹⁰ and the number of employees in the company increased from 18,000 to 24,062¹⁹¹. The share of the total budget of AUP-R100 spent in worker wages and benefits stood at 72%,¹⁹² severely limiting resources available to maintain and expand the fleet. As a result, the number of buses operating in the streets during this period remained well under 4,500¹⁹³, while the extension of the AUP-R100 route network shrunk to 2,049 kilometers.¹⁹⁴ Most of the fleet was composed of the old buses seized from the Alianza, and the purchase of new vehicles progressed only slowly. In fact, by mid 1986 the purchase of new buses was fully suspended, “as a result of the Federal Government's policy of budgetary austerity, rationality and discipline” (Autotransportes Urbanos de Pasajeros-Ruta 100 1993, 43). With few new vehicles to replace those that broke down, in 1988 only 52% of the total fleet remained in operating conditions, down from 76% in 1982.¹⁹⁵ So dire was the condition of



189 *Aviadores* -aviators- is the name informally given to people who earn a salary in large bureaucracies without reporting to work.

190 See Monge, 1995c, 11.

191 See Legorreta, 1995, 82.

192 See González Ruiz, 1996, 121.

193 See Legorreta, 1995, 84.

194 See Figueroa, 1990a, 233.

195 See Islas Rivera, 2000, 263.

the available bus fleet, that the AUP-R100 had 25 “yellow angels” -vehicles fully equipped with tools and mechanics-, permanently assigned to rescuing the buses breaking down across the city¹⁹⁶. SEFI routes were relabeled as “direct routes”, notably eliminating the “intense frequency” part of the acronym. Passengers suffered from more than long waits: Two major AUP-R100 accidents took place in 1987 -one in Ajusco, killing 10 passengers, and one in Chalco, killing 40.¹⁹⁷ Accidents also occurred frequently on the collective taxis, but these could not be as easily ignored. After all, the state was running the company.

When the presidency of Miguel de la Madrid ended in 1988, five different individuals had occupied the post of General Manager of AUP-R100, and the union had consolidated its control over key company decisions. According to a former union member, “Ricardo Barco, through the union, decided which manager stayed and which manager left, decided who could be hired, whose actions would be covered up, and who would receive unexpected envelopes with ‘retroactive payments’” (Cuéllar Vázquez 2001, 188). The government practically relinquished material control of the company to the union, whose leaders “decided anything having to do with the administration, use of equipment, and personnel, including salaries, benefits and work conditions” (González and Vidrio 2011, 27). Even as AUPR-100 struggled financially, the SUTAUR-100 became one of the richest and most powerful unions in Mexico, holding multiple trust funds and owning valuable real estate throughout Mexico City. Corruption was of course widespread, with union leaders and managers disposing of company assets as their own. Audits would later detail the existence of “complicated and solid co-administration networks between the union and some of the managers of the institution, that clouded decisions and tended to satisfy only personal interests of political and economic nature” (Monge 1995c, 11).

But to further complicate matters, the leadership of the SUTAUR-100 became politically active, joining the Independent Proletarian Movement (MPI) in 1983.¹⁹⁸ According to Ricardo Barco -a self-proclaimed marxist-, the MPI's objective was to “establish a more just society in

196 See Juárez and Trejo, 1990, 90; Autotransportes Urbanos de Pasajeros-Ruta 100 1993, 48. Another example: The management of AUP-R100 donated 62 AUP-R100 buses “that had no possibility of rehabilitation” for use as temporary classrooms in schools damaged by the 1985 earthquake (Autotransportes Urbanos de Pasajeros-Ruta 100 1993, 53).

197 See Legorreta, 1995, 85.

198 See Cisneros Sosa, 2006, 76.

our country, in which the workers are the government.”¹⁹⁹ The MPI shunned electoral politics and political parties,²⁰⁰ aligned itself with the teachings of Marx and Mao, and engaged in land invasions in the city's periphery. AUP-R100 resources -vehicles, facilities, etc- were increasingly used to bolster MPI activities.²⁰¹ For example, SUTAU-100 drivers informally extended bus routes to serve informal settlements controlled by the MPI,²⁰² used company facilities to recruit and indoctrinate members,²⁰³ and diverted member contribution funds to finance MPI events.²⁰⁴ Some scholars even suggest that AUP-R100 workers were being trained in combat.²⁰⁵ Others, like Cuellar,²⁰⁶ add that leadership of SUTAU-100 maintained close relationships with key PRI members, which could partly explain why the attitude of the government toward the union was not confrontational during the tenure of President Miguel de la Madrid. But in any case, the situation at AUP-R100 was growing financially and politically unstable, producing pressure for the state to create a new policy.

The rise of the “colectivos”

Unsurprisingly, the widening gap between the supply of public transport offered by government-run agencies and the public's demand for service in the period 1982-1988 was swiftly covered by collective taxis. The numbers are telling: The share of trips served by collective taxis in the MCMA grew from 3.3% in 1972 to 32% in 1988 (Legorreta 1995, 157). In contrast, the share served by the subway stagnated at approximately 20%, *despite* substantial extensions to the network, and the share served by buses plummeted from 50% before municipalization to a mere 19% under AUP-R100. While estimates vary, the number of

199 See González Ruiz, 1996, 13.

200 See Cuéllar Vázquez, 2002, 78. The MPI even called its members to refrain from voting in the contested 1988 elections, when the PRI was almost ousted from the presidency.

201 According to Cisneros Sosa (2006), the illegal occupation of 35 hectares in San Andres Totoltepec (south of the city) by the MPI took place with support of 2,000 AUP-R100 workers.

202 See Loyzaga de la Cueva, 1989, 26-27; Cuéllar Vázquez, 2002, 77-78.

203 See Cuéllar Vázquez, 2001, 188.

204 According to a former union leader: “We did not only finance the MPI, we gave away a lot of money. The union’s Central Executive Committee looked like the wall of lamentations. A multitude of organizations would petition for funds and each would get 10, 15, 20 thousand pesos” (Cuellar Vazquez 2002, 79)

205 For example, see Trueba Lara, 1995, 40.

206 See Cuéllar Vázquez, 2001.

collective taxis operating in the MCMA had grown to approximately 100,000 in 1988²⁰⁷, with 42,000 of them operating in the DF.²⁰⁸ The number of collective taxi routes crisscrossing the DF increased from 100 in year 1979 to 832 in 1986²⁰⁹, with a combined network coverage of 10,400 kilometers.²¹⁰ Collective taxis were everywhere. They not only flooded the SARO and SEFI routes of the “orthogonal network” but created a multitude of new routes of their own, taking advantage of the smaller size of their vehicles. According to López Zaldívar (1997, 81), “it was an epoch of disordered growth, collective taxis proliferated throughout the city. At that time, the make, model and physical conditions of the vehicles did not matter... the only condition was getting approval from an organization leader to join.” Authorities had so little information about their services, that in January 1983 city officials found no alternative but to request collective taxi organizations to submit a list of the vehicles they had in service, and to detail in maps all of their routes.²¹¹ Freed from most government regulation and facing weak competition from “formal” transit agencies, they were able to charge more expensive fares, with profound negative equity implications. Poorer populations living in areas only served by collective taxis paid much more than the relatively richer users of the highly subsidized public transit system, and since collective taxis did not participate in the multimodal transit ticket scheme, users continued to pay for each “leg” of their trips.

Mexico City authorities soon acknowledged they were barely able to manage and finance the not-so “efficient and sufficient” government-operated public transport system implemented by former regent Carlos Hank. Thus, even as they attempted to balance to the multiple financial and regulatory challenges posed by AUPR-100, STE and STC-Metro, Mexico City authorities

207 This figure corresponds to official government estimated reported by Jorge Legorreta (1995, 157). However, according to Legorreta’s own estimations the real number was approximately 178,000 vehicles.

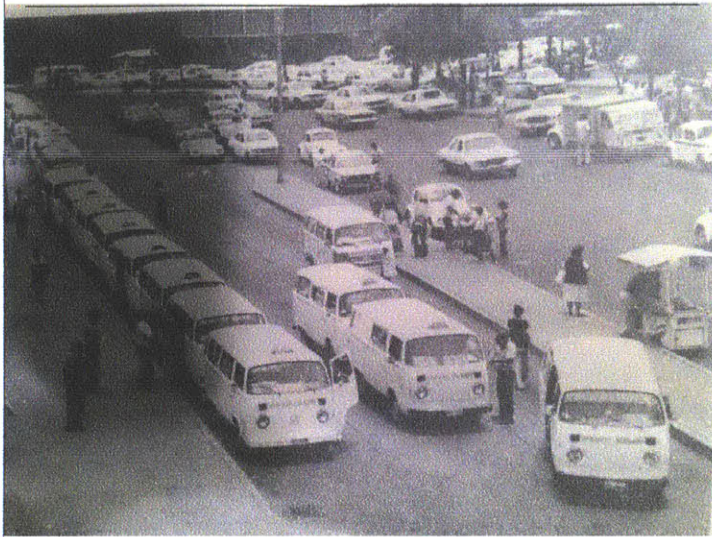
208 See Islas Rivera, 2000, 311.

209 See Figueroa 1990a, 233; Islas Rivera, 2000, 311.

210 See Figueroa 1990a, 233

211 See López Zaldívar, 1997, 81.

Figure 2.11 Collective taxis (combis) at the Observatorio Metro Terminal, 1983. Source: (Gutiérrez de MacGregor, Godínez, and Kunz 1983 p. 18)



returned to the practice of negotiating with the leaders of the collective taxi organizations, bartering marginal service improvements, fares and political loyalty in exchange for government authorization and access to some subsidies. For example, during this period, services offered by various collective taxi organizations demonstrated noticeable improvement, substituting their sedans for volkswagen combis. Operators obtained loans to pay for these vehicles from Banobras, the country's development bank, "with only a simple recommendation" from Mexico City

authorities, and much of this money was never fully repaid.²¹² Soon, the importance of collective taxis to the efficient mobility patterns in the city was such that authorities were "forced to use the instruments of control and regulation at their disposal with some flexibility, with the aim of not interfering in the growth of the supply of this now indispensable service" (Islas Rivera 2000, 309). Just like several decades earlier, tolerating and even encouraging "informal" operators became a tool for many tasks: To weaken a radicalized transit worker union, to reduce the costs of providing the population with transportation services, and to secure a base of political support.²¹³

DF officials are on record defending this policy in Congress as early as December 1983. They explained to legislators that "it wasn't advisable to regularize 'tolerated' services, because they would add to congestion, nor to prohibit their operation, since the insufficiency of service made them necessary" (Lajous et al. 1988). To manage this apparently contradictory policy, Mexico City authorities established the Coordinación General de Transporte (CGT) in January 1984, charging it with coordinating government-owned transit agencies, *and* with regulating the

212 Ibid.

213 For a description, see Wirth, 1997, 156.

operations of the officially non-existent private operators. The CGT is credited on the one hand with promoting the eventually successful call to increase bus and subway fares²¹⁴, and on the other with institutionalizing government negotiations with collective taxi organizations, much in the style of the now defunct Unión de Permisionarios.

The first stage in this process was to bring as many collective taxis as possible into the mantle of government regulation: An effort to “regularize” 56,000 collective taxis was launched in 1985.²¹⁵ Jorge Legorreta (1995, 154-175) detailed how this process was often mediated by “high level agreements” between party and organization leaders. In its most basic form, collective taxis were offered formal permits in exchange for political loyalty. But in addition to this, these relationships enabled authorities to negotiate marginal improvements to service, and to influence the behavior of individual operators. For example, in November 1985 the leaders of the CAT and Mexico City authorities agreed on the implementation of a pilot program to replace combis for 18-passenger minibuses in the iconic Avenida Insurgentes.²¹⁶ The CGT later expanded this program throughout the city, offering private operators subsidies and government backed loans to purchase one minibus equipped with a catalytic converter for every three collective taxis they removed from circulation. The plan aimed to introduce 5,000 of these cleaner vehicles (and eliminate 15,000 collective taxis) by 1988.²¹⁷ Efforts to improve the integration of public and private modes, and to protect the DF market from the competition of State of Mexico operators also were mediated by the CGT. For example, in 1984 collective taxis from the DF were authorized to pick up passengers at subway stations, and in 1986 a presidential decree banned State of Mexico's buses and collective taxis from operating within the DF, except for dropping passengers at subway terminals.²¹⁸ Each of these policies required long, protracted negotiations with groups that felt adversely affected. One collective taxi operator revealed the growing sense of entitlement that emerged during this period. “The peseros are a product of a deficiency of the public transit system and a consequence of the lack of adequacy of the roads in the city; we are a service pampered by the authorities... because it is us that carry the burden of

214 For more on this, see Figueroa, 1990, 229.

215 See Lajous et al., 1988 (available from <http://www.mmh.org.mx/nav/node/572>); and López Zaldívar, 1997, 87.

216 See López Zaldívar, 1997, 90.

217 See León Salazar, 2011, 166.

218 See Covarrubias, 2004.

transporting a growing number of passengers every day” (Legorreta 1995, 161). This opinion was shared by many authorities, to the point that President de la Madrid himself participated in events where collective taxis were granted concessions en masse.²¹⁹

Soon four federations of organizations -known as *organizaciones cúpula* (“dome organization”)- controlled 80% of the collective taxis operating in the city: The Coalición de Agrupaciones de Taxistas (CAT), the Federación de Taxistas de Mexico (FTM), the Federación de Cooperativas de Taxistas (FCT) and the Confederación Nacional Revolucionaria del Transporte (CNRT).²²⁰ According to López Zaldívar (1997, 226), cúpula organizations “are the maximum organizational configuration achieved by transport providers. It is within these organizations where power, direction and control over routes resides. They are also the medium giving cohesion and enabling the defense of their interests.” Citing journalistic accounts, Wirth (1997, 164) argues that these cúpulas were in fact controlled by no more than 12 “leaders of leaders”, that constituted a new “pulpo camionero.” These leaders replaced the Alianza, and joined the ranks of the SUTAU-100 as the key negotiating counterparts of government authorities interested in transportation policy.

In what proved to be an optimistic assessment, planners at the CGT hoped private collective taxis would limit their participation only to expanding and complementing services

219 See Lajous et al., 1988, under Gira de Trabajo en el DF. Available from <http://www.mmh.org.mx/nav/node/572>.

220 See Legorreta, 1995, 157.

Figure 2.12 Passengers waiting for AUP-R100 buses, 1983. Source: (Gutiérrez de MacGregor, Godínez, and Kunz 1983 p. 21)



offered by the troubled public agencies. They believed that the substantial fare differential would be sufficient to prevent AUP-R100, STE and STC-Metro services from being harmed by “tolerated” competition. However, the AUP-R100 deteriorated to such point, that its buses seldom showed up, making their cheaper fares irrelevant for the vast majority of users who could not afford to wait. Even the Metro -which in addition to a cheaper fare had arguably better performance- suffered from competition from the collective

taxis, to the point that the lines

outside 1, 2 and 3 carried much lower passenger loads than originally expected. Who would want to walk to a Metro station and go up and down stairs, when it was possible to hail a collective taxi almost immediately after reaching the street? Similarly, intermodal coordination efforts soon resulted in route associations establishing informal property rights over key facilities and routes. For example, at many subway terminal stations collective taxi organizations forcefully displaced AUP-R100 buses from prime spots, often with the support of corrupt city officials. Fights between collective taxi operators and AUP-R100 workers occurred frequently.²²¹

The logic of mediated deal-making lent itself to corrupt practices, and over time further disempowered authorities. To be sure, “tolerating” collective taxis was justified as a “transitory solution that became permanent given the void created by the retraction of public investment in the sector, and as an alternative of self-employment for the population lacking opportunities in other activities” (Navarro Benitez 1993, 183). But on the ground, cúpula leaders controlled and

²²¹ See Wirth, 1997, for many examples of such fights as reported in the popular media.

conditioned access to the industry, and kept the most profitable routes for themselves, while exacting contributions from members and making side payments to allies working within regulatory bodies. And in any case, the mandate to cut government expenditures was so pervasive, that many well meaning government authorities turned a blind eye to the poor practices and rising externalities caused by the surge of collective taxis throughout the city. Limited by weak enforcement capacity, authorities came to depend on organization leaders to obtain information about what was happening on the ground, and to channel subsidies. The power of organization leaders as middlemen grew considerably: Both individual operators and government regulators depended on these leaders to make the system work. Unsurprisingly, 7,000 new minibuses were on the streets ahead of the schedule outlined by the CGT's vehicle-substitution program²²² -but many of these new vehicles were actually built in clandestine workshops, "where a truck chassis was adapted with a body and mounted with seats" (León Salazar 2011, 166),²²³ and did not meet the environmental standards outlined by authorities. Furthermore, operators often benefited from subsidies and loans without relinquishing their collective taxis. Rather than reducing the number of collective taxis, the policy of government backed loans and subsidized vehicle purchases accelerated the surge of vehicles entering the public transport market, contributing to the excess supply that lowered revenues of publicly-run services²²⁴. Official estimates for the whole MCMA acknowledge the existence of 3,348 collective taxis in 1970, 4,530 in 1979, 37,500 in 1982 and 98,000 in 1988. Jorge Legorreta (1995, 162) argues that the real figure was 178,000 by 1989, computing sedans, combis and minibuses. The system entered a vicious cycle. The more collective taxi routes available, the less effective the orthogonal network. The more competition from collective taxis, the less passenger demand available to AUP-R100, STE and the Metro, and thus, the more need to publicly subsidize their services or raise fares, which in turn justified the policy of "toleration".

This deteriorating dynamic evolved within the context of the PRI increasingly losing its hold over the city and over the country as a whole. The debt crisis and subsequent austerity measures, combined with deep popular in-satisfaction over the badly managed response to the 1985 earthquake, led to plummeting poll numbers for the PRI, particularly in the capital. Forced

222 See Wirth 1997, 164.

223 In another interview reported by the same author, a collective taxi operator confided: "any blacksmith can put together a *micro*, it doesn't even take a good blacksmith, anyone can put a *micro* together".

224 See Wirth 1997, 164.

by circumstance, President de la Madrid promoted a half hearted democratic reform for the DF in 1987, leading to the creation of a local Assembly of Representatives, composed by elected members, but only given token powers. This satisfied no one, and when the time came to elect a new president of the country, the opposition candidate swept in Mexico City, even carrying the votes of supposedly loyal collective taxi organizations.²²⁵ While the votes from the rest of the country allowed Carlos Salinas de Gortari and the PRI to retain the presidency in 1988, demands for democratic change in Mexico City -galvanized around the defeated candidacy of Cuauhtémoc Cárdenas- acquired tremendous force, laying the seeds of reforms that later made possible the election of Cárdenas as mayor in 1997. But in the meantime, the incoming administration had to define its own transportation policy. Would it increase regulation over private collective taxis and sustain high but inefficiently spent subsidies to government run public transit agencies, or would it continue CGT's policy of implicit deregulation and attempt to break the hold of the union over AUP-R100 to streamline expenditures? The balancing act established by the end of the de la Madrid administration was unsustainable. Something had to give.

The 1989 strike of AUP-R100 workers, and a first failed attempt to privatize the public bus company

President Salinas appointed Manuel Camacho Solís as Regent of Mexico City in 1988. Many observers expected the incoming administration would pursue transformative transportation policies in the capital, perhaps even privatizing the AUP-R100. Not only had Salinas hinted at the possible privatization of other critical services -such as telephone and banking- during his campaign, but he had also expressed grave doubts about the future of the public bus company. As he put it, "Ruta 100 has not faced the demands of citizens with sufficiency, some say it does with deficiency. It is unclear whether it can improve in the future."²²⁶ However, even if President Salinas supported a policy of privatization, it was clear that the regent had to deal first with the company's workers. Who would invest in AUP-R100 if it came bundled with a bloated and powerful union, and forced to compete against thousands of loosely-regulated semi-informal collective taxis without guarantees of future subsidies? And, what would happen with the more than 20,000 militant workers, many of which would be

225 See Trueba Lara, 1995.

226 *Impacto*, number 2048, June 1, 1989, quoted in Juárez and Trejo, 1990, 43. Salinas' critiques of AUP-R100 are also noted in Ward, 1990, 110.

redundant after any restructuring effort designed to maintain a profitable operation? This was both a social and a political problem that could not be ignored. After reviewing the situation of the company -and the practical obstacles to privatization-, the new regent probably concluded that to transform public transport in the capital he needed to work with, not against the union, at least initially. Warning that the budget approved for the company for year 1989 could only sustain operations for four months²²⁷, Camacho's envoys proposed a particular type of privatization that had the potential of benefiting workers. The Mexico City government offered to foster the creation of cooperatives -with 25% of the capital controlled by the government and 75% by SUTAUR-100 members²²⁸- and to gradually allow these cooperatives to take over AUP-R100 services. If the workers already governed the company, why not formally give it to them? Since the earnings and future job stability of the workers participating in such transport cooperatives would be tied to their performance, Camacho hoped to control and reduce the inefficiency that characterized AUP-R100.

By advocating collectivization and semi-privatization at the same time, Camacho attempted to get the best of both worlds: Fostering a positive relationship with a powerful and politically active interest group (treating the union as something akin to a collective taxi organization) and reducing the financial cost to the city of maintaining transportation services. The proposal to “vindicate worker's rights by making them owners of the buses and responsible for maintenance and operation” (Monge 1995c, 10),²²⁹ was certainly well received by many SUTAUR-100 leaders. However, discussions soon became entangled with collective contract re-negotiations, traditionally occurring every year during the month of march. That month, the SUTAUR-100 demanded 60% salary increase and improvements in 76 benefit clauses in their contract.²³⁰ After weeks of negotiations, government countered with a proposal of a 10% salary increase,²³¹ conditioned on the implementation of Camacho's “modernization” plan based on the cooperative alternative. A few union leaders were suspecting of this deal, fearing that the

227 See Monge, 1995c, 10.

228 See Legorreta, 1995, 87. Other accounts point to a 50-50% proportion, which suggests that the details of the plan were fluidly being negotiated. For example, see *Autotransportes Urbanos de Pasajeros-Ruta 100*, 1993, 72.

229 Also see Trueba Lara, 1995, 50.

230 See Alvarez del Castillo, 1995. This author served as negotiator on behalf of the government. For an interview with one of the negotiators on behalf of the union, see González Ruiz, 1996, 122-128.

231 Alvarez del Castillo (1995) recalls that the increase offered by the government was 10%. Cuellar Vazquez (2002, 74) refers 14%.

proposed modernization was only a roundabout way of closing facilities, laying off workers and slashing government subsidies to the company without taking public blame for the results.²³² When the government failed to make any commitment regarding future subsidies, tension escalated, talks abruptly ended, and the union called for a strike scheduled to begin at 6 am on May 3, 1989.

We should recall here that Mexican legislation practically negates the right to strike to government employees. In fact, the AUP-R100 strike call was declared illegal by the labor court on April 22, and workers officially warned that paralyzing services would result in their immediate dismissal. In the past, such standoffs had been used by union negotiators to raise the stakes, but last minute agreements had always voided the need to carry out the threat. This time the government would not budge. Only one night before the self imposed deadline, the union had to resolve whether or not to paralyze services. At a massive assembly organized by the SUTAU-100 at Mexico City's Palacio de los Deportes -a stadium with capacity to seat 20,000 persons- workers listened to incendiary speeches describing the alternatives, and decided by acclamation to paralyze services despite the personal risks involved.²³³ Rather than deploying to their bus terminals, they agreed to convene the next morning at the Zócalo, Mexico City's central square, to hold a protest²³⁴.

The government made its own preparations. Regent Camacho called on the army and on private collective taxi organizations to provide emergency bus services at no cost to the public for the duration of the strike,²³⁵ and ordered the immediate firing of the 23,240 employees of the company. This included all of the workers, not only those that actually struck. Workers were notified of this fulminating decision on May 3, at 4 pm, while many were still protesting at the Zócalo. When many of workers heard the news and attempted to return to their posts, it was too late. Army and police prevented them from entering the premises and from taking the buses. That afternoon, the General Manager of the company declared that his orders were to “restructure the

232 Such suspicion was probably not entirely off mark. The SUTAU-100 demanded that the government maintain at least the previous year's level of subsidies for the next five years, and authorities would not commit (Monge 1995c, 10). Other accounts make similar suggestions, but provide little detail (e.g. Islas Rivera 2000, 284; González Ruiz, 1996, 124).

233 See Mendoza Cruz, 2001, 77; Juárez and Trejo, 1990, 75.

234 See Juárez and Trejo, 1990, 77.

235 See Autotransportes Urbanos de Pasajeros-Ruta 100, 1993, 68.

company, with or without the union” (Juárez and Trejo 1990, 77). Two days later, President Salinas formally decreed “the immediate, total and temporary occupation and administrative intervention of all of the assets and rights” of the AUP-R100, “until the delivery of this public service is reorganized” (Departamento del Distrito Federal 1989). A new administrator was appointed, with ample powers to hire new workers and contract out services if necessary.²³⁶

There are scholarly accounts that suggest that this strike was previously negotiated between Regent Camacho and the leaders of the union willing to participate in the modernization plan. Some, like Cuéllar Vázquez (2002, 75) and Loyzaga de la Cueva (1987) even claim that the assembly at the Palacio de los Deportes was manipulated into supporting the strike. This possibility is certainly plausible as the standoff only resulted in workers losing leverage to oppose the plan, but it did not make the government’s strategy any less forceful. Public opinion turned against the SUTAUR-100, and workers lost legal standing to defend their jobs in court. While we lack definitive evidence confirming internal foul play, a negotiation favorable to the government authorities certainly took place. On May 9 the union leadership and authorities of the DF signed an agreement, not only to reestablish bus services and to allow workers to return to their posts, but to “launch, immediately, a new work scheme based on cooperatives with state participation to ensure better service for users by increasing productivity in the operation and maintenance of vehicles, the strengthening of work discipline, and the application of the principle that each worker will earn according to performance” (Alvarez del Castillo 1995, 11). What triumphant union signs off on this kind of language? Workers did retain their jobs and obtained a 14% salary increase, and the government did commit funds to repair and expand the bus fleet, but the signed agreement established that workers unwilling to participate in the cooperatives would be offered a severance package to leave AUP-R100.²³⁷ In other words, union leaders signed off on Camacho's plan.

AUP-R100 organized its operations around 39 “modules” dispersed across the city, that served as bus depots, driver dormitories, maintenance workshops and administrative offices. In turn, the union organized itself in worker sections that roughly followed the modules, and Mexico City authorities planned to organize one cooperative at each of them. The “1989-1994 Modernization Program” presented after the strike to the workers and to the broader public

²³⁶ This administrator was Enrique Jackson, who previously served as head of the CGT, and later had a successful political career as congressman, serving both as *diputado* and as senator.

²³⁷ See Loyzaga de la Cueva, 1989.

contemplated the immediate launch of six cooperatives, suggesting that the rest would be organized in six months.²³⁸ New buses would be jointly owned by the government and by cooperative members, maintenance costs would be evenly split, while salaries “and other costs of operation” would be fully paid by the coops. (Autotransportes Urbanos de Pasajeros-Ruta 100 1993, 72). At the end of this transition period, AUP-R100 would swiftly disappear, replaced by a new (albeit still unspecified) “Metropolitan Transport System,”²³⁹ with the yellow and brown AUP-R100 chromatic replaced by a new one, featuring buses painted in grey, green and blue colors. According to Regent Camacho, “with these measures the history of a gigantic company whose management became impossible comes to an end” (Juarez and Trejo 1990, 79).

The cooperatives were nonetheless never implemented²⁴⁰ and the history of the AUP-R100's “impossible” management would continue until 1995, when another president and regent dispersed the company amidst renewed conflict with workers. After a few initial attempts to launch the cooperatives, this aspect of the “modernization plan” proved to be an impossible task. Worker-owners discovered that the coops could not survive for long without renouncing to many of their job benefits, accepting lay offs, and securing higher fares or sustained levels of subsidy from the state. There was no clarity regarding how workers would finance their share of the new buses, who exactly would have property rights over them, and how would stock in the cooperatives be distributed.²⁴¹ At the end, this feature of the modernization plan became little more than a administrative restructure giving more formal independence to each module -which would certainly impact the structure of the industry later- but, that had “no consequence on the efficacy of the agency” (Loyzaga de la Cueva 1995). This independence only legitimized and strengthened the ability of union leaders to co-manage the company with government authorities, but without taking any revenue risk, and often maintaining or even deepening the corrupt style that prevailed before the strike.

To be sure, the footprint of the company shrunk significantly during the Salinas and Camacho years, as demonstrated by comparing critical statistics of the company between 1988

238 See Legorreta, 1995, 87.

239 Ibid.

240 See Loyzaga de la Cueva, 1995.

241 These questions were raised by specialists as soon as the proposal was made public. See for example Loyzaga de la Cueva, 1989.

and 1993.²⁴² During this period, the number of workers decreased from 23,318 to 14,195 - meaning that approximately 9,000 individuals ceased to work for AUP-R100 after the strike-. While 1,100 new buses, and 3,500 “ecological” motors were purchased by the government,²⁴³ the number of buses actually in operation continued to decrease in this period, from 4,096 to only 2,764.²⁴⁴ The number of kilometers served by AUP-R100 buses fell from 358,000 in 1983 to 325,000 in 1988, and dipped to 206,000 in 1993. Passengers transported by AUP-R100 buses decreased from a peak of 2.14 million in 1987²⁴⁵ to 0.98 million in 1992.²⁴⁶ 12 of the 39 modules of the company were shut down.²⁴⁷ This process was of course not exempt from conflict. However, given that the union leadership had signed off on the cuts, the government had ample coverage, and disputes were mostly between fired workers and their union representatives. For example, workers demanded their contributions to the multiplicity of trust funds established by the union be returned to them before leaving the company. When the union leaders resisted, a group of 254 fired workers sued the SUTAUR-100, albeit with little immediate consequence. Counter-Intuitively, all the above mentioned layoffs and adjustments did little to reduce the amount of public subsidies allocated to the company. After adjusting for inflation, local and federal government transfers to AUP-R100 in 1992 were only 6.6% lower than transfers registered in 1986,²⁴⁸ and the share of total expenditures spent on workers wages and benefits actually increased. Why didn’t the government enforce the transition toward cooperatives, and why didn’t the layoffs and the reduction of the company’s footprint result in significant financial savings to the government?

The answer remains muddled amidst multiple possibilities. A few authors point to “political reasons.”²⁴⁹ Regent Camacho was seeking the presidency, and would not profit from a renewed standoff that could open questions about his ability to govern. Another alternative is corruption. Efforts to modernize AUP-R100 came bundled with commitments to renew the fleet

242 Figures presented here taken from the investigation of Juárez and Trejo, 1990. While different sources have slightly different numbers, the trends are consistent.

243 See *Autotransportes Urbanos de Pasajeros-Ruta 100*, 1993).

244 Islas Rivera (2000, 266, table 6.4) offers slightly lower figures: 2,467 buses in 1992.

245 Juárez and Trejo, 1990.

246 See Islas Rivera 2000, 263, table 6.3.

247 See Cuéllar Vázquez, 2002, 81.

248 See Islas Rivera 2000, 273, table 6.6.

249 i.e. Trueba Lara, 1995.

and to improve facilities, which promised juicy commissions for administrators and union leaders, likely to feel threatened by the need to explain and justify decisions to workers.²⁵⁰ A perhaps more cynical explanation is that the modernization plan was really a government trap to divide and weaken the union in preparation for a full blown privatization effort.²⁵¹ All of these reasons may have a kernel of truth, but we must not minimize the practical difficulty of building the required internal consensus, and of containing wasteful inertias typical of a large bureaucracy. In the end, the transition proposed to workers -to evolve from union-members to private operators- was not necessarily attractive, and likely resisted. Many of the workers surely remembered what was it like to work in the industry before the AUP-R100, and wondered what would happen if their union bosses became the leaders of the new cooperatives. Why should they relinquish their benefits, high salaries and work security? And, why would the individuals that mined the company's resources for personal gain embrace a business model that promised lower profits and more risk?

While discussions over the modernization of AUP-100 continued, plans to extend the Metro network progressed very slowly. Salinas had committed to building 10 kilometers of metro per year, but it was not until 1990 -after the AUP-R100 strike was resolved- that the first expansion project of his administration broke ground. While planned southbound expansions to Lines 4 and 7 were still pending, Salinas chose instead to build the 17-kilometer line A, the first to venture for any significant distance outside of the formal boundaries of the DF. In addition to its metropolitan reach, this line had the advantage of being significantly lower cost. Its "suburban" features implied that it could be built with surface rather than underground stations and tracks, and that few land takings were required (as the line used a pre-existing right of way). Furthermore, trains used on this line were iron wheels rather than rubber tires, and were fully sourced and assembled in Mexico, which implied lower purchase and maintenance costs. Notably, the per kilometer cost of this line, completed on August 1991, was approximately half of the cost required to build line 1.²⁵² To further mitigate the cost impact of this project on the

250 Later audits would suggest, for example, that the director of AUP-R100 awarded the contract to supply the 3,500 "ecological" motors to a favored supplier with no tender. This supplier was Mercedes Benz, partly owned by the Hank family. For details on this and other examples, see Monge, 1995d.

251 For this take, see Loyzaga de la Cueva, 1995; Cuéllar Vázquez, 2002, 77.

252 For a full description of efforts to reduce costs over the history of Mexico City's subway, see Henry and Kuhn, 1996.

balance sheet of STC-Metro, line A was not fare-integrated with the rest of the network. That is, passengers transferring at the massive Pantitlán terminal station were required to purchase a second ticket before boarding another subway line. The other two metro projects undertaken in the Salinas presidency were the construction of the postponed line 8, completed in 1994 after significant adjustments to the original plan, and the start of construction of line B, which would not be finished until 2000.

Decreasing capacity to tackle the second-order goals of public transport policy

Despite the efforts of public authorities to improve and extend Mexico City's public transportation system, the results were far from sufficient to cover the growing mobility needs of the population. As his predecessors, regent Camacho had little alternative but to turn to the private collective taxis to cover this primal need. However, collective taxis thrived precisely by exempting themselves from costly environmental, labor, safety and other regulations, and by charging more onerous fares, with the implication that their emergence as an increasingly dominant mode negated or at least limited the effectiveness of government policies in critical areas. These effects were no longer easy to ignore. By the mid eighties, Mexico City had attained well-deserved fame as one of the most congested and polluted cities in the world. The levels of traditional urban pollutants like sulphur dioxide (SO₂), suspended particulate matter (SPM), lead (Pb) and nitrogen oxides (NO_x) were all above World Health Organization (WHO) guidelines,²⁵³ and commuting times reaching more than three hours per day were becoming commonplace. Mexico City authorities implemented the first comprehensive program against air pollution in 1990 (PICCA 1990), calling for a wide ranging battery of policies that included vehicle emission control systems and weekly no-drive days for private automobiles. This program also justified the above mentioned public investments to expand the Metro and to renovate AUP-R100's bus fleet. But how could the regent include the collective taxis into the city's efforts to address social problems like congestion and pollution, without unleashing private operator demands for fare increases or subsidies?

The regent acknowledged publicly that the policy of “tolerating” collective taxis came bundled with significant externalities. As he put it in 1989, “given the necessity of transport alternatives in the areas that can't be covered by the Metro, the buses or the trolleybuses, others before me authorized increasing numbers of lower capacity units like combis, which caused a

²⁵³ See Nava Escudero, 2004.

mayor pollution problem that we can't ignore" (Islas Rivera 2000, 314). The gradual shift from large to smaller vehicles, amidst a weak regulatory system, certainly generated inefficiencies by adding to traffic congestion, reducing public transit productivity, increasing emissions and exposure to pollutants, and increasing accident rates. However Camacho had limited options to address the multiplicity of problems caused by the collective taxis. In fact, he *needed* this mode to exist -not only to hedge against the possibility of SUATUR-100 strikes, but to ensure that the inhabitants of the city had access to transport services given the limited reach and quality of the Metro and AUP-R100 services. The fact that they represented a base of potential political support for his own presidential aspirations did not hurt either. The task of navigating this tension fell on the CGT, which not only continued but expanded its vehicle-substitution program. Paradoxically, a program justified as a deliberate effort to control pollution and minimize congestion actually weakened the government's ability to sustain its cleaner and more efficient services, and made congestion worse. As before, collective taxi operators took advantage from government support to purchase larger vehicles, easily sidestepping the requirement to take three smaller, older and more polluting units off the streets. At best, operators replaced one combi for one microbus, and at worst took the microbus while continuing to run their "retired" combis informally. The leaders of several collective taxi organization made a profitable business out of adapting truck chassis with make-shift microbus bodywork, and selling them to members.²⁵⁴ Such apparent oversights are not due to bureaucratic incompetence or corruption, at least not entirely.²⁵⁵ The reason is that in addition to negotiating the adoption of cleaner vehicles, the CGT was using every tool at its disposal to negotiate route alignments, fare policy -and political loyalty- with collective taxi organizations. To maintain and increase government leverage in these negotiations, authorities frequently resorted to the selective enforcement of regulations and to the discretionary distribution of program benefits.

According to López Zaldívar (1997, 100), "the policy of Camacho Solís was based on pacts (*concertaciones*) designed to temper the political ambiance. Collective taxi leaders were satisfied with the policies directed at the trade: There was no mutual aggression nor street

254 The most famous of these leaders was Heriberto Flores Nava, "El Pollo." He put 75 of these adapted vehicles in the market, that soon became known as "pollo-vans." For this story see López Zaldívar, 1997, 100.

255 According to an audit, during 1994 the CGT "lost" 1,503 collective taxi license plates and had "duplicated and altered" concession files (Monge 1995e).

blockades for grave conflicts, and their organizations benefited from several sinecures (*'canonjías'*)." In many ways, the CGT got what it wanted. Camacho was able to maintain the fare without increment throughout his tenure, although these "savings" certainly impacted the quality of the service available to the public. Specialists were quick to sound the alarms. Jorge Legorreta (1995, 184) noted that collective taxi organizations in Mexico City had attained such influence "that they directly intervene in the planning functions of the state," warning that "by the end of this century, a group similar to the Alianza de Camioneros will emerge." Bernardo Navarro Benítez concurred, emphasizing that collective taxis were no longer restricted to playing a subsidiary and complementary role. Even amidst the multiplicity of problems plaguing the subway and AUP-R100, this author (1993) argued that no viable and effective "modernization" could take place without "first breaking the corporative and clientelistic control that currently exists in the services operated through concessions... the principal obstacle facing transportation policies that are imaginative and of great significance." However, the corporative and clientelistic practices that distinguished collective taxi organizations may have been precisely what enabled the city to retain some ability to influence the system, and the regent knew it.

While many of the loans used to finance new vehicles were subsidized and backed by Nacional Financiera, the national development bank, the program soon outgrew the financial capacity of the state. To maintain the vehicle-substitution program running, Camacho encouraged vehicle manufacturers and distributors linked to the regime to offer better credit conditions to collective taxi organization leaders, suggesting that in case of repayment problems debtors could be bailed out either with subsidies or fare increases. Many of these vehicle suppliers were firms owned by families close to the government, who had acquired them during the privatizing wave of the de la Madrid and Salinas administrations. Several jumped into this business opportunity, establishing assembly lines that improved the artisanal practice of adapting truck chassis with bodywork appropriate to serve public transit needs. This was the case of firms like HAVRE

Figure 2.13 Microbus, Mexico City (1990s)



(owned by the Mariscal Family, the largest General Motors vehicle distributors in the country), FAMSA (owned by former regent Hank), CATOSA (owned by Eduardo Gomez, former Minister of Public Works under Hank), CAPRE and AYCO. Partly a result of government support, and partly as a consequence of the common interests of organization leaders seeking commissions, and of vehicle distributors wanting to boost sales,

“vehicles were handed (to operators) without any type of paper or credit check” (Páramo 1994, 34). The effect was a “microbus boom” (León Salazar 2011, 166). Data compiled by Islas (2000, 312) is sobering: The number of collective taxis authorized to operate in the DF remained practically unchanged between 1988 and 1994, roughly at 42,000 vehicles. However in this same period the previously marginal microbus (capacity: 20-25 seated passengers) replaced the combi (capacity: 8-10 seated passengers) as the most prevalent collective taxi vehicle: By 1994, there were 23,247 microbuses in Mexico City.²⁵⁶ In other words, the passenger capacity of the private *authorized* collective taxi industry in the DF roughly doubled under Regent Camacho, precisely as the vehicle fleet and yearly passenger ridership of AUP-R100 buses was practically reduced in half. It is impossible to know if this outcome was deliberate, but the correlation can't be easily ignored. By 1994, the share of trips in the MCMA served by microbuses and combis had

Figure 2.14 Combi, Mexico City (1990s)



²⁵⁶ By the end of the Camacho administration, the leaders of the CAT sought to introduce even larger vehicles in main thoroughfares. Mexico City authorities briefly authorized 10 large private buses to run on Reforma, but they had to be retired from circulation after a series of fights between AUP-R100 workers and collective taxi operators. See Monge, 1995d..

increased to 54%, while the share served by subway and public buses had decreased to 16% and 10% respectively.²⁵⁷ The dream of a multimodal, integrated public transport system, governed by a single actor that prioritized social over economic objectives, was gone.

A new presidential administration, and a commitment to “force” change

The tribulations of the planners and regulators of public transportation in Mexico City seem marginal when placed within the larger political and economic context of the the final years of the Salinas presidency. This period was an emotional roller-coaster. A brief period of sustained foreign investment had many sold on the idea that the country was moving on the right track, but a string of dramatic events soon provided a sobering reality check. In November of 1993, the PRI unveiled Luis Donaldo Colosio as its candidate to the presidency. Evidently upset, Manuel Camacho resigned from his post as Mexico City regent and briefly toyed with the idea of leaving the party before accepting a position in Salinas' cabinet. The signing the North American Free Trade Agreement (NAFTA) took place on December 1 amidst much fanfare, but a few weeks later an insurgent army -the Ejército Zapatista de Liberación Nacional (EZLN)- emerged in the southern State of Chiapas declaring war on the state. As the Salinas administration reacted to the zapatista uprising -sending Camacho as peace negotiator-, candidate Luis Donaldo Colosio was tragically assassinated during a campaign event held on March 23, 1994 in Tijuana. The nation was in absolute turmoil and the market panicked. Soon the political and economic consequences of these events would lead Mexico City authorities to attempt a much more forceful approach to public transportation reform.

To replace Colosio the PRI selected Ernesto Zedillo, a Yale educated economist previously serving as education minister. Feeling snubbed for a second time, Camacho resigned from his post as peace negotiator in Chiapas, and distanced himself from the incoming administration. On August 21, Zedillo easily defeated leading opposition candidates Diego Fernández and Cuauhtémoc Cárdenas. The PRI even recovered its electoral might in Mexico City, winning a large majority in the local Assembly. This outcome was at least partly due to a 1993-1994 public relations campaign and public investment splurge, designed to bolster the PRI's popularity in the city. The first featured PRI congressional support for the 1993 reforms that granted the Mexico City Assembly full legislative powers, and a campaign pledge by Zedillo that city residents would be able to elect their own mayor in 1997. The second included President

²⁵⁷ See González and Vidrio 2011, 30.

Salinas breaking ground on the construction of Metro line B and inaugurating the long awaited Metro line 8 -only one month prior to the presidential election. Many of these public investments were financed using mexican government bonds payable in foreign currency, due just as capital started to flee the country in reaction to the tragic events in Chiapas and Tijuana.

However, Camacho's sudden exit from the regency and later break with the PRI certainly impacted a delicate balance built on protracted negotiations with cúpula leaders of collective taxi organizations. On the side of the government, key CGT officials followed Camacho and resigned, leaving behind "a tremendous power void" (López Zaldívar 1997, 106). On the side of private operators, cúpula leaders no longer had responsive government counterparts and thus were no longer as useful to their membership base. This was of course compounded by the fact that any new partnerships built would not necessarily be longer lasting, as the the next election for city mayor was in no way settled in favor of the PRI. Unsurprisingly, it is precisely during this period that the CAT began to disintegrate, and that dissidence movements germinated within each cúpula organization.²⁵⁸ Several new organizations were formed, while many Rutas decided to represent themselves. With the channels of communication that linked public and private stakeholders broken and with the decision structure of the private collective taxi industry undergoing a process of fragmentation, the state's mechanisms of control weakened. While this turn of events had a lot to due with politics, economics also played an important role. Days after Zedillo was sworn in as president in December 1994, the "tequila crisis" struck the country with full force, forcing the incoming administration to devaluate the currency and to briefly consider debt default, all while attempting to pacify the insurgency in the south of the country. Before the economy could stabilize from this shock, thousands of families had lost their lifetime savings and many private companies, including some that had too eagerly supplied the microbuses -like Grupo Havre- faced bankruptcy.²⁵⁹ Collective taxi owners fell behind on their new vehicle payments, and demanded that their leaders mobilize against the government to obtain a bailout or to force an increase to the price of fares, which Camacho had kept frozen during the previous four years as part of his effort to bolster a presidential run. This economic fallout also had

258 For example, approximately 20 ruta organizations abandoned the CAT to create the Consejo Unificador de Taxistas (CUTAC).

259 According to Paramo (1994, 35), at the end of the Salinas administration microbus organization leaders owed \$600 million nuevos pesos only to one company -Grupo Havre- (In 1993 the exchange rate was US \$1=\$3.40 nuevos pesos). This company would declare bankruptcy amidst substantial scandal.

implications for the other transit modes in the city. Unsurprisingly, line B of the Metro took the full six years of Zedillo's presidential term to complete, and most other large infrastructure projects promised during his campaign²⁶⁰ were postponed, limited, or cancelled.²⁶¹ The perspective for AUP-R100 was similarly bleak. The mandate to minimize public subsidies, cut public expenditures, restrict federal transfers to local governments and increase transit fares would continue, just as the negotiating table represented by the CGT seemed least appropriate than ever to find a workable accommodation with incumbent private operators of service.

Ernesto Zedillo appointed Oscar Espinosa as the new regent of Mexico City. He would be the last regent, governing the city for three years until a mayor was democratically elected in 1997. Espinosa promptly reorganized the city government, creating the Secretaría de Transporte y Vialidad (SETRAVI), to elevate the CGT to ministerial stature. This decision was partly taken to empower the CGT vis a vis the autonomous SCT-Metro, STC and AUP-R100, and to give more authority for the officials negotiating with private concessionaires. The decision also served a political purpose: signaling to actors involved in transportation services that the new administration had in fact begun, and that it would differentiate itself from Camacho's. To head the new SETRAVI, Espinosa appointed Luis Miguel Moreno, a no nonsense technocrat with experience as regulator, who had previously served as president of the National Stock Exchange Commission (CNV). Moreno's most urgent task would be to conduct an audit to the AUP-R100, and a review ty polices toward collective taxi organizations.

Regent Espinosa spoke freely about relying on the private sector to finance public works and services in the capital. As one of his aides explained to *Proceso* in January 1995, his plan was to "concession more public services, and privatize others." (Acosta Córdova, 1995). Not only were the new president and regent ideologically disposed to this option, but perhaps more importantly, they realized that the economic crisis significantly limited the ability of both the government and the collective taxi industry to invest the funds required to make a noticeable impact on the quality of services. Furthermore, they had a political incentive to continue reducing federal transfers to the capital, which meant that their ability to govern collective taxis through discretionary subsidies, and to improve the AUP-R100 by improving its fleet were limited. In the past, inefficient and inequitable federal spending in the DF could at least be

260 Such as a privately-financed elevated train, and the expansion of the deep drainage system-

261 See Monge, 1995b.

justified within the party as a tool to “feed” the PRI's political machine. However, there was no longer a guarantee that the mayor elected in 1997 would emerge from the PRI, nor that party loyalists would have privileged access to these funds. Perhaps it was the right time to privatize the AUP-R100, if only the government could attract suitable investors. Finding them was certainly no easy task -particularly since Espinosa wanted to bring new actors to the market. The economic crisis had diminished the private sector's appetite for risky investments, and the SUTAUR-100 was still likely to resist with full force. As Espinosa explained publicly in February when asked about the possibility of privatizing AUP-R100, “I don't think that the private sector would be interested in a company like AUP-R100 at this time.”²⁶²

Nonetheless, the alternative of continuing on the current path -where the AUP-R100's gradual decline simply gave ground to the expansion of a weakly regulated mass of collective taxis- was not tolerable either. Moreno's review of the policy of negotiation with collective taxi organizations produced a dire diagnostic. The model was based on hierarchical control and discipline, and organization leaders were dependent on government support to maintain their hold over increasingly disgruntled members. As he reported “Cúpula leaderships are facing a process of internal erosion, given that their membership bases demand a fare increment, which could lead these organizations to rupture and dissidence to grow... there is a possibility that these leaders will be surpassed, a scenario that will naturally provoke instability in the sector and consequently render it ungovernable” (López Zaldívar 1997, 124). Helping these leaders retain control over their organizations would cost more money than the government was willing to spend, and would at best only maintain the status quo. To be sure, the Espinosa administration authorized a fare increase in March 4th, 1995 to relieve much of this pressure, but there is no question that it also began exploring a new way to organize privately operated services in the city. As Regent Espinosa declared on the same day he announced the fare increase, “Public transport no longer satisfies anyone, not the users, not the private operators, not the authorities. No one is satisfied” (López Zaldívar 1997, 116).

Similarly, Moreno's audits to the AUPR-100 revealed that corruption and waste had ravaged the company and contributed to the failure of Camacho's high profile modernization program. Further, the close association of the SUTAUR-100 with the MPI raised concerns in

262 *La Jornada*, February 2, 1995

national government circles about the possibility that subsidies for public transportation were actually financing the EZLN's insurgency in Chiapas.²⁶³ In fact, Moreno's audits linked the underperformance of the company to the SUTAUR-100's political activism. An official then working under Minister Moreno explained, "the union was extending the company's bus routes, to reach the peripheral areas of the city were the MPI sought to gain influence. By doing that, they were reducing bus frequencies and thus significantly impoverishing the service. This was the space that minibuses quickly filled up, running every 3-5 minutes, vs the AUP-R100's 20-25 minutes."²⁶⁴ Fabricated or not, the suggestion of potential terrorist linkages combined with documented evidence of widespread mismanagement, corruption and impunity probably swayed President Zedillo into authorizing the new regent to forcefully intervene the public bus company. And so, the contextual forces of politics and economics laid the groundwork for a significantly more forceful approach to public transportation reform in Mexico City.

The 1995 bankruptcy of AUP-R100: A second attempt to privatize bus services

March 17 marks the anniversary of the first collective contract linking the AUP-R100 to its worker union. Every year on that date, the union leadership presented new demands, opening a period of contract re-negotiation that typically ended with salary and benefit increases. However, the incoming authorities did not spend the days prior to this yearly milestone lobbying union leaders, in the style of many of their predecessors. According to journalistic accounts, Minister Moreno instead hosted a dinner at his home on March 16, attended by owners or managers of the main bus manufacturers (DINA, MASA and Mercedes Benz) and microbus assemblers (FAMSA, CATOSA, CASA, CAPRE and AYCO). "Moreno explained the motive for the meeting: Espinosa wanted to modify the manner in which public transport services were delivered in the city, and they were invited to play an important role in the transformation. He suggested that if interested, they would find favorable terms and financial support. When one of the invitees asked what would happen with AUP-R100 and its union, Moreno answered 'don't worry about it.' They agreed to meet again in 45 days".²⁶⁵ Government authorities also reached out to the leaders of the strongest collective taxi organizations -Francisco Aguirre from the CAT,

263 During the month of february, television newscasts reported on the connection between Ricardo Barco and the EZLN. This could of course have been a story "planted" to diminish the leverage of the union in the upcoming contract renegotiation.

264 (Villegas, Alejandro. Personal interview. March 2, 2011)

265 See Monge, 1995d.

Jorge Almaguer from the Consejo Unificador de Taxistas (CUTAC), Jesus Martínez from the Bloque de Agrupaciones y Rutas de Taxistas (BARTSCE), and Gustavo Roldán from Ruta 2²⁶⁶. “the only ones who have the economic power and political and financial contacts to partner with the vehicle suppliers, or to play on their own”²⁶⁷. While it is impossible to know the exact content of what was agreed in these meetings, subsequent events clearly demonstrate that the Mexico City government was committed to forcing change in AUP-R100.

Instead of responding to contract renegotiation demands, the AUP-R100 unexpectedly filed for bankruptcy in court on April 5th.²⁶⁸ This legal proceeding -usually reserved for private entities- required formal notification to debtors and workers, which took several days. However, in this case a judge sanctioned the bankruptcy of AUP-R100 swiftly and quietly by the next day.²⁶⁹ On April 8 at 2 AM anti riot police stormed all of the AUP-R100 modules, securing company buses and facilities. Workers arriving to their normal shift at 5 AM were turned back and informed that the company was bankrupt. The city woke up without public bus services -a problem somewhat tempered since it was a Saturday, and the Holy Week vacation period had just begun. At 1 PM Minister Moreno and Jesus Salazar Toledano -Secretary General of the DDF, and Espinosa's second in command- held a press conference to explain the motives for the bankruptcy, and to outline the government's plan to dissolve the company and replace its services. They presented the results of their audit, highlighting unsustainable levels of subsidy, mismanagement, “corrupt practices” and “a perverse relationship” between union leaders and management.²⁷⁰ The officials announced that no less than 1,000 leased buses would offer free emergency transport services during the coming weeks, and that “on May 2, 1995, a new transport service would start operations, with a healthy company, without vices, covering the 207 routes operated by Ruta 100” (Fernández 1995, 36).

266 Both the CUTAC and Ruta 2 splintered from the CAT. Ruta 2 was a single organization, now representing itself, however given its large size it continued to be considered as a cúpula organization.

267 Ibid.

268 The process was atypical from the start. Only private entities unable to cover their debts could legally file for bankruptcy. Public agencies could be dissolved with a presidential decree. Furthermore, the AUP-R100 was not technically insolvent, since it had an approved budget and could continue to draw from subsidies to meet its obligations.

269 See Fernández, 1995.

270 See Loyzaga de la Cueva, 1996; González Ruiz, 1996, 56; Cuéllar Vázquez 2002.

As the SUTAUR-100 organized its response, a different court issued arrest warrants for eleven union leaders. Surprisingly, these warrants were based on the trust fund mismanagement case filed back in 1991 by fired AUP-R100 workers, suddenly and conveniently reactivated at this precise moment. Most of the indicted leaders, including Ricardo Barco, would be incarcerated in the subsequent days, and the union bank accounts frozen.²⁷¹ The beheading and financial handcuffing of the SUTAUR-100 had apparently been flawlessly executed by the authority, and government plans seemed to progress rapidly. However, on the morning of April 10, Minister Luis Miguel Moreno was found dead with two bullet wounds in his chest. Surprisingly, it took only a few hours for government authorities to rule out murder and to declare that the minister had committed suicide²⁷², opening questions that remain unanswered to this day. On that afternoon, 35,000 protestors (SUTAUR-100 workers accompanied by members of the MPI and of other left-leaning organizations) convened in the city's central square, denouncing government attempts to “privatize public transport and increase fares.” In what quickly became an improvised assembly, workers agreed to “guard” their modules, demand the liberation of their leaders, and refuse the checks for 3-months salary plus 12 days per year worked that authorities had offered to workers as liquidation.²⁷³

Tension escalated rapidly. Hundreds of workers chanting “*quiero mi camión, no liquidación*” (I want my bus, not my liquidation) practically sieged several AUP-R100 modules. It did not help that the management-in-bankruptcy of AUP-R100 signed a contract with another union, which actively recruited workers to ramp up emergency transport services in anticipation of the end of the Holy Week break. It was one thing was to secure the company’s facilities, but taking the buses out to provide service was an invitation for violence. On April 21, two molotov bombs exploded outside of Module 34, and police and workers fought on the streets. In the skirmish 16 people were badly injured, 24 detained and 15 buses damaged²⁷⁴. After this event, emergency buses offered services guarded by police cars, as authorities anticipated they would be attacked. In the meantime, Regent Espinosa ordered a new round of audits, explaining that “the strongest and most important obstacle” to any restructuring of the industry, was “the perverse relationship established by Manuel Camacho with the union” (Monge 1995d). On

271 See Loyzaga de la Cueva, 1996.

272 See Mayolo López, 1995.

273 See Loyzaga de la Cueva, 1996.

274 See Trueba Lara, 1995, 99.

several occasions, the regent had to reiterate that the bankruptcy of AUP-R100 was irreversible.²⁷⁵ The question that remained, however, is what exactly would take its place?

Planning a regulatory regime transition amidst a politically stressed system

To replace Moreno at SETRAVI, Espinosa appointed Jorge Ramírez de Aguilar, the AUP-R100 General Manager that had oversaw the bankruptcy. The new minister had been part of Moreno's team, and continued his search for willing investors and for a viable new formula. He declared publicly that "every transport operator and vehicle assembler ("carrocero") will have the opportunity to participate in the modernization of transport in Mexico City" (Monge 1995d). The planners working at SETRAVI decided to divide the AUP-R100 in ten route "packages" - identified as Ruta 110, 111, 112... and so on until 119-, and proposed awarding them to nine different private companies, retaining the tenth as a public entity designed to serve financially unprofitable routes. Ideally, each of these companies would obtain a new concession to operate these route packages with a fleet of approximately 500 new buses, exploiting the bus depots and maintenance facilities of the existing AUP-R100 modules. The plan was to include as many collective taxi organizations as possible into the deal, brokering partnerships between organization leaders and the vehicle manufacturers able to finance them. After all, the participation of both types of actors seemed necessary for the plan to work: Collective taxis needed to be included, or they would continue to engage in ruinous competition against the buses, and bus suppliers needed to participate, as they seemed to be the only private investors interested in financing such a large and risky venture amidst the financial crisis that plagued the country. The fact that many of the collective taxi operators were heavily indebted with the suppliers of their minibuses was considered by SETRAVI officials as a source of leverage to get them to the table. To further tighten this plan, SETRAVI planners drafted a new regulatory package that would outlaw the production and sale of minibuses, empower authorities to inspect and fine collective taxis, and mandate the conversion of the private minibus fleet to standard-size buses by the end of 1997.²⁷⁶ As Ramírez explained, his goal was to combat "the regulatory obsolescence that has harbored discretionally in the authority's decision making and anarchy in the services operated through concessions."²⁷⁷

275 See Cuéllar Vázquez, 2002, 92.

276 See IEA, 2002.

277 See ALDF, 1997b, 44.

By April 27, the plan seemed to be moving forward. After weeks of negotiations behind closed doors, SETRAVI officials declared to the press that the firms “MASA, DINA, CATOSA and Mercedes Benz would create new companies partnering with transport providers in the metropolitan area to operate the routes of Ruta 100.”²⁷⁸ At least one such partnership (between Fernando Ruano, one collective taxi leader, and the Gómez Flores Family, owners of Grupo DINA), appeared to be progressing smoothly. However, authorities may have been too quick to announce the news. As one of the SETRAVI planners participating in this process recalled, “the technical and legal concept was very well designed. The political aspect not so much.” And in fact, as the conflict with the SUTAU-100 escalated rather than receded, potential investors grew more uncertain, and soon demanded that the government settle its dispute with the SUATUR-100, before committing any investment.²⁷⁹

By May 18, only 427 of the roughly 14,000 AUP-R100 workers had picked up their liquidation checks, and the SUTAU-100 seemed more united and unwilling to budge than ever. With tension mounting, Mexico City authorities offered to negotiate, but the union demanded that their leaders first be freed. When authorities frowned at this possibility, protests resumed throughout the city with added force. On May 20, 7,000 people marched to the Presidential Residence of Los Pinos, by route of the Periférico (the city's main ring road). Three days later, the SUTAU-100 drew an even larger crowd that attempted to reach the Presidential Residence for a second time, before being blocked by anti riot police city. The demonstration still paralyzed traffic on the Periférico for several hours, turning the city on its head. The likelihood that these events would keep escalating triggered an emergency security cabinet meeting, attended by President Zedillo. According to the press release, “the president instructed the regent to resolve the differences between the DDF and the workers of Ruta 100.” Formal talks between Mexico City authorities and the union finally began on May 25, although Espinosa clarified, “not to discuss the bankruptcy, but only the future participation of workers and their severance packages.”²⁸⁰ In these talks, authorities insisted that the new firms would hire former AUP-R100 workers and even offered to increase severance payments, but could not guarantee future employment for everybody nor that the new concessionaires would respect current union salary and benefit levels. Another option put on the table was that the SUTAU-100 could create its

²⁷⁸ *La Jornada*, April 28, 1995

²⁷⁹ See Trueba Lara, 1995, 114.

²⁸⁰ *La Jornada*, May 18, 1995.

own company, and be awarded one or several of the “route packages”, albeit with no government financial support to purchase the buses. After several meetings, talks broke down again.

Amidst these negotiations, another scandal broke. A magistrate named Abraham Polo Uscanga denounced having been pressured in March by “high ranking government authorities” to grant the arrest orders that had landed SUTAUR-100 leaders in jail. In what became the second mysterious death associated to this conflict, this magistrate was murdered on June 19th. The bankruptcy of Ruta 100 quickly mutated into a high ring conspiracy, with scandalous political connotations. Cuauhtémoc Cárdenas declared that the murder of Polo Uscanga was “one more proof of the country’s rotting political regime and of the incapacity of the president to establish order.”²⁸¹ Weeks later, Cárdenas visited the SUTAUR-100 leaders in jail, asserting that “no one in this country has any doubt that you are political prisoners.”²⁸² Within days, the image of these leaders shifted from potential terrorists and delinquents to oppressed victims. By October 1995, SUTAUR workers had organized no less than 80 assemblies and 345 mobilizations, many of them multitudinous.²⁸³ Rather than turning against the union, people donated coins at metro stations to help workers sustain the protests. Other national organizations joined -such as the unions of teachers (CNTE) and university workers (STUNAM), and radical groups like the Frente Francisco Villa and the MPI-, making the protests no longer only about the buses, but more generally about employment, salaries, and government commitment to public enterprise. The scandal also garnered international attention, with the AFL-CIO expressing its solidarity, Amnesty International taking the side of the union and protests taking place outside of foreign embassies. Even Subcomandante Marcos, the visible leader of the EZLN, came out from hiding in the jungle to publicly express his solidarity to the union.

With thousands of workers taking the streets, and with Mexico City residents suffering from traffic blockades and scarcity of public transport services, SETRAVI officials urgently needed to break the stalemate. Predictably, the emergency transport program was grossly insufficient to replace the AUP-R100, with all the gaps swiftly covered by collective taxis. The hold of combis and minibuses as the dominant transportation alternatives in the city grew with

281 See Trueba Lara, 1995, 121.

282 *La Jornada*, August 31, 1995.

283 See Loyzaga de la Cueva, 1996.

each day that passed, putting the entire modernization plan at risk. Why would collective taxis agree to partner with large capitalists, or even to renovate their vehicles if they could have the whole market for themselves without investing another peso? For this reason, SETRAVI officials focused much of their energy getting the new Transport Law passed at the local Assembly (which now had the power to pass legislation). As Minister Ramírez Aguilar explained to assemblymen, the law was urgently needed to “give legal certainty to service suppliers, and establish the normative bases for the reorganization of the sector” (ALDF, 1997b). The Law assumed the AUP-R100 no longer existed, and empowered SETRAVI to award any bus service concession it deemed necessary, as long as the decision was based on “technical studies.” When approved, the Ministry would be free to decide whether to hold a competitive tender or to select the new operators by direct invitation. To make participation attractive, the law allowed a duration of up to twenty years per concession, renewable. While the regent (and subsequently the mayor) would retain ultimate authority over fares, the law foresaw a mechanism to introduce yearly adjustments that would take into account the varying cost of inputs. To limit the free-roaming collective taxis, the new law empowered SETRAVI to establish “mechanisms of control and surveillance of the transport operator organizations,” -such as a mandatory registry, vehicle inspections, and fines. In addition, it called for “mechanisms necessary for the transformation of operator associations into mercantile societies, with the objective of ensuring a level field and not placing anybody in privileged conditions, and to prevent monopolistic practices and unfair competition” (Departamento del Distrito Federal 1995, article 26).

While the PRI enjoyed a strong majority in the Assembly, passage of the transport law required much negotiation with Camacho's sympathizers within the party's back-benches, which probably explain why the tone condemning corrupt managers and union leaders at the AUP-R100 practically disappeared by the end of 1995. Debates in the Assembly, taking place over the month of November were certainly intense. After all, passage legitimized the bankruptcy of AUP-R100. According to left-leaning assemblymen, “the project sought to dismantle the role of the state by establishing economic profitability over social profitability as the criteria that must guide the transportation project of the city.”²⁸⁴ Unsurprisingly, language was added to clarify that the Metro system “cannot be operated by concession”.²⁸⁵ But behind the rhetoric, a more primal

284 *La Jornada*, November 17, 1995.

285 See Departamento del Distrito Federal, 1995, article 21.

fight was taking place about who exactly would profit economically and politically from the bus system set to emerge from the ashes of AUP-R100.

Interestingly, the new transport law was not approved until the seeds of a “political agreement” to resolve the conflict with the SUTAUR-100 were planted. Primed by assemblymen, Espinosa sent a personal envoy on November 25 to meet informally with the incarcerated leaders of the SUTAUR. Espinosa offered to award the union 2 of the 10 concessions -each with capacity to sustain 500 buses and to employ full time 1,500 union workers-. In addition, he offered to broker a deal to dismiss the trust mismanagement case that had them in jail, and to significantly increase the severance payments offered to workers.²⁸⁶ While detailed discussions would continue for several months, and while the final tab of this negotiation to the state would increase considerably, the new transport law was finally passed on December 20, 1995.²⁸⁷ For a moment it seemed that the impasse was finally breaking up. However, just like in 1989, getting union leaders to agree was only one part of the problem. The decision had to be con-validated by the majority of the workers, who certainly worried that not everybody could find employment in the two union-controlled firms. Unsurprisingly, in February Ricardo Barco countered the government's offer, demanding that 5 of the 10 concessions be awarded to the union. As the government considered this proposal, worker protests resumed, now featuring a group of workers engaging in a hunger strike. Seeking to finalize the conflict, on March 21, 1996 the government officially proposed to top its previous offer of two concessions with

- 1,000 taxi medallions, estimating that each medallion would provide a job to two workers;
- financing for an early retirement and retirement program for 1,000 workers;
- roughly tripling the amount offered as worker's severance packages, bringing their value to an average of \$86,700 pesos (US \$11,494 dollars) per worker. This increase had the

286 See Loyzaga de la Cueva, 1996.

287 Incidentally, Mexico City authorities also increased the price of subway fares on December 15, 1995. According to Espinosa's own testimony: “If we had postponed the fare adjustment, we would have had to suspend construction of (Metro) line B, suspend operation in line 2, and we would have been forced to retire from circulation cars and even entire trains in the coming years” (ALDF 1997a, 64).

objective of capitalizing workers to pay the downpayment of the buses required to operate their two concessions, and

- a commitment to award a third concession “if the first two operated in accordance to established regulations.”²⁸⁸

This agreement was finally signed on April 26, 1996 -almost one year after the AUP-R100 was declared bankrupt. Ricardo Barco and the rest of the leaders of SUTAUR-100 were freed on July 11, 1996. The approximately 8,000 SUTAUR workers that resisted throughout the year-long conflict held an assembly and agreed that each member would need to invest at least 30% of their severance checks to participate as stockholders in the new business ventures of the union. 7,200 of them paid the required amount, and together raised \$150 million pesos (US \$18.9 million), which were invested in a common trust.²⁸⁹ With this money, the SUTAUR created three bus companies -Servicios Metropolitanos de Transporte 17 de Marzo, Autotransportes Urbanos Nuevo Milenio, and Autotransportes Urbanos Siglo Nuevo²⁹⁰- and covered the downpayment for 556 new buses purchased from Grupo DINA.²⁹¹ In August 1996, these firms were formally awarded two concessions to operate route packages 110 and 112.²⁹²

A pyrrhic victory?

Mexico City authorities succeeded in getting the new law passed and in bringing closure to conflict with displaced AUP-R100 workers. The effort took time, political capital, significant financial resources and at least two unexplained deaths. Surely they expected to end their term in office with the ten concessions awarded and with the new buses of formal companies replacing the combis and minibuses of operator associations in the streets. To be sure, between August and October 1996 SETRAVI organized restricted-invitation bidding processes and formally awarded the remaining seven concessions. Each of them had detailed specifications of the type of vehicles that would be required, of the standards of service that were expected, and of the route grid that they needed to serve. During that same period, the Ministry published several

288 See Cuéllar Vázquez, 2002, 94; Loyzaga de la Cueva, 1996; Mendoza Cruz, 2001, 138. See also *El Financiero*, April 27, 1996.

289 López, Enrique. Personal interview. March 8, 2011

290 This consortium of firms would eventually be known as the Grupo Metropolitano de Transporte (GMT)

291 See Mendoza Cruz, 2001, 138.

292 The next administration would award them Route 115 two years later.

norms concerning the allowable vehicle age, as well as the “safety, comfort, and environmental standards that must be met by buses, minibuses and combis offering public transport service” (ALDF 1997b, 45). Angel Molinero, one of the planners involved in the process, summarized the feeling of optimism that prevailed within the government: “We had clearly established the rules of the game. We were on a path to a first world system.” However, by the end of the Espinosa administration in December 1997 only three concessionaires had begun operations: The two already awarded to former SUTAU-100 workers, and a third (Ruta 111) that resulted from a partnership between collective taxi operators led by Fernando Ruano and Grupo DINA. Furthermore, these four companies combined had far fewer buses than originally required. Instead of 10 companies with 5,000 buses, the modernization efforts had yielded only 3 companies with 790 new buses (ALDF 1997b, 16). Similarly, “mandatory” substitution of minibuses operated by collective taxi organizations had only resulted in 316 additional new buses.²⁹³

When Minister Ramírez de Aguilar offered his last testimony to the Assembly as head of SETRAVI, on October 1997, his tone had changed dramatically. He was no longer talking about tightening regulation but of justifying noncompliance. As he explained, the pending seven concessions “would begin operations in the coming months, contingent on bus manufacturers and assemblers having available vehicles, and on concessionaires obtaining the necessary credit” (ALDF 1997b, 48). However, Espinosa himself explained that collective taxi operators could not obtain loans to finance bus purchases, “because they did not pay their prior loans taken to buy their minibuses” (Ibid., 65). The system was locked in: Financing was not available, and rules did not matter for much. The private companies that had been originally approached by the government to take on the concessions pulled out, one by one.²⁹⁴ Several failed to even submit a proposal, forcing SETRAVI authorities to award the concessions to technically and financially weaker companies than required by the plan, if only to save face. In fact one of the “winners” only committed to operating a limited number of routes, with only 14 buses. Part of the reason had clearly to do with the financial crisis, which on the one hand prevented the government from offering subsidies and revenue guarantees, and on the other kept private investors from securing

²⁹³ See ALDF, 1997b, 46.

²⁹⁴ (Hernández, Javier. Personal interview. March 4, 2011). Two of the companies that pulled out were UTEP -a large company of school and industrial worker transportation services- and MASA, the microbus assembler.

attractive financing to purchase the required vehicles. However, this was not the only nor the most important factor. By the time the protracted conflict with the SUTAU-100 was finally settled, the city was overrun with combis and minibuses.

And relatedly, the possibility of regime change now loomed too close for a profound transformation to occur. The Mexican Congress approved in August 1996 the constitutional amendment that concluded the democratic reform of the Federal District. Whatever happened, a mayor would be democratically elected in July 1997. With only eleven months to go before what promised to be a contested election, who would want to pick a fight with the collective taxi organizations, attempting to forcefully evict hundreds of members from the most profitable corridors in the city? And what investor would be willing to enter the market when a new administration might change the terms or even void a recently awarded concession?

Part II. State Capacity: Carving a niche for transport planning

A democratically-elected mayor and the new constraints to public transport planning in Mexico City

Cuauhtémoc Cárdenas achieved a landslide victory on the July 6, 1997 local election. Not only did he obtain double the number of votes of his closest competitor, but his party, the Partido de la Revolución Democrática (PRD), won 38 out of 40 seats in the local Assembly. The Cárdenas' campaign platform, "A city for all", promised an antithesis to the neoliberal programme and authoritarian style of regents governing under presidents de la Madrid, Salinas and Zedillo. Cárdenas denounced the "drastic reductions in social expenditures, that systematically and deliberately provoked the dismantling of fundamental public services in the areas of health, education and public transit",²⁹⁵ and advocated, a "bottom up" approach to decision making, seeking "to turn verticalism on its head to base decisions on the decision of the people."²⁹⁶ To head SETRAVI, Cárdenas appointed Jorge Martínez y Almaraz, an academic who pledged to "establish a *new* way of working that placed the common good over private interests."²⁹⁷ In the opinion of many *cardenistas*, recent government efforts to replace AUP-R100 with private companies had been mostly intended to benefit regime cronies. A SETRAVI official serving under both administrations recalls the shift taking place within the ministry, "When Cárdenas came in their basic directive was, 'we'll do things differently'."²⁹⁸ Within months of taking office, Martínez Almaraz reaffirmed the new administration's policy of "frozen" fares, committed to relaunch the AUP-R100, and revoked seven of the ten area-based concessions awarded by his predecessor. These companies had not supplied the promised new buses, and were asking for financial support the government was not willing to give. In his testimony to the Assembly, Martínez y Almaraz summarized the new administration's approach to dealing with the collective taxis: "We cannot accept generalizations that label microbus operators as criminals, assassins and bandits... what we need to do is organize them, support them, make credit available to them."²⁹⁹

295 (Cardenas Solorzano 1998)

296 This quote is by Enrique González Pedrero.

297 (ALDF 1998 p. 8)

298 (Villegas, Alejandro. Personal interview. March 2, 2011)

299 (ALDF 1998 p. 30)

Such turn of the tide was not by itself noteworthy. Over the past decades, subsequent government administrations had shifted back and forth in their stance toward private transport operators, from forcing to fostering styles and vice-versa. In many ways, the new minister's rhetoric appeared to signal little more than a return to the policies prevalent under the CGT and Camacho Solís. However, the challenge confronting the Cárdenas administration was different. In contrast to his predecessors, Cárdenas could not count on unrestricted financial support from the Federal Government for subsidies and capital investments (in fact, the PRI dominated Federal Congress blocked Cárdenas' attempts to finance public investments with long term debt),³⁰⁰ nor rely on instruments of power long available to former regents through the president and through the PRI. Without these levers of support to empower and discipline collective taxi organization leaders, the simultaneous commitment to low fares and to non-conflictual regulation of collective taxis proved to be a devastating combination. On the one hand, financial limitations forced the new mayor to significantly scale down his plans to revive AUP-R100 and to expand subway services, and on the other, the threat of unfair competition and low profits kept potential private investors away from the sector. In fact, Mexico City authorities had to declare deserted a competitive bidding process announced by Minister Martínez Almaraz in 1998 to award three of the seven revoked bus concessions. A later effort in 1999 had the same result.³⁰¹ No company expressed interest.

And while the new government tried to define its own vision for the sector, collective taxi organizations suffered from their own vicious cycle. The low fares established by Cárdenas soon resulted in "past due payments of microbus loans, insufficient mechanical maintenance and scarce vehicle fleet renovation".³⁰² Unsurprisingly, vehicle-owners reacted by demanding fare increases, and when this proved to be a non starter with authorities, they invaded more profitable routes, stopped honoring government-mandated discounted fares for students³⁰³ and demanded further relaxation to regulation. Discussions between collective taxi organizations and officials at SETRAVI, or between rival organizations grew more confrontational, and both street blockades and bus operator protests became frequent. In response, the SETRAVI ramped up its body of

300 Cárdenas sought authorization to contract debt for \$7,500 million pesos (US \$760 million dollars) during his tenure as city mayor. The Federal Congress only authorized \$1,700 (US \$172 million dollars).

301 (ALDF 1999 p. 10)

302 (Leon Salazar 2011 p. 168)

303 Collective taxi operators had agreed to offer a 20% discount on fares charged to students as part of the negotiations that led to the March 1995 fare increase authorized by Espinosa.

inspectors -241 motorcyclists known as the “Dantes”- and empowered them to make on site revisions to public transport vehicles and to impose fines. Tension certainly escalated. Many buses displayed a large sign, explaining to users that “it is impossible to provide first class service with third class fares.”

Figure 2.15 “For our users: First rate service, with third rate fares”



Further, collective taxi organizations no longer operated on the fringes of legality and thus could resist regulatory efforts through legal means, and not only through back room deals brokered by cúpula organization leaders. For example, Ruta 1 and Ruta 2 -two collective taxi organizations that abandoned the CAT and represented the owners of 6,000 minibuses in the city- obtained in 1998 an injunction to exempt their vehicles from SETRAVI’s vehicle inspections,

rendering the Ministry practically powerless to enforce standards.³⁰⁴ Soon, the Cárdenas administration had to choose fares over rules, jettisoning its ability to address second-order objectives of public transport policy, in order to maintain mobility affordable. Martínez Almaraz described well the duality of the resulting system: “The Metro with adequate planning, under a centralized administration, vis a vis an unplanned transport mode with anarchic growth, inadequate vehicles and pulverized administration, and relaxed regulatory framework.”³⁰⁵

The problems associated with loosely-regulated and atomized bus service provision were so large, and the resources and power available to the government to do much about them so limited, that it was no longer practicable to approach transport planning through city-wide, broad-ranging reforms. As Alejandro Villegas put it, “between the exit of Espinosa and the entry of Cárdenas the city-wide vision was lost. The Metro Master plan was forgotten, and nothing was

304 (ALDF 1999 p. 8)

305 (ALDF 1998 p. 8)

really left to take its place. Cárdenas comes in with substantial democratic legitimacy, but does not invest this resource in transportation reform. They concentrated only in little small parts.”³⁰⁶ When analyzed at a distance, it becomes clear that Mexico City authorities for decades bridged the recurring problem of insufficient state capacity by institutionalizing negotiating “tables” that allowed them to balance fiscal, regulatory and political objectives city-wide. Given a fragmented industry structure, where thousands of individuals own vehicles and hold concessions, these tables centralized decisions and made them enforceable. Only when the relevant private actors chose not to participate at these tables, and/or when the government had little to give as compensation, did the alternative of conflict and full system reinvention gained traction, as exemplified by the forceful decisions to municipalize the Alianza de Camioneros in 1981, and to dissolve the AUP-R100 in 1995. Now, a democratically elected mayor faced something much worse than a renewed “pulpo camionero.” In addition to the long prevalent atomized industry structure, the government lacked a strong counterpart able to take agreements from the negotiating table down to the operators working the streets. The result was anarchy.

Cúpula leaders still existed, but their ability to enforce agreements had been largely eroded by a new political and economic context that limited their usefulness both to authorities and to organization members, with the result that the sector was fragmented in roughly a hundred separate ruta organizations increasingly seeking to negotiate on their own, and willing to publicly challenge authorities. As Nicolás Gómez, current leader of cúpula organization BARTSCE, explained, “the system broke down in 1997, when the city government was no longer from the PRI. Before 97 the transport power group -to call it some way- was modeled around a PRI-framework, vertical and pyramidal. There was a line and everyone followed. When the PRD arrived, this system broke to pieces, and we began to see these pieces everywhere.”³⁰⁷ But what were the options for the government, except trying to piece this system back together? The failed attempts to competitively tender area-based contracts clearly demonstrated that there was no market appetite to compete with the collective taxis, to say nothing about the ideological hesitations within the PRD about employing this option again in the future. And even if Cárdenas and his democratically elected successors preferred instead to challenge private operators by municipalizing services and relaunching the AUP-R100, how could they legitimately evict such a large interest group and still claim to be any different from the regents governing under the PRI?

306 (Villegas, Alejandro. Personal interview. March 2, 2011)

307 (Gómez, Nicolás. Personal Interview. March 7, 2011)

And even if this was feasible, how would they possibly deliver the level of service required with low fares and without the almost unlimited public funds that had been available to Hank? Consider this: Cárdenas launched a microbus-to-bus substitution initiative, modeled around the CGT program implemented under Camacho. This program offered microbus owners a Mx \$100,000 subsidy (roughly US \$12,400) to be used as down payment for a new bus, for every microbus taken off the streets. However, the financial limitations were such, that by the end of his tenure the program had only introduced 100 new buses to the network.³⁰⁸ At that rate, it would take several decades to improve the city's microbus fleet.

Faced with these limitations, Cárdenas replaced Martínez y Almaraz with Joel Ortega, who had previously worked at the CGT under Camacho. His task was to reestablish the lines of communication between city authorities and collective taxi organizations, i.e. to bring them back to the table. As he put it, "the transport sector is a nodal point of interests in conflict, and for some time it has been accused of vice and absence of authority. For this reason my challenge will be propitiating operative frameworks that strengthen the margins of governability in the sector."³⁰⁹ By late 1999, the "operative frameworks" that Ortega had in mind became clear. SETRAVI modified the comprehensive transport plan designed under Espinosa,³¹⁰ with the most noticeable update being the identification of "33 corridors of strategic character."³¹¹ Mexico City authorities incorporated these corridors as part of a strategic decision to award route-based, rather than area-based contracts. Public transport services on these corridors would be in theory reserved for "medium capacity" vehicles -filling the modal void left after the demise of AUP-R100, and serving as a bridge between the "high capacity" subway and the "low capacity" microbuses. Since the formal private sector was clearly not interested in the area-based "route packages," the only likely private partner that remained to operate these corridors were the collective taxi organizations that *already* provided services on them. While formally tendered competitively, it was clear that only the existing organizations would participate. In fact, it was the government's challenge to *entice* them to participate willingly. Bringing them back to the

308 (ALDF 1999).

309 "El transporte concesionado, centro de intereses en conflicto," *La Jornada*, 27 February, 1999

310 This was the *Programa Integral de Transporte y Vialidad 1995-2000*

311 SETRAVI's planners identified and detailed these 33 corridors previous to the AUP-R100 bankruptcy. They were part of an "emergency plan" designed to maintain critical services in the event of a contingency such as a SUTAUR-100 strike (Villegas, Alejandro. Personal interview. March 2, 2011).

table and fostering agreements to improve their vehicle fleets and rationalize their supply of services implied crafting “modernization” projects amenable to their financial capacity and capable of eliciting broad agreement among organization members. To this aim, SETRAVI planned to concentrate available resources -vehicle-substitution subsidies, infrastructure investment, etc-, as well as to consider authorizing limited fare increases, for the “special” services running on these corridors. To participate, collective taxi organizations would need to complete their transition into more professional, more accountable and more credit worthy transportation companies. In this manner, a corridor-by-corridor negotiating table was created.

This plan could only be implemented gradually. On the one hand, the government had no money to promote the 33 corridors at the same time, and on the other not every collective taxi organization was inclined to participate. SETRAVI would select its partners, and maintain its policy of arms length regulation for the rest of the system. In fact, as part of the effort to defuse tension and facilitate negotiations in the corridors, Ortega reorganized the “Dantes” and promoted changes to the 1995 Transport Law to “limit the discretion of authority” and to address the “excesses on the part of the team inspecting transport services.”³¹² These 33 corridors would soon become the focal point of government efforts to marginally improve bus services, always seeking the participation of the incumbent organizations holding a territorial claim over them. By the end of the Cárdenas administration, a new public transit agency was established to operate the few modules and buses that remained under the control of the AUP-R100. This firm, called Red de Transportes de Pasajeros del DF (RTP), was however restricted to offering services to low income populations and peripheral areas. This framing demonstrated that the government was committed to working with, and not against collective taxi organizations. And, to be sure, negotiations were taking place between SETRAVI and the collective taxi organizations that operated 7 of the 33 strategic corridors, labeled by Ortega as “pilot.”³¹³

Reforms to the surface transport network could now follow an expansion pattern similar to the subway, except using “strategic corridors” rather than “lines” for nomenclature. The 33 corridors represented something akin to a master plan, providing authorities with a long term road map. Since implementing everything at the same time was politically and economically unfeasible, authorities could now break down this plan into manageable stages, choosing which

312 (ALDF 1999 p. 8)

313 Insurgentes, the south arc of the Anillo Periférico, Reforma, the north arc of Circuito Interior, the Ejes Viales 5 and 6 Sur (as a paired corridor), Eje Central Lázaro Cárdenas and Eje 8 South.

stage to do next depending on the political and economic conditions prevalent. To be sure, details of what exactly would happen at each “strategic corridor” were not fully thought out, other than the fact that each project implied a substitution of individually-owned minibuses for corporately-owned buses. In fact, negotiations to corporatize organizations, and to optimize service supply in any of the corridors under the Cárdenas administration achieved little beyond introducing the 100 new buses previously mentioned. “Route invasions were very frequent,” explained the operations manager of Ruta 110, “once it happened, we needed to get a group and kick invaders out immediately. If they stayed there one or two days, SETRAVI would likely split the difference and negotiate a little bit for both.”³¹⁴ Magdaleno Barragán, the leader of Ruta 88, described the role of authorities during this period in a similar way, “they acted like firemen, except each time they put out a fire in one side of the city they started a new one elsewhere.”³¹⁵ With competitors permanently threatening to enter “their” corridor, it made little sense for collective taxi organizations to heed to the government’s wishes. A few firms were in fact created, but operated mostly in paper. The incentives offered to corporatize were not that attractive, and the financial capacity of individual collective taxi operators to purchase new vehicles was very limited. By the turn of the century the public transport system in Mexico City had the following structure:

106 collective taxi organizations (known as “rutas”), formed by vehicle-owners holding individual concessions, operating 1440 bus routes (named “ramales”) with 22,850 minibuses, 2,271 buses and 3,094 vans.

9 private firms operating 1,197 buses (including the 3 firms created by the SUTAU-100).

Three publicly owned companies: STE-Metro, STE with 489 trolleybuses, and RTP with 1,400 buses.³¹⁶

How could Mexico City authorities entice the collective taxi organizations to become firms, to rationalize their supply of services, and to replace their minibuses for cleaner buses? Fortunately for the democratically elected mayors of Mexico City, a new transformative

314 (López, Enrique. Personal interview. March 8, 2011)

315 (Barragán, Magdaleno. Personal interview. March 14, 2011)

316 (Transconsult 2003)

transportation innovation that not only promised subway levels of service using relatively cheaper buses, but that implied a new, more bankable business model, became known and available. Propitiously, this technology had been developed in cities with a public transport industry structure similar to Mexico City, and had been implemented through collaborative partnerships linking state authorities and private operators.

Bus Rapid Transit: A trojan horse for industry transition

In September 2002, Claudia Sheinbaum, the Minister of Environmental Affairs of Mexico City (SMA), secured seed funding from the World Bank, the Shell Foundation and the Hewlett Foundation to explore “the introduction of climate friendly measures in transport.”³¹⁷ The relationship linking the World Bank and SMA authorities originated in the mid nineties, as part of a joint effort to measure green house emissions in Mexico city. During this early period, Claudia Sheinbaum participated as an external consultant, and had established contacts with both the Hewlett Foundation and with officials at the World Bank’s Global Environmental Facility (GEF). This research had naturally identified transportation, and particularly the business structure of private microbus services, as a key area of environmental concern. Throughout the Cárdenas administration, Mexico City authorities maintained a dialogue with officials from both the Hewlett Foundation and the GEF about what type of policies to implement, and SETRAVI’s “strategic corridors” gradually emerged as a candidate for financing.³¹⁸ This alternative only strengthened after 2000 when a new mayor, Andrés Manuel López Obrador (PRD), appointed Claudia Sheinbaum to head the SMA, and when GEF authorities became keenly interested in replicating the resounding success of Bogotá’s Transmilenio system.

Bogotá had launched its bus rapid transit system in December 2000, and soon became an international benchmark for developing world cities. The first phase of Transmilenio replaced a large number of minibuses for high-capacity, cleaner articulated buses running on the previously congested Avenida Caracas. BRT operations have many similarities with a subway system, and can be implemented for a fraction of the cost. Passengers pay to enter enclosed stations, where multiple-door, high-frequency vehicles pick them up. The stations are often located on street medians, and vehicles enjoy exclusive right of way in at least one full lane each

317 (World Bank 2009)

318 Relatedly, the latest revision to the comprehensive transport plan of Mexico City (PITV 2000-2006) mentioned the implementation of 5 “strategic corridors” between 2002 and 2006.

way. As a result bus speeds improve tremendously, giving public transit an advantage over cars and significantly expanding public transit capacity, while simultaneously reducing air pollution, bus congestion and accident rates. But perhaps more interestingly, a feature of the Colombian system was that the contracting rules had been designed to ensure that former microbus permit holders owned at least part of the stock of the companies that owned and operated Transmilenio's new buses. Fares collected at the stations concentrated into a common pool, producing a predictable revenue stream that made the system, and thus these new private companies, highly bankable. With this structure, the system itself could underwrite the loans required by private operators to purchase the new vehicles. Since fare revenues were only later distributed among private operators, regulators gained leverage, particularly when compared to the previous system where fares were collected directly by drivers. With control over the flow of payments, the government could structure rules that rewarded desired features of operator performance, and even reserve part of the revenues to pay for the state's planning and regulatory functions. In other words, the implementation of a Transmilenio-like project not only promised a technological transformation, but also a savvy strategy to modify the structure of the industry and to expand state capacity: It simultaneously made bus-based public transit more attractive for private investment, strengthened the government's role as planner and regulator of public transit, *and* enticed incumbent bus operators to consolidate their organizations as firms.

The Hewlett Foundation had produced a "business case" for implementing BRT in Mexico City.³¹⁹ To pursue this idea further, the World Bank contributed a grant of US \$5.8 million from the (GEF) and of US \$1.31 million from the Japan Policy and Human Resources Development (PHRD) Fund. The Shell and the Hewlett Foundations contributed each US \$1 million through the World Resources Institute (WRI), which led to the creation of Mexico City's Centro de Transporte Sustentable (CTS), an NGO charged with providing technical support.³²⁰ Several other donations and grants were collected throughout this planning process, adding up to US \$11.86 million dollars of non-governmental seed money.³²¹ Part of this money was explicitly

319 (Villegas, Alejandro. Personal interview. March 2, 2011)

320 The creation of the CTS was partly due to the fact that the Hewlett Foundation's rules did not allow directly funding governments, so this NGO was created as a special purpose vehicle (Villegas, Alejandro. Personal interview. March 2, 2011)

321 Metrobús (2005). Powerpoint presentation at the "Calidad del Aire en el Distrito Federal y Cambio Climático" Forum. Mexico City.

earmarked for the development of a viable model for the participation of collective taxi operators in strategic corridor projects, including mechanisms to help them finance the acquisition of clean fuel vehicles. For the World Bank this was a worthwhile exploratory investment, and its officials proudly referred to the initiative as “the first transport and climate operation under GEF financing worldwide.”³²² For Mexico City authorities, it provided a way to transform SETRAVI’s “strategic corridor” concept into a tangible (and attractive) reform package that could be brought to the table when negotiating with collective taxi organizations. Nonetheless, Mayor Andrés Manuel López Obrador was skeptical of BRT’s political feasibility and did not initially consider it a priority. In fact, his closer team of advisors had already decided that the key transportation investments in this period would be the purchase of new trains for the subway and the construction of an elevated highway over the Anillo Periférico, leaving a severely restricted financial margin available for other projects.³²³ In fact, both of these capital intensive projects were approved before BRT was even a possibility. Still, the World Bank grant implied that this project would not require any upfront investment from the city government, and perhaps for this reason, López Obrador agreed to form an exploratory committee chaired by Claudia Sheinbaum. Other committee members were the directors of STE and RTP -Florencia Serranía and Luz Elena González- as well as the head of SETRAVI, Francisco Garduño, later replaced by Luis Ruiz.³²⁴ During most of 2003, and before engaging incumbent operators with the idea, the committee studied legal and institutional options for the new service scheme, prepared a financial model and business case, and evaluated several corridors that could support a pilot.

The committee recommended the creation of a new public agency, named *Metrobús*, charged with planning and regulating privately-operated bus services on BRT corridors. SETRAVI would still grant these private operators with the necessary concessions, but Metrobús would have administrative autonomy and be responsible for day-to-day governance of the system. Drawing heavily from the Transmilenio model, private bus operators would not have

322 (World Bank 2009 p. 11)

323 The cost of the elevated highway of the Periférico was never publicly disclosed, but specialists estimate it came close to US \$683.6 million dollars (Mx \$7,000 million pesos, using 2003 exchange rates). For details, see (Marquez Lopez and Pradilla Cobos 2007)

324 The fact that it was the SMA and not SETRAVI heading this project had tremendous implications. This mechanism, while not deliberately designed, freed this project from longstanding commitments developed over time between middle level SETRAVI officials and transport operators.

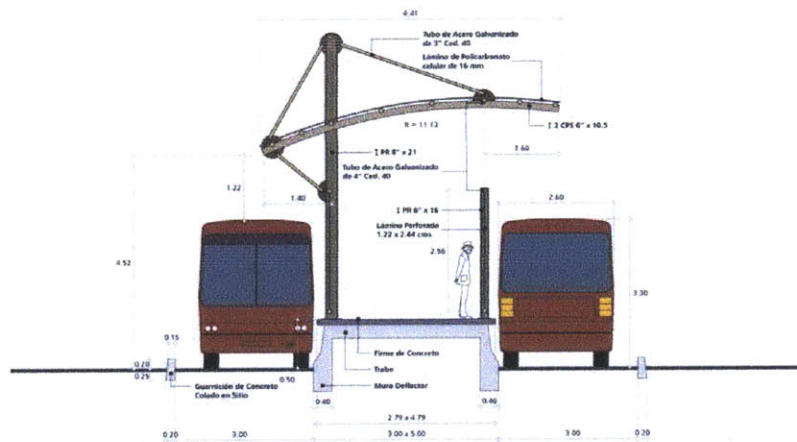
control over the fare-box, and would be paid a fixed amount per serviced vehicle-kilometer (vkm). Fares would be collected by a third private party and deposited into a trust fund, which would distribute revenues according to a fixed pecking order: (1) trust manager, (2) fare collection services, (3) bus loan payments, (4) station maintenance and services, (5) payments to operator companies serving the BRT corridor, (6) the regulatory agency (Metrobús), (7) feeder bus routes and (8) contingency and reserve funds. The city government would pay for stations and pavement, while private operators would pay for the fare collection technology and the buses. According to Arturo Herrera, finance minister under López Obrador, “the project was never conceived to have a subsidy scheme similar to the subway.”³²⁵ The expectation was that the operations of the system would be financially self-sustaining.

The consultants hired by the exploratory committee - many of which had direct experience instrumenting Transmilenio- insisted BRT operators should be selected through a competitive tendering process, preferably international.³²⁶ They pointed to the difficulties implicit on

getting individual vehicle-owners to agree on their transition to a BRT operator firm, and suggested that the introduction of competitive pressure could serve as a catalyzing force.

However, Claudia Sheinbaum disagreed. As she explained, a competitive tendering process “was

Figure 2.16 Conceptual design of a Metrobús corridor



Source: (CTS-Ceiba 2004)

325 (Herrera, Arturo. Personal Interview. January 18, 2010)

326 (Transconsult 2003 p. 130)

never a possibility, because it implied significant social, legal, and political problems.”³²⁷ This position was likely influenced by the ideological predisposition of the PRD, and by the failed tendering processes attempted by SETRAVI in prior years. Further, attempts to implement BRT systems in other Mexican cities *without* guaranteeing the participation of operators directly affected had recently failed. The most notable example was in the city of Puebla, where BRT infrastructure (stations and a transfer station) was built and inaugurated by the local government in 1999, only to be abandoned soon after amidst bus operator protests. In contrast, the city of León, Guanajuato beat Mexico City to the punch, launching in September 2003 the BRT system in the country, managed by private companies created by the incumbent associations of bus operators.³²⁸ Adriana Lobo, a key player then working as a consultant for the project, later justified this position: “Government officials knew that if they attempted a tendering process, we would probably end up with nothing.”³²⁹

To be sure, a competitive tender would have been problematic for social reasons. Since the demise of AUPR-100, minibuses provided ubiquitous services, at reasonable prices with no public subsidy, while providing livelihood for thousands.³³⁰ How could a government of the political left justify a system that would tend to concentrate rather than redistribute wealth? How would it deal with the thousands of people likely to be affected, particularly after tolerating them for so long? A legal problem also existed. Most individual incumbent operators have concession titles, and their organizations hold government authorizations to operate their current routes. A competitive tender implied (a) voiding the current permits and authorizations, (b) creating a new legal framework for issuing new concessions, (c) conducting the actual tendering process and (d)

327 (Sheinbaum, Claudia. Personal Interview. 11 March, 2011)

328 Curiously, both the Puebla and the León efforts had their own seeds on a World Bank grant. These cities participated in the *Programa de Transporte Urbano para Ciudades Medias* organized by the Mexican Federal Government and financed with World Bank funds. As part of this project, officials from 10 mid sized cities traveled in 1993 to several south american cities, including Curitiba.

329 (Lobo, Adriana. Personal Interview. 27 January, 2011)

330 This does not mean that service quality was good, or that operators were popular. Martín Mejía, the SETRAVI officer in charge of negotiating with bus operators put it quite clearly: “Citizens in general applaud attempts to eradicate the minibus. There are polls showing that the most feared people in Mexico City are policemen, politicians and minibus operators” (Personal interview. 17 March, 2011).

defending the winner. This simply provided too many moments when the project could become engulfed in protracted legal battles, especially if conducted in an adversarial fashion against incumbent operators with both formal and informal property rights over their current routes.³³¹

Finally, a forceful strategy posed a political problem. With democratization, bus operator organizations in Mexico City had indeed grown more independent and powerful relative to local authorities. Their support, important for electioneering, led to political alliances hard to reconcile with “forceful” reforms. Indeed, PRD administrations had long realized the need to rebuild the city alliances with the collective taxi organizations, and SETRAVI was actively working toward that objective. And even beyond electoral calculation, city governance was at stake. As a public official who later served as director of the BRT system put it: “If at any time, we chose a non-negotiated, non-concerted intervention, the city would be immediately paralyzed. Bus operators form quite a powerful guild, able to inflict severe economic and political damage to the city.”³³²

According to several experts advising on the project, these social, legal and political constraints “forced a trade-off between political expediency/feasibility and economic efficiency of the new system.”³³³ Indeed, the implementation strategy of the government was designed explicitly to minimize conflict with incumbent operators. This was not a gracious concession to private operators, but the savvy realization that their participation was an indispensable element to guarantee the project remained feasible, particularly considering recent experiences in the city.³³⁴ Their buy-in was considered so important for success, that authorities continuously adjusted the technical specifications and the financial models of the project so that participation

331 A transport operator recalled discussing his options with Mexico City officials later negotiating BRT implementation in this manner: “Look, if you want to displace us you will face an *amparo* (legal injunction), and after that *amparo* you will face a second *amparo*, and we will go all the way legally. What’s going to happen? The trade will put the break on your project for three years, exactly the time your boss the mayor has left to show off how great he is.”

332 (Calderón, Guillermo. Personal interview. March 3, 2011)

333 (Kete et al. 2005)

334 This was stated explicitly in the legal notice that later established Mexico City’s BRT system: “To make the operation of the transport corridors *feasible*, the overseeing authority may consider the participation of the concessionaires operating on the road declared as a transport corridor, as long as these concessionaires adapt to the new norms of operation to deliver service” (SETRAVI 2004 p. 33, emphasis added).

in the BRT would not entail financial loss for individual operators. Without a doubt, “the most complex element of this project was figuring out a way to get operators to participate.”³³⁵

Crafting an offer private operators couldn't refuse

The team planning the BRT settled on making the following proposal to collective taxi organizations: To participate, incumbent operators in the selected corridor would have to agree to the cancellation of their individual concession titles and route authorizations. With counseling from government advisors, these individual operators would join to create a new firm, with stock distributed according to the number of buses owned. The new firm would acquire a loan (negotiated by authorities with the banks) to purchase new buses suited for BRT operations (negotiated by authorities with the manufacturer). This loan would be underwritten with future system revenues, but private operators would still be required to put down 20% of the total cost of the vehicles as down payment. The government would grant the new firm a single concession title to operate BRT services in that corridor, without subjecting it to any competitive pressure. In other words, the chosen transition mechanism was a guaranteed swap: Incumbents would trade their existing individual concessions for a single new concession awarded to a company owned by themselves. The underlying logic was that anyone with an individual bus concession in the corridor had the *right* to be part of the emerging BRT system. For unconvinced operators, SETRAVI would offer relocation to a similar route elsewhere in the city, and/or other types of compensation, such as taxi medallions.

To help operators finance their organizational transition, Mexico City authorities would concentrate resources from the minibus-to-bus substitution program into the selected corridors. Individual operators would submit their minibuses for scrapping -an indispensable element to meet the SMA's environmental goals- and obtain the Mx \$100,000 subsidy (by then worth US \$9,100). However, rather than distributing this money to individuals, Mexico City authorities would pool the subsidies and make a payment to the bus manufacturers on behalf of the new BRT company. Each stockholder would then have to contribute its share of the difference

335 (Herrera, Arturo. Personal Interview. January 18, 2010)

between this payment and the required 20% down payment for the buses. The debt on the remaining 80% would be guaranteed by, and paid with, future fare revenues. To further reduce the investment required from collective taxi organizations making the transition, the Mexico City government would offer exclusive use of the appropriate number of AUP-R100 modules, for use as BRT vehicle depots and maintenance facilities.³³⁶ The rest of the infrastructure of the system - such as stations and heavy duty pavement required in the corridors- would be built, owned and maintained by the government.

And perhaps more important to seal the deal, the new bus operator firms would be paid a price per kilometer sufficient to cover not only the company's operating costs, but also a monthly stipend to each of the partners, equaling their previous earnings as microbus operators in that particular corridor. According to Luis Ruiz, who represented SETRAVI throughout this process and would later serve as minister: "We were not displacing them, not taking advantage of them. Our quest was to find a healthy equilibrium, that allowed them to operate in good terms. We always strived to ensure, as an equilibrium point, that their individual revenues matched their current revenues... that was our commitment, and thus the data, the financial runs, and everything was structured around it."³³⁷ In practice, this meant that all stockholders would receive a payment akin to a salary, informally treated as a fixed cost, and independent of any profits achieved by the firm through efficiencies. Claudia Sheinbaum stated the government's negotiating logic succinctly: "You can't offer a business opportunity to anyone by saying 'you'll earn less'. What would they reply? 'No thanks!'"³³⁸

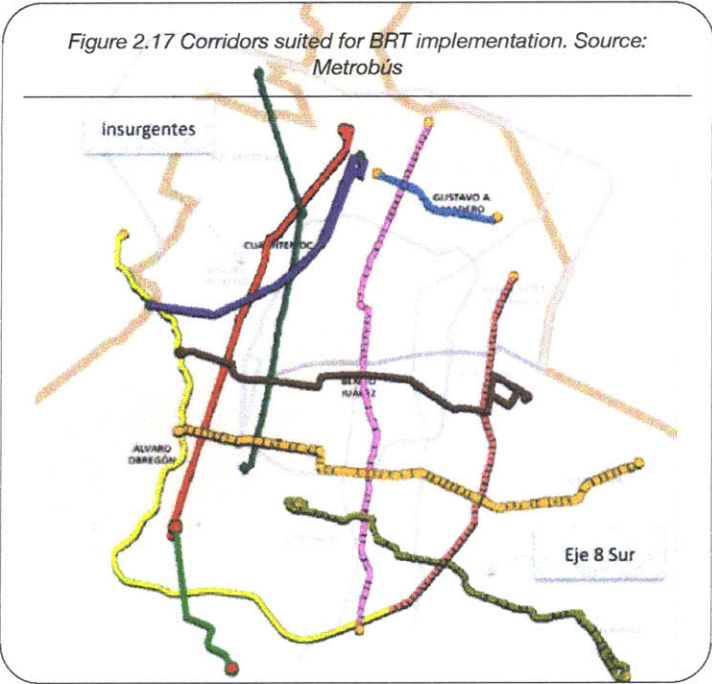
Mayor López Obrador realized this framework made implementation politically and financially feasible. To move forward, he instructed Mexico City authorities to devise an incremental implementation strategy, with only one corridor immediately pursued. This was,

336 These modules would remain government property, administered by BRT operators under bailment (through a figure called "*Permiso de Administración Temporal Revocable*."

337 (Ruiz, Luis. Personal Interview. 1 March, 2011)

338 (Sheinbaum, Claudia. Personal Interview. 11 March, 2011)

after all, more a test than a city-wide policy. SMA and SETRAVI worked together analyzing the list of 33 strategic corridors, reducing it to only 10 that met the passenger demand conditions and



physical characteristics required to sustain BRT operations (figure 2.17).³³⁹ But where should Metrobús begin?

Avenida de los Insurgentes: The right corridor with the right private partners

The technical studies narrowed on two options for the pilot BRT corridor: (a) Eje 8 Sur, running east from Tlalpan towards the southeastern fringe of the city, and (b) Avenida de los Insurgentes, the main north-south

axis in Mexico City. Eje 8 Sur promised much higher passenger demand (and thus higher revenue generating potential) than Insurgentes (576,586 vs 250,900 daily passengers), and reached a lower income area grossly underserved by the subway system. However the numbers for Insurgentes were not bad. In fact, the Metro Master Plan still contemplated a subway line for this corridor, probably unfeasible given the prohibitive cost of the land takings required. Furthermore, the López Obrador administration was facing intense criticism for the construction of the “second floor” over the city’s main ring road (Periférico), located only a few blocks away from Insurgentes, particularly from environmental and neighborhood advocacy groups. Critics pointed out that the supposedly left-leaning PRD administration was paradoxically prioritizing a highway investment that benefited higher income commuters and make citizens more auto-dependent, while not expanding the subway and allowing the microbus system to operate in apparent anarchy. Making a conspicuous public transport investment served the political purpose

339 The source of this map is (Metrobus 2006)

of countering this claim -even if the BRT would cost many times less than the highway. If he built in Insurgentes, this investment would be most visible, particularly to his mostly middle-class critics.

Whatever his political calculation, two practical reasons helped sway the mayor towards choosing Insurgentes. The first was that the deal that authorities could put on the table to entice the participation of individual operators was less attractive financially on Eje 8 Sur than on Insurgentes. The reason was simply that many more microbuses operated on Eje 8 Sur than on Insurgentes (2,500 vs 352). If the government wanted to avoid operational subsidies, the available revenue “pie” would have to feed many more mouths. Further, the land uses prevalent in Insurgentes suggested that passenger demand was distributed in many short-distance trips throughout the day, rather than overly “lumped” at peak hours. This implied that a smaller fleet of buses could offer the same standards of service on this corridor compared to Eje 8 Sur. Such propitious conditions led members of the planning team to refer to Insurgentes as the golden eggs-goose: It enabled negotiators to offer a deal sweet enough to practically buy the operator’s collaboration. The second reason for prioritizing Insurgentes was that negotiations for Eje 8 promised to be much more complex. Eight feuding ruta organizations operated bus services on this corridor, *including* one of the companies created by former SUTAU-100 workers (Autotransportes Urbanos Siglo Nuevo). The implication, as explained by the leader of one of these organizations, was that “the government had to get eight different leaders in line, and then each of them would have get their people in line. Obviously (government authorities) concluded it couldn’t work, with so many parts to stumble upon”³⁴⁰ In contrast, Insurgentes was served by two organizations only. Conveniently, one was the publicly owned RTP, meaning only one private group of operators needed to be convinced to move forward. In the end, López Obrador made the decision to prioritize Insurgentes because it enabled his government to put more propitious conditions at the table: It promised higher revenues for vehicle-owners, required less vehicle-substitution subsidies and avoided (or rather, minimized) complicated negotiations with

340 (Gómez, Nicolás. Personal Interview. March 7, 2011)

organization leaders. With this decision, he instructed SETRAVI to reach out to the potentially affected private operators with the idea.³⁴¹

Ruta 2 had done well since splintering from the CAT. It had expanded its reach beyond Reforma, and established a significant number of routes throughout the city. The organization had approximately 2,300 members and 3,000 minibuses. It was so big, that indeed it functioned like a *cúpula* organization. Each minor route (*ramal*) had a *delegado*, and each route had an executive committee with a president. Then, overseeing all these minor routes was another executive committee, led by Heriberto Flores, “El Pollo.” The most profitable minibus route controlled by Ruta 2 -indeed, the most profitable route in the city- was undoubtedly Insurgentes: In this corridor, 262 minibuses generated roughly 30% of Ruta 2’s total revenues.³⁴² For this reason, when Mexico City authorities first reached out in 2003 to the leader of Ruta 2 about the BRT project, his reaction was of skepticism and caution. He was accustomed to government proposals turning bad, as he had personally experienced the financial bust that followed Camacho’s call to purchase minibuses. As instructed by authorities, “El Pollo” had then promoted the purchase of new vehicles -and in fact had made a personal business out of it- only to find that authorities did not increase fares for several years, leading to a quick deterioration of the fleet and to a mountain of overdue payments from members. SETRAVI had also promised that the government would retire RTP buses running on Insurgentes, and had not honored this. This had resulted in significant opposition to his leadership within Ruta 2, and particularly among the operators running minibuses in Insurgentes, and therefore, while not completely against the BRT proposal, El Pollo was non-committal and tried to keep information from reaching potentially affected members.

As rumors of the BRT grew, however, a dissident group engaged the government directly, and demanded to be included in the negotiations. For several months, the planning team brought in international consultants -like Ignacio de Guzmán, Edgar Enrique Sandoval and Paulo Custodio, who had participated in the implementation of Transmilenio- to detail elements of the BRT plan, assuage fears of displacement, and convince individual vehicle-owners to push for the project. The deal on the table was sufficiently attractive to sway most into supporting the BRT, but discussions within the Ruta escalated, not about whether to participate, but over the details of

341 (Villegas, Alejandro. Personal interview. March 2, 2011)

342 (Moreno, Arturo. Personal interview. March 3, 2011)

the transition. How much would they personally need to invest, and who exactly would be stockholders of the new company? The Ruta 2, or the *branch* of Ruta 2 that operated on Insurgentes? Who would “lead” this firm, “El Pollo” or someone else? According to Jesús Padilla, who led the dissident group, “we spent 90% of the time fighting among ourselves, trying to protect our interests from the president of the ruta that controlled our service in Insurgentes. We fought against his group, we fought among ourselves, it was practically everyone fighting against everyone.”³⁴³ For authorities, it was not initially clear which group was a better partner. On the one hand, keeping Ruta 2 as an organization on board implied that they could more easily expand the “strategic corridor” idea to other areas, like Reforma. On the other, dissidence among the operators serving Insurgentes threatened to escalate, putting the pilot project at risk. Furthermore, Heriberto Flores had a longstanding relationship with the PRI, and this was an opportunity to harbor new leaderships, closer to the PRD. In the end, Padilla grouped enough support, called the Ruta 2 members operating in Insurgentes into an assembly, and ousted El Pollo’s group from this project.³⁴⁴ This does not happen magically in Mexico City. As one official from SETRAVI explained, “how do we enter a Ruta, when the government decides to do a project? SETRAVI throws its support behind a dissident leader, empowering him. In contrast, doors are closed to enemies of the government, weakening their ability to solve problems on behalf of its members. Before long, their leadership deteriorates. And so, we began strengthening Jesús.”³⁴⁵ To be sure such strategy, if pursued simultaneously city-wide, would have led to significant turmoil, and perhaps sparked cohesive resistance to the “strategic corridor” concept as a whole. However, by breaking down reform in “projects,” the government had better control of the table, and it could choose *who* among incumbent collective taxi interests would be invited to participate.

343 (Padilla, Jesús. Personal interview. March 11, 2011)

344 The vote in favor of Padilla was 202 out of the 262 (Nava and Ramirez 2008 p. 445).

345 (Mejía, Martín. Personal interview. March 17, 2011). There are several other versions that suggest this “pressure” was exerted much more actively than mentioned in the previous quote. One of these was that authorities ordered a round of audits on an advertising company run by El Pollo’s son, that placed billboards on Ruta 2 buses without paying the required contributions to the City. Another, more obscure version, points attempted to make El Pollo responsible for the murder of one of the dissident operators, that occurred on the date the Insurgentes BRT corridor was announced publicly. These are of course unconfirmed, but converge on the key point: Authorities actively supported dissidence within Ruta 2 to facilitate implementation of the project.

Individual operators had two major concerns related to corporatization. First, they worried about losing their individual concessions, an asset worth much more in the informal market than their 9-15 year old buses, and their direct “link” to the industry.³⁴⁶ Second, they worried about losing cash liquidity, as the proposed model implied compensation would be paid to the firm, giving individuals no certainty that money would reach their pockets. Significant effort focused on mitigating these concerns. The basic premise of the negotiation was that incumbent operators would earn at least the same amount of money by participating in the BRT; yet, determining pre-BRT earnings implied significant haggling. How much, exactly, did they earn? Many operators overestimated their income, ignoring unpaid taxes, non-existing insurance policies, high maintenance expenses, frequent bribes, social security contributions and even their own salaries as drivers and mechanics. Only after protracted discussions did they agree that the new system should be able to guarantee \$15,000 pesos/month (US \$1,366) per stock. Intense discussions also revolved around who, exactly, held formal title over the 262 Ruta 2 concessions on Insurgentes. Since the transport law prohibited any single person from holding more than 5 individual concessions, operators holding more than this quantity had long worked with false concession titles or with titles registered under different names.³⁴⁷ Some titles had been informally passed on to sons and daughters. Many were expired, or the vehicles used did not correspond to information on file at SETRAVI. Eventually the list of people with rights over the corridor was ascertained, identifying 180 individuals. To mitigate individual concession holder’s concern that they would be soon bought out by large investors, language was added to the concession title stipulating that the original number of stockholders had to be maintained throughout the life of the concession, and that no stock could be sold before 5 years. Similarly, to eliminate the fear that they would be shortchanged by whomever ran the company, authorities agreed to develop a compensation mechanism that guaranteed that the Mx \$15,000/stock (US \$1,366) would effectively be distributed.

In October 2004, more than a year after the conversations had begun, a majority of Ruta 2 members holding bus concessions on the corridor (representing 68% of the buses) finally joined to create Corredor Insurgentes, S.A. (CISA). The operators that did not join CISA may have sold the rights to their shares to other members, or joined later. According to official records, 180 of

³⁴⁶ The approximate market value of bus concessions with authorization to operate on Insurgentes was Mex\$600,000.

³⁴⁷ A former SETRAVI official interviewed for this project estimated that 2/3 of concession titles in Mexico City are informally owned and operated by someone different to the official holder.

262 vehicles were scrapped under the substitution program, and the pooled money from the resulting subsidy deposited in an escrow account under the name of the company, to be paid to Volvo for the new buses.³⁴⁸ As promised, on March 2005 SETRAVI awarded CISA a new concession to operate the Insurgentes BRT corridor, without accepting bids from any other group. In exchange, the government suffered almost no militant opposition from incumbents. One notable exception was bus *drivers*, a group that was consistently excluded from the negotiating table³⁴⁹ despite the fact that it certainly stood to lose in this process, as optimization in the number of buses implied that many drivers would be left redundant. According to an estimate by an official working in CISA, the pre-BRT corridor had approximately 500 bus drivers working for Ruta 2. Of these, only 180 drivers were retrained and retained by CISA.³⁵⁰ This group indeed staged a few protests, but had little leverage to influence or derail the ongoing process and rapidly dispersed.



Figure 2.18 Metrobús vehicle and station, Insurgentes Corridor

Arturo Herrera summarized quite succinctly where the true complexity laid. As he put it, “negotiation with the operators took 2-3 years. The construction of the corridor took only 3

348 Official records accessed August 2011 at the *Fondo de Promoción para el Financiamiento del Transporte Público* confirmed that 180 scrappage subsidy payments (*bonos de chatarrización*) were paid for Ruta 2 buses previously operating on *Insurgentes*.

349 (Nava and Ramirez 2008 p. 460)

350 (Moreno, Arturo. Personal interview. March 3, 2011). This figure is confirmed in (Nava and Ramirez 2008 p. 456), who add that 400 of the 500 original drivers did apply for a job at CISA.

months.”³⁵¹ Luis Ruiz agreed, “in this case, 95% of the project was striking an agreement with transport operators. The rest was easy, a project like any other.”³⁵² Indeed, once CISA was created and details ironed, everything progressed quickly. The first BRT corridor in Mexico City, spanning 19.6 kilometers and 37 stations across Insurgentes, began operations in June 2005, only days before Mayor López Obrador left office to run for president.

Original sins and the price of BRT Inclusion

For the first time since the arrival of the PRD to the mayor’s seat, Mexico City authorities seemed on the verge of a major, conspicuous achievement regarding privately operated public transportation. The new stations, the more organized traffic flows, and the cleaner vehicles running on Insurgentes offered a stark contrast to the anarchy of the microbuses elsewhere in the city. For a relatively low public investment, Mexico City residents experienced significantly improved transit services, at least in this emblematic avenue. Indeed, López Obrador liked to point out that the whole Insurgentes corridor cost the city less than what it would have cost to build one kilometer of underground subway. The interest rate offered by Volvo’s financial branch for the purchase of the new vehicles was 14.5%, which although still high represented a marked improvement from the interest rates typically available to individual collective taxi operators, around 26.5%.³⁵³ Furthermore, this success was achieved without displacing incumbent transport operators, and instead contributed to re-establishing government’s authority (and the PRD’s authority) over the industry city-wide. The message for the rest of the *ruta* organization leaders was clear: If you don’t come to the table the government can oust you, like it did with El Pollo. But if you do come to the table, the government *will* deliver on its promises. After all, CISA stockholders seemed happy, and Jesús Padilla became the rising star of the transport leader landscape. To many, this successful transition from *ruta* organization into a viable firm, and from a “*gremialista*” leader into an “*empresario*” embodied the PRD’s long sought model for a city-wide negotiated industry transition.

However, replicating the success of Insurgentes would prove difficult. As previously mentioned, this corridor represented the low-hanging fruit: The high revenue potential and the low number of incumbent operators enabled the government to offer a propitious deal. Further,

351 (Herrera, Arturo. Personal Interview. January 18, 2010)

352 (Ruiz, Luis. Personal Interview. 1 March, 2011)

353 (Gómez, Nicolás. Personal Interview. March 7, 2011)

all affected operators were part of a single organization, reducing the number of parties that had to be at the table. Despite these advantages, negotiations had proven significantly complex and time consuming. Several elements of the Insurgentes project had been discussed and detailed at the table, with the objective of mitigating the concerns of pre-existing operators and retain their support. These adjustments were probably inevitable, given the simultaneous need to defuse opposition and to secure implementation within López Obrador's personal political calendar. Nonetheless, each of these adjustments had an important effect on the costs of operating the systems, and on the complexities of future negotiations in other corridors. To be sure, Insurgentes became an implicit baseline, that inevitably constrained the capacity of the state to expand this model. As Guillermo Calderón explained, "we had to make certain additional concessions to get them on board. These were, to say it in some manner, the original sins. When we negotiated the next BRT lines we had to revert what we had agreed to in Line 1, and this required a lot of work."³⁵⁴ Among these "original sins," were:

- **The number of new buses on the BRT corridor**

The planning team debated intensely about the number of new buses required on Insurgentes. The wide range recommended by various consultant groups, from 65 to 120 articulated buses, had to do with differing estimations about the speed that was feasible in a corridor with no passing lanes, no overpasses and a large number of streetlights. In the end, however, rather than settling the question on purely technical grounds, the final size of the fleet was determined as part of negotiations with incumbent operators, who were concerned that more buses implied a larger capital investment from each individual stockholder. Each BRT vehicle cost Mx \$3.5 million pesos (US \$318,750), meaning that to pay for the 20% required downpayment, CISA had to cover Mx \$700,000 (US \$63,750). The company had pooled a total of Mx \$18 million pesos (US \$1.64 million), from the subsidies paid by the government for 180 scrapped minibuses (as part of the vehicle-substitution program). This amount was enough to cover 25 new buses without requiring any additional investment from CISA's shareholders. However to reach a technically acceptable fleet size, an additional out of pocket capital contribution was required, and many stockholders resisted. In the end, they agreed to contribute Mx \$70,000 (US \$6,375) in addition to the Mx \$100,000 (US \$9,100) coming via their vehicle

354 (Calderón, Guillermo. Personal interview. March 3, 2011)

scrappage payments, in total enough to purchase CISA's initial fleet of 60 buses.³⁵⁵ CISA's fleet of 60 articulated buses was then combined with 20 articulated buses directly purchased by the government, to be operated directly by RTP. Weeks after the launch of operations, however, this fleet size proved insufficient to service demand on the corridor, leading to a hurried purchase of 17 new buses (10 by the government, 7 by CISA). Ex-ante financial models were, thus, quickly obsolete.

- **Participation of other operators on the corridor**

Mexico City officials wanted RTP to operate some of the BRT services on Insurgentes. They saw this as a way of protecting the governability of the corridor -since whatever happened with CISA, this government-run company would be able to maintain a minimal supply of services. Further, RTP could provide Metrobús authorities with detailed information about costs and operational problems, and bring credibility to the threat that authorities could void CISA's concession if it failed to deliver on its commitments. And perhaps more importantly, the PRD had long defended the need for a viable, publicly owned transport company that took the place of AUP-R100. In fact, Insurgentes represented one of the few routes that RTP operated at a profit, and its director adamantly wanted to maintain it. RTP's participation was, in the words of Claudia Sheinbaum, "a matter of justice." If the BRT promised significant profits for private actors, why couldn't it also benefit the publicly-owned transit company?

Operators initially resisted, demanding exclusive control over the new corridor. It was only because RTP's participation in fact reduced the investment required from each individual stockholder that they finally agreed. However, CISA required that pre-existing market shares be maintained throughout the life of the concession. But which measure of "market share" should be used as benchmark? According to the service supply analysis conducted as part of the corridor's feasibility studies, RTP operated 26% of public transport vehicles working on Insurgentes, but due to their relatively larger size, they transported 38% of the passengers (see table 2.1). To gain CISA's agreement, authorities fixed RTP's participation on the corridor according to *vehicle* share and not to *passenger* share. To further make RTP's participation more acceptable to CISA, the government committed *not* to finance RTP's buses with the system's revenue stream, expanding the capacity of the trust to pay for CISA's buses instead. RTP would

³⁵⁵ The effective substitution rate for the private operators' fleet was thus approximately 4.4 microbuses per new BRT vehicle. Vehicle-Owners that did not submit their vehicles for scrappage contributed the subsidy amount themselves, increasing their out of pocket investment.

pay in for its buses up-front, drawing from the city’s general fund, establishing an important precedent. But perhaps more importantly, CISA’s concession title established that RTP would be the *only* other company allowed on the Insurgentes corridor, required to maintain a 3-to-1 proportion of buses (CISA to RTP) throughout 10-year life of the concession. In practice, this shielded CISA from any competitive pressure and, ultimately, severely complicated the operational integration of future BRT corridors, as buses operated by different private companies

Table 2.1 Bus service supply on Avenida de los Insurgentes, before and after BRT

Organi- zation	Prior to BRT Line 1-South					After BRT Line 1-South (March, 2008)				
	Vehicles		Passengers/Day		Passenger Capacity/ Demand	Vehicles Scrapped	Company Stock		BRT Buses	
	#	%	# (,000s)	%			Shares	Share- holders	#	%
Ruta 1 (pre-BRT)	245	73%	38.0	71%		115	137	109	19	73%
Ruta 76 (pre-BRT)	55	16%	3.0	6%		22				
RECSA (post- BRT)										
Ruta 111 (pre-BRT)	15	4%	1.7	3%					-	
RTP (public)	21	6%	10.8	20%					7	27%
Total	336	100%	53.5	100%	28%	137			26	100%

Sources: (SETRAVI 2007, 2008)

would not be allowed into Insurgentes.

• **Costs per kilometer: Hidden profits and public-private disparities**

In order to determine a fair price per vehicle-kilometer (vkm), consultants estimated the cost of BRT operations on Insurgentes by accounting for fixed and variable costs such as fuel, tires, driver salaries, vehicle maintenance, etc. Upon discussions with CISA’s representatives, Mexico City authorities added an additional “fixed cost” to reach the “equilibrium point” sufficient to cover the sustained payments of Mx \$15,000/month (US \$1,366) per each of CISA’s stock. According to Luis Ruiz, “that was our commitment. Data, financial projections and

everything else were estimated around this figure.”³⁵⁶ This adjustment added Mx \$11.96/vkm (US \$1.09/vkm) to the estimated cost of operations, and was labeled explicitly in CISA’s concession title as “payments to concessionaires,” ultimately accounting for 35% of the finally agreed price per vkm.³⁵⁷ In other words, a built-in profit margin was included in the price that Metrobús agreed to pay CISA, earmarked to be distributed in a manner akin to a salary to each former microbus operator. The price/vkm for CISA was further adjusted upward to include Mx \$8.97/vkm (US \$0.82/vkm) to cover payments on the 5-year loan taken to purchase its buses. The trust would pay this money directly to the creditor, but structuring payments in this manner had the critical implication that once the loan was fully paid, that money would revert to CISA. While government authorities wanted to withhold this money in the trust and earmark it for CISA’s fleet renovations, the final deal was that starting in year six (2011), the Mx \$8.97/vkm would add to CISA’s earnings, to be used as the company deemed fit. Metrobús’ financial statements for fiscal year 2011, suggest that indeed, during that year CISA obtained a financial windfall of Mx \$49.6 million pesos (US \$3.55 million dollars) from this concept.³⁵⁸

To be sure, there is nothing inherently wrong in this negotiation. However, while Mexico City authorities adjusted the vkm price offered for CISA’s services, they kept the amount offered to RTP fixed at the original vkm cost estimate. The price paid to RTP would not include “fixed payments” to stockholders, nor would it consider a margin to renovate this company’s bus fleet or to make other investments. In other words, the public company was paid much less than the private for exactly the same service, and was inevitably poised to require significant amounts of public subsidy. This disparity only worsened over time. While CISA’s per vkm payments were periodically adjusted to reflect cost increases for fuel and other inputs, RTP’s per vkm payments remained fixed.³⁵⁹ At the initiation of the Insurgentes BRT in June 2005, CISA earned Mx \$33.87 pesos/vkm (US \$3.12/vkm) vs. RTP’s Mx \$24.9/vkm (US \$2.30/vkm); by 2011, CISA’s price had been increased to Mex\$40.2/vkm (US \$2.88/vkm), but RTP’s remained pegged at the

356 (Ruiz, Luis. Personal Interview. 1 March, 2011)

357 These figures appear in Annex 6 of CISA’s concession title (SETRAVI 2005). Unfortunately, concession titles made available to the author for companies operating subsequent Metrobús corridors did not include the Annexes with similar cost breakdowns.

358 (Metrobus 2012). Conversion by author, using December, 2011 exchange rates (US \$1=Mx \$13.98).

359 The first input-based adjustment to CISA’s vkm price occurred in 2008, coinciding with the first fare increase authorized for Metrobús services; a second adjustment took place in November 2009.

original price of Mx \$24.9/vkm (now worth only US \$1.79/vkm).³⁶⁰ This of course served the purpose of decreasing pressure on the fare: Costs increased for both CISA and RTP operations at the same rate, but since the price paid to RTP could remain fixed, Metrobús had a wider financial margin to increase payments to CISA without requiring a fare increment. Of course, this was nothing else than a hidden subsidy from the public company to the private, but never publicly discussed in such terms.

• **Fare revenue distribution scheme**

The original design assumed that revenues from the Insurgentes corridor would finance the costs of the new regulatory agency, Metrobús. Indeed, 5.6% of fare revenues were earmarked for this purpose and acknowledged as such in the trust. However, the incumbents secured preference in the agreed pecking order for revenue distribution: Metrobús would only get its share of the fare after (and if) bus operators were fully paid. This implicitly guaranteed the need to either increase fares or subsidize planning and control functions if operating costs were greater than anticipated.³⁶¹ Indeed, this is exactly what happened. Financial statements published by Metrobús reveal that in years 2005-2007 and again in year 2011 the agency did not receive any money from fare revenues.³⁶² In years 2008-2010 the amount actually paid to the agency approximated only 1% of fare revenues.³⁶³ Contrary to the initial expectation, the operations of the planning and regulatory body Metrobús are almost fully financed with the city's general fund.

Expanding an inclusionary BRT system

Mexico City's emerging BRT system became financially strained almost immediately after launch. To begin, authorities left too little leeway between the technical fare (sufficient to cover costs and commitments to operators) and the published fare of Mx \$3.50 pesos (US \$0.32).³⁶⁴ Further, operating costs grew faster than projected, as Metrobús ordered operators to

360 In June 2005, US \$1=Mx \$10.84. In December 2011, US \$1=Mx \$13.98.

361 The original plan also considered a share of fare revenues to fund feeder bus services. This was subsequently cancelled.

362 (Metrobus 2008, 2012)

363 (Metrobus 2009, 2010, 2011)

364 According to Jesús Padilla, the original fare (Mx \$3.50, US \$0.32) was in fact below the technical fare, that he estimated at Mx \$4.13 (US \$0.38). I could not confirm this information, but in any case it does suggest that the López Obrador administration faced significant political pressure to keep the fare charged to the public as low as possible.

run significantly more vkms to relieve onboard congestion. This led to the previously mentioned purchase of more buses. By the end of 2005, six months after inauguration, and despite the promise of a self-sustaining fare, the Insurgentes corridor was operating at a growing deficit. presidential and mayoral elections slated to occur in July 2006 ruled out a fare increase, and CISA authorities resisted attempts to renegotiate contractual conditions. Instead, the city government negotiated *on behalf* of CISA with the creditor, to lower interest rates on its bus purchase loan from 14.5% to 10.5%.³⁶⁵ Even with this adjustment, it soon became clear that fare revenues alone would not suffice to cover the expenses of the regulatory agency, of servicing stations and perhaps even of paying operators. So, the Mexico City government chose instead to implement a formal, albeit hidden, subsidy to the emergent BRT system: on December 26, 2005, Metrobús instructed the trust fund that manages fare revenues to suspend vkm payments to RTP; payments to this publicly-owned bus company would instead come from the city government's general funds. This order was negotiated with the city's Finance Ministry and formalized with an agreement among Metrobús and RTP, signed July 28, 2006, and later renewed "until further notice" on February 21, 2007. By the end of 2007, the amount paid to RTP through this non-fare-based operational subsidy summed US \$8.21 million dollars.³⁶⁶ Interestingly, this amount corresponds almost precisely to CISA's yearly built-in profit margin (the part of the vkm price added to guarantee monthly payments to stockholders). That is, we could argue that the government's subsidy to RTP really went to CISA's stockholders. Could it be possible to do away with those guaranteed payments in future corridors?

This question was part of a larger discussion taking place among local authorities. How *sustainable* was this inclusionary model, especially if Mexico City strived to simultaneously expand its BRT system and keep costs down? Insurgentes was a choice BRT corridor, due to the combination of high passenger demand and relatively few operators grouped in only one ruta organization. In contrast, other corridors physically fit for BRT operation had lower revenue generating potential, larger numbers of collective taxis and a much more complex web of incumbent organizations potentially affected. Nonetheless, the sweet-deal offered to CISA had

³⁶⁵ Volvo's financing branch provided the original loan for 14.5%. Several interviewed stakeholders indicated that the 10.5% interest rate was not originally available, as banks did not trust the project would work. For reference, microbus operators interviewed said that interest rates offered to individual operators by the banking system reached 26.5%.

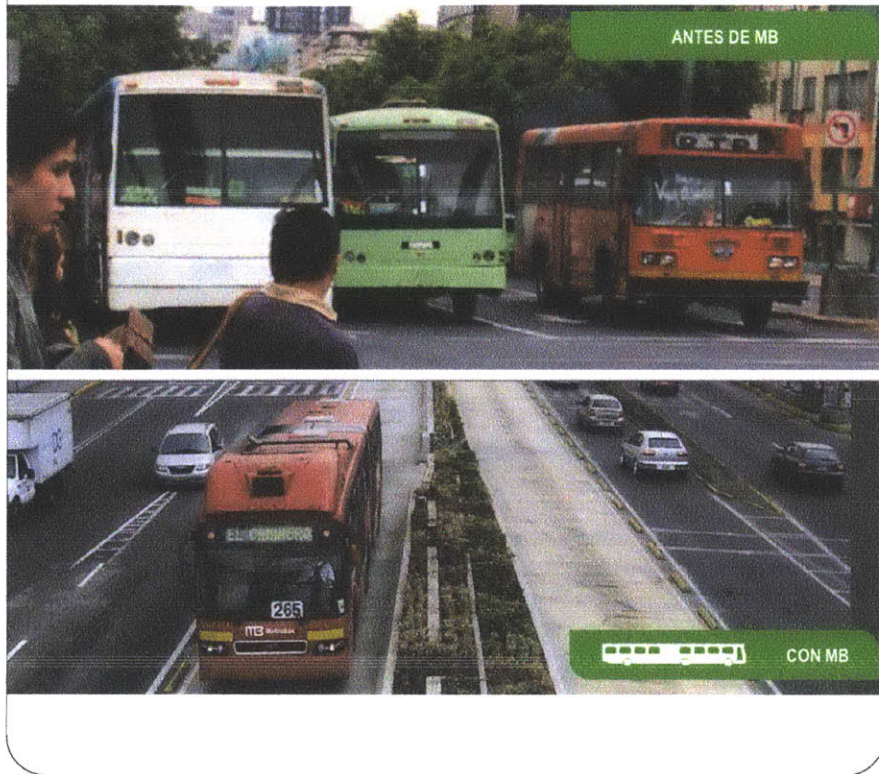
³⁶⁶ Mx \$89.5 million (Mx \$44.2 million in 2005-6 and Mx \$45.3 million in 2007). These amounts are reported in the minutes of Metrobús' Insurgentes fare revenue trust fund. Conversion by the author, using December 2007 exchange rates (US \$1=Mx \$10.90).

created unrealistic expectations among all other collective taxi operators. They wanted - demanded- similar conditions in order to participate. And to complicate matters, the participation of RTP in other corridors could not be taken as granted. This public company provided the government with a mechanism to inject operational subsidies to the Insurgentes corridor, relieving pressure on the fares. This was not yet a major budgetary problem, as the subsidy commitment to only one corridor was still relatively small. However, the city could not easily expand this subsidy model to other corridors without straining its own finances, and in any case, incumbent operators would not necessarily accept the intrusion of RTP into corridors not previously serviced by this company. Perhaps for these reasons, we observe a gradual tightening of the terms offered to incumbent operators in subsequent BRT corridors. After proving its worth and viability, the negotiated “strategic corridor” model was fine-tuned, relaxing the commitment to include everybody and reducing the financial guarantees offered.

Some of the changes were inserted into the concession titles by increasingly experienced and capable Metrobús and SETRAVI officials, who suggested possible tweaks to the deals finally put on the table. Without a doubt, the state’s institutional capacity increased as subsequent BRT corridors were negotiated and implemented. For example, Metrobús authorities successfully pointed out that the price per kilometer offered to CISA included many costs that should decrease as the number of kilometers increased, such as insurance policies. In future corridors, Metrobús officials added a distinction between “base kilometers” and “extra kilometers,” with the later paid at a lower price. However, the broader picture that emerges is a larger strategic reassessment, especially after the administration of López Obrador ended and Marcelo Ebrard (PRD) became mayor in December 2006. Soon after being sworn in, the new mayor launched a plan to implement 10 BRT corridors over the next 10 years, expanding the network at least 200 kilometers during his administration.³⁶⁷ To deliver, both the time used to negotiate with collective taxi organizations and the amount of public funds required to sustain the resulting system had to decrease significantly. Perhaps for this reason, Mexico City authorities gradually moved away from a “fostering” strategy towards a “forcing” one.

367 (World Bank 2009 p. 15-16)

Figure 2.19 Avenida de los Insurgentes, before and after Metrobús



Metrobús Line 1 expansion: Same corridor, different deal

Incoming authorities continued negotiations started under López Obrador with several Ruta organizations, seeking out viable private partners for a second BRT corridor. Initial efforts pointed to the iconic east-west Reforma corridor, but this project was abandoned partly because of the opposition of neighborhood and historic preservation groups, and partly because of the inability of leader Heriberto Flores to coalesce sufficient support among Ruta 2 members. Attempt to implement the previously mentioned Eje 8 alternative were not successful either, despite completed feasibility studies and earmarked funds to build the required stations in the budget for fiscal year 2007. In fact, the first successful replication was not a second corridor per se, but actually an 8.5 kilometer (10 stations) southbound extension to the Insurgentes corridor. In February 2007, authorities approached Ruta 1 leader Francisco Aguirre Guadarrama, to gauge his interest. By March, an informal letter of intention was signed by the leaders of all three organizations potentially affected (Ruta 1, Ruta 76 and Ruta 111, which was owned by the

former SUTAU-100.)³⁶⁸ However, it would take a full year to iron out the details; this extension was not inaugurated until March 13, 2008. Part of the complexity had to do with the fact that this segment had much lower passenger demand (53,503 passengers/weekday) and much larger supply of transport vehicles (315 private buses in addition to 21 RTP vehicles) than the northern part of Insurgentes. The SETRAVI/Metrobús team planning this expansion estimated that passenger demand should be served with a fleet only 26 articulated buses, which implied a very high substitution rate: Almost 13 vehicles currently running on this corridor would have to exit the corridor to make room for each new articulated bus (see table 2.2).

Table 2.2 Bus service supply on Avenida de los Insurgentes Sur, before and after BRT

Organization	Prior to BRT Line 1-South					After BRT Line 1-South (March, 2008)				
	Vehicles		Passengers/Day		Passenger Capacity/Demand	Vehicles Scrapped	Company Stock		BRT Buses	
	#	%	# (,000s)	%			Shares	Shareholders	#	%
Ruta 1 (pre-BRT)	245	73%	38.0	71%		115	137	109	19	73%
Ruta 76 (pre-BRT)	55	16%	3.0	6%		22				
RECSA (post-BRT)										
Ruta 111 (pre-BRT)	15	4%	1.7	3%					-	
RTP (public)	21	6%	10.8	20%					7	27%
Total	336	100%	53.5	100%	28%	137			26	100%

Sources: (SETRAVI 2007, 2008)

In practice this meant that not every incumbent operator could expect to participate in the BRT scheme *and* maintain the accustomed level of profits. Given that the amount of fare revenues predicted for the corridor was fixed, increasing the number of participating operators reduced the monthly profit that could be guaranteed to each individual operator. This led to significant intra-ruta and inter-ruta conflict. Ruta 1 is the largest standalone collective taxi

368 (Hernandez 2007 p. 72)

organization, with 3,500 minibuses dispersed throughout the city, of which Insurgentes-South was only a branch. Similar to what happened in the first segment of the corridor, Ruta 1 leader Francisco Aguirre soon found himself unable to manage the process, as members of the organization working on that corridor fought among themselves over whether to participate and under what conditions. The minority that did want to participate splintered from Ruta 1, joined others from Ruta 76, and created a firm of their own: Rey Cuauhtémoc, SA (RECSA). To keep the project viable, SETRAVI had to step in and broker a deal with Ruta 1 leader Francisco Aguirre, and with Ruta 111 managers³⁶⁹ to relocate the vehicles that did not join RECSA elsewhere in the city. Only 137 of the 315 privately operated buses and minibuses previously in the corridor were finally scrapped for the Mx \$100,000 pesos subsidy, which indicates roughly the number of operators that remained as participants of the project. In addition to the Mx \$100,000 (US \$9,278) subsidy per scrapped vehicle, each RECSA stockholder contributed Mex \$57,000 (US \$5,289) per stock, and pooled these resources towards the downpayment of a fleet of 19 BRT vehicles. The difference was covered by RTP, which purchased 7 additional buses, again drawing from the city's general fund. Given the lower revenue potential, authorities negotiated a vkm price that was significantly lower than what CISA earned for its services in the northern segment of the corridor. RECSA settled for Mx \$22.66 (US \$2.10)/vkm price. Since this lower price was still not enough to make the financial models work, authorities determined that RTP would charge even less -Mx \$16.00 (US \$1.48)/vkm- and decreed the first increase to the fare charged by Metrobús, from Mx \$3.50 to Mx \$4.50 (US \$0.32 to US \$0.42).

In other words, while this extension proved viable, it still required evicting more than half of the incumbent operators, authorizing a 29% fare increase, and committing significant public investment -not only to build infrastructure in the corridor and to purchase RTP's buses- but also to cover the operational subsidies needed to maintain RTP's underpaid services in the future. A second problem also came up. Since different companies operated the north and the south segments of the Insurgentes BRT, passengers intending to traverse the corridor were forced to alight in one station, only to board an identical bus operated by a different company. This lack of integration resulted from previous negotiations: CISA's concession established that no other private company could operate on "their" corridor. This situation remained for five months to much ridicule in the media and inconvenience for commuters, until Metrobús authorities finally

369 Ruta 111 is a firm owned by Grupo Ruano, with a contract awarded in the tender process that followed the bankruptcy of AUP-R100

brokered a deal on October 2008 that allowed the buses from each company to enter the rest of the corridor. Again, this agreement implied that no company felt financially affected, and probably came at the expense of reducing vkms to RTP. In the words of Jesús Padilla, now president of CISA, “we have tolerated it (the entry of RECSA’s buses to the north-segment), and can put a stop to it whenever we want”³⁷⁰

Metrobús Line 2: Many operators, many firms, lower profits

Line 2 began operations in December 2008, running on the 18.7 km east-west Eje 4 Oriente “strategic corridor” (estimated demand: 142,847 passengers/day). Prior to this BRT line, 620 private minibuses, grouped around 5 different organizations (Rutas 110, 27, 53, 49 and 11) served this corridor, along with 30 trolleybuses operated by the publicly owned Sistema de Transportes Eléctricos (STE). Planners estimated that this corridor required no more than 71 BRT vehicles to operate efficiently, with 20 of these to be allocated to RTP (taking the rightful place of STE’s trolleybuses). In other words, the negotiation at this corridor implied substituting 9.15 of the vehicles currently offering services, per each new BRT vehicle introduced. Maintaining RTP’s 20 bus slots was important for many reasons, but particularly to retain the ability to subsidize Metrobús operations, in case financial problems arose in this corridor as they had in Insurgentes. The original plan was to allocate the remaining 51 BRT bus-slots to one or two firms that resulted from the merger of the incumbent organizations. However, the creation of these firms proved to be very problematic.

One of the key reasons why authorities selected this corridor was the insistence from Ruta 110. As you may recall, Mexico City authorities awarded the contract to operate Ruta 110 to Servicio Metropolitano de Transporte 17 de Marzo, of the firms created by former SUTAUR-100 workers, as part of the “political agreement” to settle the conflict following AUP-R100’s bankruptcy. Since this company’s creation, Ruta 110 had struggled to balance its dual commitments: Guarantee jobs and benefits to former union members, while at the same time remaining financially viable. Since the arrival of the PRD to power, former SUTAUR-100 leaders vigorously denounced the unlevelled ground they faced competing for passengers against

³⁷⁰ (Padilla, Jesús. Personal interview. March 11, 2011). The director of the Metrobús explained the agreement in different terms: “It was an agreement. We let them see that it would be good for the system and that it would be profitable for them. Will you generate more kilometers? Yes. Yes for CISA and yes for RECSA. It was good for both” (Calderón, Guillermo. Personal interview. March 3, 2011).

weakly regulated collective taxi organizations. As the operations manager of Ruta 110 explained during my visit to their facilities, “taxes are killing us. We pay 20-30% of our revenues as taxes, while collective taxis get away evading them. Our employee roll is also killing us. All of our workers have all the benefits established in law, raising our operational costs, making us go through a very tight financial situation. Collective taxi organizations don’t pay that.”³⁷¹ A BRT in one of Ruta 110’s corridors would be blessing to former SUTAU-100 workers, precisely because it promised to “guarantee their investment”³⁷² by leveling the playing field. In their case, participation did not imply any organizational transition: This firm already had most of their processes centralized, retained state of the art facilities from the AUP-R100, and ran a relatively tight ship. Since the implementation of the Insurgentes corridor, ex-SUTAU-100 leaders insisted that they should be next, and had even suggested five different corridor alternatives. Both their ties to the PRD and their pro-activeness paid off. In February 2008, SETRAVI authorities announced that the second line of the Metrobús system would be built on Eje 4, and that it would be operated by a firm called Corredor Eje 4-17 de Marzo (CE4-17M), owned by Ruta 110.

Of course, the collective taxi organizations that also operated in that corridor were not interested in partnering with Ruta 110. Relations between these stakeholders were historically bad, and for good reason. Many former SUTAU-100 members blamed the private microbus operators for the demise of their former company, and for their current financial struggles. So, authorities conceded that three different firms would operate on this BRT corridor: RTP (20 bus-slots), CE4-17M (20 bus-slots) and a third firm owned by the individual operators of Rutas 27, 53 and 49, who were conveniently part of the same “cúpula” organization, led by Encarnación Juárez (with the remaining 31 bus slots). This left Ruta 11 out, since its routes only marginally touched upon the corridor, as demonstrated by the fact that their vehicles carried only 4% of the passenger demand (see table 2.3). SETRAVI offered them relocation. Of course, such alternative was not well received, and Ruta 11 members organized protests in the streets, rapidly escalating to violent confrontations with police.

This did not initially threaten the project, as Encarnación Juárez had expressed willingness to participate, of course seeking to retain control of the new company himself. To

371 (López, Enrique. Personal interview. March 8, 2011)

372 (Ibid)

elicit support from Ruta 27, 53 and 49, he invited representatives from these organizations to León, Guanajuato to show them how a single BRT company composed by different groups could function well. He also hired renowned professional consultants, such as Angel Molinero to run the numbers for them, and to prep himself for sitting at the table. As he put it, “we knew the corridor was inevitable, so my strategy was to muster as much knowledge as possible in anticipation of negotiations”.³⁷³ However, organization members perceived him as “too close” to government authorities -calling him “Padilla the Second”- and a dissident group soon emerged. Both groups jostled over the 31 bus slots reserved to them, with discussions mediated by SETRAVI carrying on for months, with the dissident groups at times threatening to join Ruta 11 in opposition to the project. As part of efforts to sway members to their side, both groups lowered the amount of money they requested as contribution from potential member-stockholders, to the point that those that joined Juárez paid nothing beyond the Mx \$100,000 vehicle scrappage subsidy. Seeking to move forward, authorities decided to split the difference allowing two different firms to participate in those bus slots, Juárez’ COPSA (15 bus slots) and the dissident’s CTTSA (16 bus slots).

While these negotiations took place, the leaders of Ruta 11 sought back doors to re-insert themselves into the project. As a SETRAVI official privy to the process described, “there were plenty of protests, mobilizations. When we determined that there was no room for Ruta 11 they rose in arms. There were fights, anti-riot police (*granaderos*), people injured, all that, and at the same time we had to manage the negotiating tables with the other groups. A political agreement was finally brokered, and the instruction came from the office of the mayor, ordering us to make room for Ruta 11. This situation messed up all the framework we had prepared.”³⁷⁴ Another planner, working for Metrobús, confirmed this, “our technical position was that they should not participate, but there were public protests. The matter escaped the technical negotiation managed by us, and moved toward a political negotiation, managed in the Secretaría de Gobierno, and conditions changed.” Simply creating more bus slots to fit in Ruta 11 would not work financially. Again, the only buffer available to facilitate a compromise was RTP. The mayor ordered the

373 (Juárez, Encarnación. Personal interview. March 4, 2011)

374 (Mejía, Martín. Personal interview. March 17, 2011)

public company to cede 12 of its 20 bus-slots to a firm created by Juan José Sánchez Armas, the leader of Ruta 11. This decision not only limited the possibility of managing financial stress by paying the public company less (or even by not paying for its services) but also created immediate problems. For example, the financial models had assumed that RTP's buses would not be

Table 2.3 Bus service supply on Eje 4 Oriente, before and after BRT (Line 2)

Organization	Prior to BRT Line 2				Passenger Capacity/Demand	After BRT Line 2 (December, 2008)				
	Vehicles		Passengers/Day			Vehicles Scrapped	Company Stock		BRT Buses	
	#	%	# (,000s)	%			Shares	Shareholders	#	%
Ruta 110 (pre-BRT) CE4-17M (post-BRT)	35	5%	30.5	21%		31	60	3	20	28.2%
Ruta 11 (pre-BRT) SAJJ (post-BRT)	217	33%	5.0	3%		52	50	2	12	16.9%
Ruta 27 (pre-BRT) Ruta 53 (pre-BRT) CTTSA (post-BRT)	148	23%	34.3	24%		81				
	44	7%	7.6	5%		33	114	85	16	22.5%
Ruta 27 (pre-BRT) Ruta 53 (pre-BRT) Ruta 49 (pre-BRT) COPSA (post-BRT)	40	6%	9.3	7%		22				
	52	8%	9.0	6%		21	82	63	15	21.1%
	84	13%	18.4	13%		39				
STE/RTP (public)	30	5%	28.6	20%					8	11.3%
Total	650	100%	142.8	100%	19%	279			71	100.0%

Source: (SETRAVI 2008, 2008)

financed with fare revenues, while SAJJ's buses

certainly would. That was a problem, as a Metrobús official explained, "RTP had always served us as a cushion, as an allied operator, that in many ways, allowed us to absorb many of the costs we had to take on. At the least, it gave us a needed breather to reduce deficits or give us some margin of action."³⁷⁵

Interestingly, 45 of the 50 shares in this company were personally owned by Mr. Sánchez Armas, and his firm was named after his initials: SAJJ.³⁷⁶ Perhaps by acting as a committed trade association leader, Mr. Sánchez Armas proved to be the savviest businessman around. But in any case, it was clear that even with new, beautiful Metrobús buses, pressure politics continued to play an important role in Mexico City's transportation planning agenda. In the words of Bernardo Navarro, by then serving as an chief advisor to the SETRAVI, "what is technical is not really technical, but political, and transportation is pure politics. The stakeholders in

375 (Coxtaña, Jorge. Personal interview. March 9, 2011)

376 (SETRAVI 2008)

transportation are political actors.”³⁷⁷ In the end SETRAVI awarded not three but five different concession titles to operate this BRT corridor (RTP, COPSA, CTTSA, SAJJ and C4-17M). The decision to have several companies operating on BRT line 2, with a relatively small number of buses each, was a pragmatic choice that enabled the project to move forward. However, it would soon create significant coordination problems and negate many of the expected economies of scale promised by the new industry structure. Each of these firms would have its own administrative body, its own procurement, etc. Further, COPSA, CTTSA and SAJJ shared the same bus depot (owned by the city), with conflicts between drivers frequent. Still, authorities managed to get agreement on a price of Mx \$22.10 (US \$1.67)/vkm³⁷⁸ for all five companies, partly as a consequence of C4-17M signing first and lowering the bar for everyone else. Former SUTAUR-100 workers could offer such a low price because of their decade-long long experience with corporatization, but this figure became the new benchmark for negotiations with collective taxi organizations only beginning this transition. The low vkm price in turn translated in a relatively low guaranteed profit for each of individual collective taxi organization member. In attention to the lower revenue potential of the corridor, they had to settle for Mx \$7,300 (US \$550)/month, compared to Mx \$15,000 (US \$1,130)/month offered to CISA’s stockholders on Insurgentes.³⁷⁹

As a result, many individual vehicle-owners felt cheated and opposed the project and/or demanded to participate *without* relinquishing their existing bus for scrappage, seeking to retain the ability to complement their personal income by operating elsewhere. Authorities probably conceded. As Martín Mejía explained his role in SETRAVI: “what do we do? Negotiate, negotiate, and when it comes down to it, we throw in a taxi medallion or something that will complement their revenues.”³⁸⁰ It is at least suggestive to note that only 279 of the 620 privately-run buses previously on this corridor were officially destroyed,³⁸¹ with most of the non-scrapped buses soon reemerging as competition to the BRT on parallel streets, chipping away from the

377 (Navarro, Bernardo. Personal interview. March 14, 2011)

378 December 2008 exchange rates (US \$1=Mx \$13.27).

379 Ibid.

380 (Mejía, Martín. Personal interview. March 17, 2011)

381 One Metrobús official further confided that the owners of 70 of the 279 microbuses supposedly scrapped never destroyed their vehicles, despite collecting the subsidy; Others have observed similar cases of fewer vehicles scrapped than originally planned in BRT transitions. (Orrico Filho, Guilherme de Aragao, and Medeiros do Santo 2007), for example, suggest that Bogota’s Transmilenio expected to retire 5,000 vehicles, but only 1550 were eventually eliminated.

corridor's anticipated passenger demand. Since each of the five BRT operators had a guaranteed number of vkms, they suffered no penalty if minibuses affiliated to their organizations continued to run in competing routes. "It was a perversion. The BRT paid the per kilometer, and thus they kept running their minibuses taking all the passengers, since at the end we also paid for BRT services running with or without passengers"³⁸² The result was not negligible: While BRT line 1 reached 80% of its expected ridership only three weeks after launch, it would take line 2 a full seven months to achieve the same milestone. It also did not help that one of the firms, COPSA, failed to produce its buses on time, claiming financial problems, partly caused by its own decision not to raise capital from members beyond the scrappage subsidies.

The combination of operational inefficiencies, unauthorized competition from incumbents, and the need to pay for SAJJ's buses from the fare revenue stream strained the already precarious finances of the entire system, which could not be informally subsidized as previously planned given the reduced participation of RTP. In fact, line 2 operated at a significant financial deficit every year since the start of its operations (US \$2.38 million dollars in 2009, US \$2.10 million in 2010 and US \$2.00 million in 2011).³⁸³ But in addition to the financial problems, Metrobús authorities were increasingly unable to establish terms. In fact, line 2 began operations without all the terms of the concession contracts accepted and signed, and SETRAVI did not make them public until 2011.³⁸⁴ Disputes over particular clauses -such as the ones stipulating whether companies should earn windfall payments after the bus purchase debt was settled- carried on for months, with operators successfully able to get their way by exploiting back doors to the mayor's office, such as PRD assemblymen. Metrobús was also unable to easily re-distribute vehicle resources across the different BRT Lines, for example to leverage the lower price (and willingness to delay payment) of RTP to the system's advantage. Although line 2 had redundant buses, and line 1 was displaying significant passenger congestion, Metrobús was legally unable to order line 2 companies to run their vehicles on line 1, due to CISA's "exclusivity." What would otherwise be a simple reallocation of available resources within a

382 (Rocha, Jorge. Personal interview. March 7, 2011)

383 Figures reported in Mx \$ in Metrobús' yearly financial statements: Mx \$31 million in 2009, \$26 million in 2010 and \$28 million in 2011. Conversion to US \$ by author, using exchange rates from December each year.

384 To access them for this research, a freedom of information request was submitted at both SETRAVI and Metrobús. These requests were first denied, and granted on appeal.

network became a protracted negotiation between the regulator and the operating companies, only solved through informal, ad hoc agreements.³⁸⁵

The experience of line 2 raised multiple flags regarding the scalability and the sustainability of the approach chosen to expand Mexico City's capacity to plan and regulate public transportation services. Each subsequent BRT corridor promised increasingly complex negotiations, and rising subsidy commitments. Further, while services noticeably improved in the selected corridors, authorities increasingly resorted to shifting excess bus capacity to other areas of the city, moving the location of a city-wide problem rather than really solving it. Authorities realized that the leaders of collective taxi organizations were slowly, but successfully adapting to the new "table," limiting the extent to which Metrobús could plan, regulate and finance its services. Regardless of whether SETRAVI's private counterparts in a particular corridor were traditional, conservative and risk averse, or progressive, entrepreneurial and risk-seeking, the emergent leaders of the new BRT firms seemed to gradually regain control over the agenda. To be sure, many key figures making this transition -Jesús Padilla, Encarnación Juárez, etc- appeared to have made their choice between two irreconcilable business models, choosing to become "empresarios," rather than "gremialistas." They certainly played the part. However, once at the table, they continued to engage in value claiming, protecting "their" territories, "their" bus slots, even if this made the system less attractive to users. Similarly, beyond the ability to establish the corridors, transportation authorities seemed disempowered, torn between the need to satisfy the technical and financial imperatives of BRT while at the same time mitigating the political and social costs of collective taxi organization corporatization. As Bernardo Navarro aptly described "we were producing a sort of neo-corporativism, with a type of actor who sometimes played being a businessman, and sometimes played at being a collective taxi organization leader."³⁸⁶

An unsustainable pattern seemed to be emerging. Every subsequent strategic corridor had lower passenger demand, and a higher number of collective taxis to be either included or ousted. This resulted in a larger vehicle-substitution rate, and thus in more implementation complexity,

385 In the end, a complicated scheme was agreed upon: RTP would increase operations on line 2 while one of the line 2 companies would operate RTP's slots on Line 1. This reduced the number of line 2 buses that depend on fare revenue for payment. While this move was revenue-neutral from a system perspective, it served two important purposes: It enabled the city to introduce another -lower cost- private operator into line 1, while reducing the likelihood that the rest of the private companies in line 2 would require a formal, direct subsidy.

386 (Navarro, Bernardo. Personal interview. March 14, 2011)

involving protracted discussions with, within and between each incumbent organization over who could be included, under what terms and at what price. To keep the deal at the table attractive in the first two BRT corridors, the public company RTP had accepted reduced or delayed payments for its own services, and financed its own fleet from the city's general fund and not from fare revenues. The government paid for the stations and corridor infrastructure, and subsidized a significant share of the downpayment on the privately-owned buses, via its vehicle scrappage program. Metrobús, the planning and regulatory agency, also financed its expenses from external, non-fare sources. Despite this, the emergent BRT system displayed severely constrained finances, which in the end combined to put pressure on the price of fares. If authorities saw BRT as more than simply a demonstrative project, and sought to base their efforts to transform privately owned public transport city-wide around it, perhaps the terms of its inclusionary implementation model had to change.

Metrobús Line 3: From Fostering to Forcing Change

Between 2009 and the first half of 2010, SETRAVI and Metrobús officials continued to explore options for the negotiated implementation of a third BRT line, holding talks with the leaders of collective taxi organizations with presence in several plausible "strategic corridors." One likely option was the 17 kilometer north-south Eje 1 corridor (estimated demand: 123,293 passengers/day). Authorities estimated that it could be well serviced with a fleet of 54 BRT vehicles, that could replace the 702 collective taxi vehicles from three incumbent organizations: Ruta 1, Ruta 3 and Ruta 88. Despite the high vehicle-substitution rate (13 incumbent vehicles per each new bus), the leaders of all three organizations initially expressed their disposition to participate, and seemed strong enough to muster the required support from members. Ruta 1 was led by Francisco Aguirre, who had previously facilitated the implementation of the southbound extension of the Insurgentes corridor by accepting (and perhaps forcing) the relocation for his non-participating members. The city "owed" him, and he had already proven his capacity to enforce agreements. Ruta 3 was another large organization in the city, with 1,300 members and 67 routes (ramales) city-wide, of which the corridor under consideration represented only a small part. Its leader, Felipe Núñez, had already obtained authorization from the 152 affected members of his organization to create a firm to participate in Metrobús. A similar case was the smaller Ruta 88, led by Magdaleno Barragán, who already had celebrated an assembly dividing potentially affected operators among those who wished to participate and those that would prefer relocation, without noticeable conflict. All three groups were inclined to partake on BRT,

particularly after initial talks with authorities -seven “working tables” occurring between February and May 2010- suggested that the deal on the table was as inclusionary and financially attractive as the first two Metrobús corridors.³⁸⁷

However, authorities abruptly suspended talks in May, leaving participants to think that the government decided to shelve the project and build line 3 elsewhere. When SETRAVI finally invited collective taxi leaders to resume conversations in July, the meeting was no longer run by mid-level officials, but by Armando Quintero, head of SETRAVI and by Guillermo Calderón, head of Metrobús. “The tone changed dramatically,” recalls Felipe Núñez “as well as the data.” Metrobús authorities made it clear that RTP would not participate in this corridor, eliminating the city’s responsibility to supply capital investment and subsidies.³⁸⁸ Every single new bus in this corridor would need to be privately owned and financed through fare revenues. This put pressure on the financial model, with the implication that the deal on the table was nowhere as attractive as previously expected. Using revised passenger demand estimates, authorities explained that there was no way the system could sustain guaranteed monthly payments for the owners of the 702 incumbent vehicles. At best, only the owners of 430 vehicles could be integrated into the BRT, and the rest would need to accept relocation as “feeder and complement routes.”³⁸⁹ But in addition, instead of a downpayment of 20% on the new buses, authorities expected operators to put 40% up front, in an effort to reduce financing costs. Guillermo Calderón, director of Metrobús, explained the logic behind the change of terms: “Inserting RTP into this corridor implied that we had to purchase 25% of the fleet with city funds, and probably that we would subsidize the services of 25% of the fleet. We did not want to do that anymore. Why? Because it implied an immediate investment to buy the buses, and because it created a financial hole that had to be covered with subsidies. We decided to do something different. We would invite an investor.”

This suggestion came as a bomb to ruta leaders. According to Magdalena Barragán, the increased down-payment implied that the contribution of *each* individual member of his organization would need to be around US \$23,800 and \$31,745 dollars (Mx \$300,000-\$400,000

387 (Núñez, Felipe. Personal interview. February 28, 2011)

388 (Rocha, Jorge. Personal interview. March 7, 2011)

389 (SETRAVI 2010)

pesos), in addition to the US \$7,936 dollars (Mx \$100,000 pesos)³⁹⁰ from the vehicle scrappage subsidy. “It was too much. The numbers were manipulated. My partners were up in arms, but what could they do? They did not have this money.”³⁹¹ But perhaps even worse, government authorities suggested that to cover this financial shortfall they should accept an “investor-partner.” The PRD administration was beginning to resemble the later PRI governments, inviting large capital into “*their*” industry -which made sense, as Marcelo Ebrard had worked in the Manuel Camacho administration. Predictably, this meeting heated up rather quickly. The leaders of Ruta 3 and 88 abandoned the table. And while Francisco Aguirre seemed inclined to continue negotiations, 50 of the 199 Ruta 1 members with interests in this corridor splintered from the organization and declared they would represent themselves. Between August and November 2010, collective taxi organizations in Mexico City took their protest to the streets, amidst growing rumors about who exactly was the “investor-partner” that Mexico City authorities had in mind.

Since the start of the Ebrard administration Autobuses de Oriente (ADO), the largest inter-urban bus company in the country, approached Mexico City authorities with the intention of entering the city’s urban transport industry. They had done this with insistence, seeking to diversify their operations to hedge against competition posed by low-cost airline carriers.³⁹² In fact, ADO had already participated with the french conglomerate Alstom in a bid to build and operate an electric trolley running into Mexico City’s downtown. This project was embraced by Mayor Ebrard as part of his downtown redevelopment initiative, but canceled in May 2010 due to its high costs and to the mounting opposition from historic preservationist groups.³⁹³ Collective taxi organization leaders rumored that the city offered ADO participation in the BRT as a “consolation prize,” after the trolley project failed. This is of course speculative, but in any case the dates of the cancellation of Alstom’s downtown trolley project and of the change of terms offered in this BRT line three coincided. Collective taxi organizations had every reason to be worried: If any private company in Mexico was well positioned to compete successfully against them, it was ADO.

390 June 2010 exchange rates (US \$1=Mx \$12.60).

391 (Barragán, Magdalena. Personal interview. March 14, 2011)

392 (García, Gonzalo. Personal interview. March 9, 2011)

393 The same sources insisted that Mexico City authorities invited ADO into Metrobús as a sort of “consolation prize.” This is of course speculative, and I could not confirm if in fact ADO owned stock in Alstom’s trolley project, but if it did, the dates coincide with the change in tone of the negotiation with collective taxi organizations over Metrobús line 3.

In fact, ADO was quite an attractive choice for the city. It had 70 years of experience running buses, unquestionable financial capacity and a long established relationship with bus manufacturers and suppliers. Its nationwide inter-urban transport business carried 120 million passengers per year, with a fleet of 4,500 buses.³⁹⁴ It was so well established and known to the public, that one of the most popular songs of *El Tri*, Mexico's most famous rock band, was about someone waiting for a bus on ADO's terminal ("*Estoy esperando mi camión en la terminal del ADO...*"). But perhaps more importantly, it had only transitioned from a cooperative of vehicle-owners into a corporatized firm in the early nineties, and thus understood how collective taxi organizations worked. Through their conversations with Mexico City authorities, ADO managers identified that the city was struggling with the financial implications and slow progress of its inclusionary approach to BRT expansion, and saw a tailor-made opportunity. It bluntly offered to operate this corridor without public subsidy and to finance the required buses at a much lower interest rate, while *also* committing to include existing operators as minority shareholders, offering them a guaranteed monthly payment. In the words of Gonzalo García, ADO's Director of Metropolitan Transport, "we offered to internalize the social costs of the project... freeing up funds, eliminating subsidies, and delivering a profitable model that considered the social part... and that allowed authorities to make much faster progress."³⁹⁵ This was music to the ears of an administration approaching the end of its tenure with little to show for its promise to build 10 BRT corridors in 10 years. ADO offered 49% of the stock of a special purpose company called Movilidad Integral de Vanguardia, SA (MIVSA) to the 430 individual operators eligible to participate in line 3, committing to pay them a "guaranteed monthly flow" ranging from US \$635 to US \$952 dollars (Mex\$8,000 to Mex\$12,000).³⁹⁶ In addition, ADO pledged that operators that joined MIVSA would *not* contribute any capital beyond their US \$7,936 dollar (Mex\$100,000

394 "Invertirá Grupo ADO\$1,500 millones de pesos en tecnología y camiones," *T21Mx*, June 8, 2005

395 (García, Gonzalo. Personal interview. March 9, 2011)

396 (MIVSA 2011). This variance accounted for the vehicle age and the size of the buses used by each incumbent operator.

pesos) vehicle scrappage subsidy.³⁹⁷ Finally, ADO committed to hiring former operators as mechanics, drivers and administrative staff in MIVSA.³⁹⁸

Of course, collective taxi organizations did not interpret this as generosity. Noé Rendón, the leader of the group that splintered from Ruta 1, explained their position: “first, we did not need them. We could deliver on our own, just like the organizations in Insurgentes and Eje 4. To be clear, partnering implied sharing a slice of *our* pie. They had no right. They had not exploited these routes, like us, for decades.”³⁹⁹ The entry of such a large player into the city’s urban transport market threatened not only the members of Ruta 1, 3 and 88 working in this corridor, but all collective taxi organizations in the city. Progressive and conservative industry leaders alike interpreted ADO’s entry as the first step towards a government-sponsored intrusion of large external competitors into the market. If only briefly, this threat served as the catalyst that united incumbent transport organizations in Mexico City in ways not seen since the Alianza de Camioneros. Ruta 3 and Ruta 88 convened a series of emergency meetings to discuss industry-wide options. Soon, 62 of the 106 rutas in the DF were represented at these discussions.⁴⁰⁰

397 García suggested that MIVSA paid US \$280,000 per bus, relative to a price US \$317,000 available in the market at the time of purchase. Financing cost available to MIVSA was 8%, the lowest achieved by a Metrobús operator yet. ADO’s long history as a consolidated bus operator, with well-trained personnel and an established line of suppliers, support its stated ability to operate at a lower cost.

398 According to MIVSA’s manager, 110 of the 130 drivers originally hired by MIVSA were previously working in this corridor under *Ruta 1*, the first organization to agree to the proposed scheme (García, Gonzalo. Personal interview. March 9, 2011)

399 (Rendón, Noe. Personal interview. March 6, 2011)

400 This figure was offered by Martín Mejía. Leaders of collective taxi organizations mentioned a superior number.

Table 2.4 Bus service supply on Eje 1 Oriente, before and after BRT (Line 3)

Organization	Prior to BRT Line 3					After BRT Line 3 (February, 2011)				
	Vehicles		Passengers/Day		Passenger Capacity/Demand	Vehicles Scrapped (As of March, 2011)	Company Stock		BRT Buses	
	#	%	# (,000s)	%			Shares	Share-holders	#	%
Ruta 88 (pre-BRT)	218	31%	27.3	22%			79 (9%)			
Ruta 3 (pre-BRT)	153	22%	47.5	39%		250	152 (17%)	81		
Ruta 1 (pre-BRT)	331	47%	48.5	39%			199 (22%)			
ADO	0	0%	0	0%			447 (51%)	1		
MIVSA (post-BRT)									54	100%
RTP (public)	0	0%	0	0%					0	0%
Total	702	100%	123.3	100%	32%	250	877		54	100%

Source: (SETRAVI 2010; MIVSA 2011)

Proposals included suspending all interlocation with SETRAVI, calling for the resignation of Minister Armando Quintero, and demanding a direct dialogue with the mayor. Interestingly, Jesus Padilla, president of CISA, Juan José Sánchez Armas, president of

SAJJ, and Nicolás Vázquez, president of COPSA, participated actively in these meetings, probably concerned about the entry of a new player that could disrupt their existing accommodation as Metrobús operators. Felipe Núñez and Magdaleno Barragán explained to their peers how authorities wanted to force them into an unnecessary partnership with ADO. They argued that Ruta 3, 88 and the dissidence of Ruta 1 had already created their own firms and had in fact signed a contract to purchase their buses from Mercedes since June. Further, they accused SETRAVI of deliberately underestimating passenger demand in their corridor to corner them into accepting help they did not need. The message was powerfully simple: What is happening to us could soon happen to you. In the end, most ruta organizations agreed to join a city-wide protest “against the privatization of transportation,”⁴⁰¹ which of course really meant against the entry of *new* private actors into the industry.⁴⁰²

Several protests took place, including one on September 21, the very day that the mayor offered his state of the city speech at the local Assembly. Anti riot police had to prevent 4,000 microbus operators from marching into the Assembly hall, with the event nonetheless ending in a

401 (Núñez, Felipe. Personal interview. February 28, 2011)

402 These paragraphs are based on my conversations with several individuals, such as Nicolás Gómez, Jesús Padilla, Noé Rendón, Magdaleno Barragán, Felipe Núñez, Martín Mejía, Guillermo Calderón, Jorge Coxtaña, etc.

major traffic jam. That day, head of SETRAVI Armando Quintero reacted by stressing publicly that the city “will not stand down from the proposal to incorporate ADO as operator of Metrobús line 3,” and explaining that “we have dialogued with all parts affected, but we simply can’t change the proposed plan. We *will not* subsidize those that are not making investments they should make.”⁴⁰³ Undeterred, protestors simply raised the stakes. They promised



Protest against participation of ADO into Metrobús line 3. Source: La Jornada, September 22, 2010.

to disrupt two international events hosted by Mayor Ebrard: The World Summit of Local and Regional Leaders hosted on November 16-20 and the World Mayors Summit on Climate on November 21. Mayors from around the world would visit the city during that week, and Ebrard was scheduled to receive a prize as “best city mayor.” Having public transport break down or streets blockaded precisely on those days promised to be a tremendously embarrassing blunder.⁴⁰⁴ Soon after posing this threat, leaders Felipe Núñez (Ruta 3), Magdaleno Barragán (Ruta 88) and Noé Rendón (Ruta 1-dissidence) finally received an invitation -via the Secretario de Gobierno (Ministry of the Interior)- to talk with the mayor directly. At this meeting, Ebrard told them that he was not sold on ADO’s proposal, and that his concern was rather centered on ensuring the system remained financially viable. He accepted that 37 of the 54 BRT vehicles considered for this corridor corresponded to their constituents, and asked them to present an alternative proposal of how to finance and operate these buses without ADO. As proof of goodwill, Ebrard ordered SETRAVI to deposit their scrappage subsidies into an escrow account in favor of Mercedes Benz, the company with whom these leaders had pre-negotiated the

⁴⁰³ La Jornada, “La línea 3 del Metrobús va, con o sin microbuseros, afirma Armando Quintero,” September 22, 2010

⁴⁰⁴ Excelsior, “Anuncian mega-marcha: Planean aguarle la fiesta a Ebrard,” November 5, 2010

required BRT bus purchase.⁴⁰⁵ With this, production of the buses could start. This seemed so tangible, that it worked to defuse tension. Thinking they won -perhaps recalling the experience of SAJJ in line 2- ruta leaders called off the protest, and the Ebrard hosted his meetings without complications.

However, there is little indication that Mexico City authorities had second thoughts about ADO's entry to the market. In fact SETRAVI's negotiations with Francisco Aguirre, the leader of Ruta 1 who conspicuously never opposed a partnership with ADO, continued. SETRAVI officials contend that Aguirre's pro-ADO stance is explained by his history as one of the oldest leaders in the industry. He had once led the CAT, where he learned that the best way to protect his organization's city-wide interests was not to joust but to find accommodation with authorities. Perhaps with good reason, officials referred to him as the most cunning leader in the pack ("*el de más colmillo*"). There is another, complementary explanation. Francisco Aguirre did not see himself as a marginal partner to ADO. Passenger flows suggested that BRT line 3 should be extended southbound, to the National University (UNAM), but such option had been shelved to save costs. According to SETRAVI's negotiator Martín Mejía, "Francisco Aguirre pointed out that this profitable southbound extension would inevitably happen within 2 to 3 years. So we made a deal, authorizing him to immediately offer services from Etiopía (the BRT terminal station) to the University with his existing bus fleet... we will eventually extend the BRT, and Francisco is already there."⁴⁰⁶ As a consequence of this agreement, Ruta 1 announced that the majority of its members working on this corridor accepted ADO's offer to partner, severely weakening the position of Ruta 3, 88 and of Ruta 1 dissidents.

Government authorities reached out to the leaders of other organizations supporting the protests as well. Many stopped attending the meetings, and gradually distanced themselves, ending the very brief attempt to create a united front against ADO. According to Felipe Nuñez, "when authorities saw that many Rutas were united behind us, they began to operate. They reached out to the cúpulas. You know, to the folks that have always served the government."⁴⁰⁷ Of course, these leaders, such as Nicolás Gómez and Jesús Padilla -who by now had ousted "El

405 El Universal, "los primeros autobuses de la línea 3, listos," October 19, 2010

406 (Mejía, Martín. Personal interview. March 17, 2011).

407 (Nuñez, Felipe. Personal interview. February 28, 2011)

Pollo” as the leader as all of Ruta 2- argue they broke ranks only after the mayor gave incumbents a chance to put forth an alternative proposal. According to Padilla, he personally offered to raise US \$4 million dollars (Mx \$50 million pesos) towards the US \$24 million dollars (Mx \$300 million pesos)⁴⁰⁸ required to match ADO’s exact terms, and suggested that other organizations may be able to contribute the difference if asked. Ruta 3 and 88 flatly refused this offer. Gómez explained, “the first thing Núñez and Barragán said was that they would take all the decisions regarding their business... we stood back, but the whole process became so unproductive that we stopped attending. Sometimes it felt as if they considered us the enemy.”⁴⁰⁹ Clearly, the organizations immediately affected did not want to partner with ADO, but neither did they want to partner with anybody else. Coordinated efforts require a minimal level of trust, and collective taxi organizations were so fragmented, and accustomed to each other’s route invasions that they could not really coalesce, even against this very real threat. Perhaps with good reason, they interpreted Padilla’s offer to help as a more formal version of a route invasion: An acquisition. To divide collective taxi organizations, it did not hurt that authorities reopened negotiations with other organizations regarding pending corridors. Members of Ruta 7, for example, reported being close to reaching agreement about yet another BRT corridor -inclusive of RTP and without ADO- in Eje 3 Oriente. While these talks were only preliminary, they conveyed the message to the industry that the “inclusive” model of BRT expansion continued to be the preferred method, and that ADO’s participation was only an exception. Perhaps also as part of this strategy, Jesús Padilla was invited to present a proposal to operate BRT line 4, running into Mexico City’s downtown, precisely along the route previously reserved for Alstom’s cancelled trolley project.

In December, Mercedes-Daimler void the contract signed with Felipe Núñez, Magdaleno Barragán and Noé Rendón to supply the buses. “We had every paper signed, with every required seal on them. The order was approved in Mexico, in the USA, in Germany. They didn’t give a shit... Mercedes knew this corridor only had 54 bus slots. They could not produce a second set of 54 buses for ADO, as one of the two groups would not be able to pay for them, and so had to choose: Producing them for us, or producing them for one of their largest clients in Mexico, perhaps worldwide, with the blessing of authorities.”⁴¹⁰ The affected operators threatened

408 October 2010 exchange rates (US \$1=Mx \$12.48).

409 (Gómez, Nicolás. Personal Interview. March 7, 2011)

410 (Rendón, Noe. Personal interview. March 6, 2011)

Mercedes with legal suits, with burning the buses, even with traveling to Germany and hosting protests there. However, at this point it was clear to them, and to the members they represented, that Ebrard had made his choice. On December 11, 2010, ADO gave the 430 eligible members of Ruta 1, 3 and 88 a window of 75 days to accept their stock options in MIVSA. In addition to the Ruta 1 members that had already agreed to join, many individual members saw their ship sinking and broke ranks from their leaders, taking the stock option or even selling their concession to ADO, which paid above market rate. Again, SETRAVI authorities helped catalyze this process, on the one hand throwing in taxi medallions or route authorizations to sweeten individual deals, and on the other shunning opposition leaders. For example, Magdaleno Barragan recalls, “SETRAVI started calling on my deputies (delegados) rather than me. It empowered leaderships within my organization that wanted to join MIVSA. In fact, one of these deputies is now vice-president (of MIVSA). When we saw that we no longer had the majority, many of us decided to sell”⁴¹¹

On February 2011, Mayor Marcelo Ebrard inaugurated the 17 kilometers and 32 stations of Metrobús line 3, operated by MIVSA -which not only retained the concession to run the buses, but also to manage fare collection and to put advertising on stations and vehicles. ADO’s majority stake in this company allowed Metrobús to overcome many of the consequences of the first corridor’s “original sins.” In fact, MIVSA accepted in 2011 a significantly lower vkm price (Mx \$24.90, US \$2.06) than CISA obtained *seven years earlier* (Mx \$33.87, US \$3.12), which only highlights the amount of money initially paid to foster collaboration in this system. In addition, MIVSA committed a share of its revenues for a fleet replacement fund, and accepted that Metrobús could run buses from other BRT operators on its corridor if needed, solving two key issues that remained contentious with other Metrobús operators. Government officials hoped to leverage ADO’s strengths to reduce the public subsidy needed to operate Metrobús, and to use these freed-up resources to accelerate BRT network expansion. Furthermore, the entry of ADO empowered authorities, as it established a credible threat for future negotiations either with the collective taxi organizations exploring participation in a corridor, or with other Metrobús operators, like CISA, that may demand unsustainable terms. Even if ADO does not expand beyond this initial corridor, its readiness as an alternative actor put the balance back in

411 (Barragán, Magdaleno. Personal interview. March 14, 2011)

equilibrium, since the other side is still dominated by former organization leaders that at the end of the day may regain their capacity to coordinate actions.

Nonetheless, *Metrobús*' 2011 financial statements show that Line 3 operated at a US \$1.15 million dollar deficit⁴¹², so it is still unclear whether MIVSA will fully deliver on its financial promise to the city. But perhaps more importantly for the purposes of our discussion on industry transition, official records suggest that only 250 of the 430 pre-existing vehicles were actually scrapped, as small figure particularly if we consider that it was 702 vehicles originally servicing the corridor.⁴¹³ This is perhaps indicative of the number of operators that actually joined MIVSA as stockholders, rather than selling their stock option, after perhaps negotiating with SETRAVI a taxi medallion or relocation of their vehicles into a different route.⁴¹⁴ In other words, despite its original claim, ADO's contribution to the city was mostly in terms of efficiency gains -reducing the vkm cost to the city,- rather than equity -facilitating the transition of incumbent bus operator organizations into viable transport companies-. To be sure, this contribution alone justifies ADO's participation in the market, however, it opens up the question: if most incumbent operators were going to be bought out, why didn't the city open a competitive call to select the operator of this corridor, rather than directly award it to ADO? Other actors - either external to the industry or internal, like Padilla, may have assembled a competing bid. The response of course may be that the *appearance* of an inclusionary approach to BRT is still required in Mexico City to keep collective taxi organizations at the table. Does *Metrobús*' line 3 provide a model for expanding the system while keeping incumbent operators as integral partners? Only time will tell. Perhaps it simply reflects authorities' increased willingness for confrontation – a government emboldened, more confident that it can survive the legal, political and social costs of displacing incumbent operators, at least in one corridor.⁴¹⁵ Maybe it simply marks a step towards the long-abandoned objective of enticing larger, stronger, private investors into the bus industry.

412 *Metrobús*' 2011 financial statement reported a Mx \$16.1 deficit for this corridor. Conversion to US \$ by author, using exchange rates from December 2011 (US \$1=Mx \$13.98).

413 Official records accessed August 2011 at the *Fondo de Promoción para el Financiamiento del Transporte Público*.

414 To avoid repeating the experience of Line 2, in which retired buses -supposedly scrapped- reemerged as competition to the BRT, MIVSA required submission of a scrapping certificate, and established in its bylaws that any stockholder found competing "directly or indirectly" against the firm would lose all its privileges.

415 At the suggestion that the government's inclination for inclusion was ideological, one *ruta* leader responded: "Bullshit. Our participation happens only as long as the government believes it needs us. As soon as it is able to displace us it will do so without asking for permission."

Assessing *Metrobús*

While rarely, if ever, acknowledged by authorities or advocates, Mexico City's BRT system incurred an operating deficit every year since its creation. That is, not only did the city government invest in stations, pavement, and the publicly owned buses; it also subsidizes operations. Using the presence of the publicly owned operator (RTP) on relevant corridors, paying an important share of RTP's per-kilometer remuneration from the city's general fund, at a lower rate and without inflation adjustments, the government essentially subsidizes all operations on the corridor. Furthermore, the city pays for the regulator/planner of the system, *Metrobús*, from general funds, although these costs were originally to be covered by fare-box revenues. Available evidence suggests a deteriorating financial situation. In 2005, *Metrobús*' operational subsidy per transported passenger was Mx \$0.30 pesos (US \$0.03 dollars); a small amount that still resulted in a Mx \$12.3 million peso (US \$1.15 million dollar) deficit.⁴¹⁶ In 2008, coinciding with two system expansions, two fare increases took place: in March, from Mx \$3.50 to Mx \$4.50 (US \$0.32 to US \$0.42); and, in December, from Mx \$4.50 to Mx \$5.00 (US \$0.34 to US \$0.38). These increases barely sufficed to maintain the real price of the fare, and were insufficient to close the system's operational deficit. By 2011, the per-passenger subsidy had increased to Mx \$0.72 (US \$0.05 dollars), while the yearly deficit, Mx \$135.3 million (US \$9.68 million dollars), was 8.4 times greater than in 2005.

Public transit subsidies can be justified on economic efficiency and equity grounds and to be clear, *Metrobús* operating subsidies are not particularly high, particularly when contrasted to the subsidy needed to operate the subway. However, part of the reason this financial burden remains manageable is that the BRT system's share of the total number of trips in the city is still very low. The vast majority of public transport trips in the city remain served by private minibuses. If Mexico City were to suddenly apply the same standards of service, with the same inclusionary approach, throughout its current surface public transport system, the cost to the public purse would be very significant. Furthermore, subsidies to *Metrobús* remain hidden from the public eye, preventing an important policy discussion from taking place, and diminishing the possibility of using those subsidy funds as sources of leverage and accountability. Notably, most of the subsidy goes as rents to original incumbents, shareholders in companies holding

⁴¹⁶ These deficit figures estimated from *Metrobús*' yearly financial statements. They do not account for funds used to pay for *Metrobús*' bureaucracy. Conversion to US \$ by author, using exchange rates from each year reported.

concessions awarded non-competitively, with substantial profit guarantees. For example, in 2011, the guaranteed profits to CISA's shareholders inserted into the vkm price as operational costs amounted to US \$3.38 million dollars. Similarly, payments to this company from the revenue stream previously earmarked to cover debt on its original bus purchase amounted to US \$3.55 million dollars.⁴¹⁷ Combined, these payments to CISA account for 72% of the *total* financial deficit registered by the system of US \$9.68 million dollars reported above.

To be sure, the sequential implementation experience of *Metrobús* suggests a gradual tightening of conditions over time. Nonetheless, the original sins committed during the initial “fostering” era continue to haunt the system:

the fostering era's initial compromises certainly hampered system expansion (evidenced in Line 1's southern extension) and conditioned (not necessarily negatively) the rest of the system expansion, as all actors in the system learned from the process;

the effects on regulatory leverage have not been entirely negative as the authorities certainly have more regulatory power than over the non-BRT system and this power is likely increasing and possibly spilling over into the non-BRT system;

the process has increased operating costs as measured by the levels of operating subsidies, themselves product of the initial fostering stance, although possibly also necessary for BRT operations -which internalize costs previously unaccounted by private operators; and,

somewhat negative effects on performance insofar as operational flexibility (e.g., adding buses) has been constrained due to initial deals struck.

Although Mexico City remains committed to expanding its BRT system, this objective will continue to clash with its stated commitment of incorporating incumbent operators into the new system. As even Jesus Padilla, the president of CISA, recognizes: “I am now convinced that this model is not viable. I am sorry to say this now, because I wouldn't have said it before. It is not viable financially, and it takes too much work to keep everyone happy all of the time.”⁴¹⁸ In fact, *Metrobús*' recently inaugurated line 4 (in April, 2012) appears to represent another step towards a “forcing” strategy. For the first time, authorities did not require the selected BRT

417 Estimates from figures reported in *Metrobús*' financial statements: Mx \$47.2 million pesos paid as operational costs to CISA's stockholders, and Mx \$49.6 million pesos paid to CISA from the revenue stream previously going to cover debt on its bus purchase. Conversion to US \$ by author, using December 2011 exchange rates (US \$1=Mx \$13.98)

418 (Padilla, Jesús. Personal interview. March 11, 2011)

company to reserve stock for and guarantee profits to incumbent bus operators affected by the project, despite the fact that the city's own reports acknowledged that 15 different *ruta* organizations serviced sections of the selected corridor.⁴¹⁹ Instead, the selected company - Transportes Ejecutivos Centro Aeropuerto Buenavista- has only four shareholders, none of which has a history operating buses in this area of the city.⁴²⁰ Further, this line was not considered as a "strategic corridor" in earlier plans, nor does it have the physical characteristics that enable most of BRT's performance gains. Further, each of the hybrid vehicles used in this corridor -much smaller than regular BRT vehicles- cost US \$400,000 dollars, and the passenger demand of only 40,000 passengers per day used to calculate this line's financial model, has proven grossly overestimated, suggesting that the level of subsidy required to sustain this line is significant.⁴²¹ Achieved without significant protest, this deal's details remain, for the moment, unknown. A new mayor was elected in 2012, also from the PRD, pledging during his campaign to expand the Metrobús system 200 kilometers during his administration. His first corridor, in construction since September 2012, is still to be inaugurated at the time of this writing, and will apparently be operated by RTP and by a firm created by the dominant collective taxi organization, Ruta 7. My hunch is that while still inclusionary, the terms on the table for this fifth corridor are probably much less financially attractive for incumbents than in previous iterations.

Case conclusion

Mexico City's adoption of four BRT corridors (plus an extension to Line 1) led to the scrapping of almost 900 small and underutilized minibuses and their substitution with at least 230 newer and less polluting articulated buses. It also facilitated the transition from several quasi-informal *ruta* organizations into nine more professional and presumably more accountable private firms. Service has improved along the affected corridors, with reduced travel times, lower pollutant emissions and safer and more reliable trips. The number of traffic accidents featuring public transport vehicles has decreased along these corridors, and the stations and vehicles are safer and more accessible than the minibuses. Drivers operating BRT buses are now paid fixed salaries, and receive the benefits mandated by law, and in contrast to the vehicle-owner

419 (SETRAVI 2011)

420 Jesus Padilla acknowledged to the author being one of the four shareholders, and the names of the rest remain undisclosed.

421 Padilla, Jesus. Personal interview.

associations, BRT companies now pay taxes. Quite deservedly, Metrobús has garnered international recognition as a best practice. Further, the public sector's role as planner and regulator of public transport has been clarified and reasserted in the process, and the industry has become more bankable and attractive for private investment. However, the sequential, negotiated, conflict-averse implementation strategy of BRT corridors requires increasingly complex discussions at the table, increasing the cost and decreasing the pace of system expansion and integration. The ambitious plan to comprehensively reform all public transit in the city after the demise of AUP-R100 was reduced to a focus on 33 strategic corridors. Then, authorities reduced their goal further to implementing 10 BRT lines, and even this has proven difficult to implement. This gradual, conflict-averse strategy is partly the legacy of Mexico's public transport history, that resulted in a severely atomized and weakly regulated private industry, which not only acted as a barrier for external competitors and private financing to enter the market, but also limited the incumbents' ability to coalesce and rationalize their own service supply. In other words, Mexico City authorities have had to tailor its recent reforms to the capabilities of its likely private sector partners, which in turned reduced the scope of feasible changes from a city-wide transformation to route-level improvement efforts.

To be sure, Mexico City's BRT system continues to grow, a feat that should not and is not under-appreciated in this study. However, each additional corridor typically has more incumbents organized around more *ruta* organizations, fighting over smaller passenger demand pies, which has led to added costs and to increasing numbers of displaced operators who don't magically disappear. Mexico City authorities negotiate their relocation into other areas of the city, which contains conflict but also implies that the system-wide benefits of the BRT are not as big as suggested by the ordered, high quality services experienced in a few choice corridors. Further, while officials initially asserted that *Metrobús* could function without an operating subsidy, the government is subsidizing operations, increasingly so, *primarily* to satisfy initial deals made to mitigate harm to existing operators. These subsidies remain hidden from the public eye, and are not subject to a transparent appropriation process. This money does not seem to provide much leverage for regulators, and operators continue to interpret subsidies as the official recognition of their pre-existing rights. Partly for this reason, authorities appear limited in their ability to use this money as leverage to force the private operators of Metrobús into accepting increasingly stringent performance standards. Instead, when system revenues have been insufficient to maintain subsidies, the city has chosen to "punish" the publicly owned bus company, and even to

raise fares, rather than revising commitments made to participant private operators. Rather than formal contract renegotiations based on shifting circumstances, authorities are forced to petition Metrobús operators for their case by case cooperation in solving problems. The negotiating “table,” even after corridor implementation, remains tilted in favor of private operators, and the ability of their leaders to condition agreement on extra-contractual “perks” remain as valid as it ever was. To this day, no private operator of BRT in Mexico City has been ousted, nor systematically forced to improve their performance as a condition to retain their contracts or their expected revenues. In fact, their permanence in the system is still perceived as a “right,” and the ability of authorities to link operator revenues to performance remains severely limited.

This complication is even more relevant if we assess the likelihood that the state planning capacity presumably developed through the conformation of the Metrobús system will eventually extend beyond its current corridor niche and integrate to city wide transport services. To be sure, the business model that underlays the Metrobús system could certainly be exported to bus routes that are not physically suited for BRT operation, and eventually integrate into a single system that includes the subway. However, it appears that the city would face severe financial and political difficulties, that would probably require authorities to either use more forceful, less inclusionary reform strategies, *or* to commit a significant amount of money to mitigate harm to potentially displaced vehicle-owners. This would probably require reallocating current subway subsidies to fund private bus services, and/or increasing fares. Further, in a city-wide reform, where would redundant operators be relocated? Why would current operators of profitable services -including the subway- agree to “share” “their” revenues to enable the system to subsidize less profitable services? Why wouldn’t collective transport operators -realizing that this time all are equally affected- join in sustained opposition? And, how could the city possibly finance a city-wide system that guaranteed pre-existing levels of profits to all participants, only to secure their buy-in?

This case study indicated how even within the BRT corridor framework the planning and regulatory capacity of the Mexico City government has not yet reached its full potential, and how authorities have turned to increasingly forceful strategies to manage the money and rules dilemma. This tendency may be partly attributable to an increasingly empowered public authority; but, it also appears to be correcting for original sins committed during the initial corridor implementations. These original sins may have been the inevitable costs of initiating

change in a complex urban system, meaning that Metrobús required a fostering strategy to enable it to eventually assume a more forceful posture. We cannot know for sure; nor can we know whether the price of the original sins was “worth it.” However, there are multiple signs that authorities are aware that the Metrobús’ “fostering” strategy has not proven sustainable; both operators and implementers learn from experience, adjust their expectations, and position themselves to extract more value from the system. Extending BRT’s model of increased state planning and regulation to city-wide non-BRT services, will undoubtedly come associated with either significant conflict or significant financial cost. In fact, there are clear signals that collective taxi organizations are actively preparing for the incoming negotiation or fight. I participated in a meeting with several *cúpula* leaders present, and one of them mentioned, “either due to cunning or necessity, we are re-grouping. Locally, and nationally. If we don’t do something to ensure that this model remains inclusive and democratic, the authorities will certainly displace us. And by that I don’t mean that *we* displace the individual members of our organizations, but that large capitalists displace *us*.”⁴²²

BRT may be a useful tool for authorities of developing world cities seeking to change the terms of their relationship with the private operators of bus-based public transportation. Beyond its performance advantages, it provides a path to transition away from the weakly regulated, privatized and atomized system, while in the process reasserting the role of the state as regulator and planner. Nonetheless the challenge remains on how to extend this added state capacity outside of its corridor “niche” in a financially and politically sustainable way. The Mexico City case also serves as a powerful reminder that this transition is inevitably costly, and that compromises, when managed without a healthy dose of conflict, can become obstacles to realizing and sustaining BRT’s true potential. How have other cities approached city-wide reform? Is there a flip-side to the previous argument, suggesting perhaps that more forceful, city-wide efforts to expand state capacity in the urban transportation services have their own sets of complications? With this question in the back of my mind I turn to Santiago de Chile, a city where a slightly different pattern of conflict and compromise implemented in a relatively similar context is already producing significantly different -and perhaps more promising- results.

⁴²² Present at this meeting were Jesus Padilla, Nicolas Gómez, José Luis González Galán, Agustín Hernández and José Antonio Sánchez Escalante, who claimed to represent 50% of bus routes in Mexico City.

Chapter 3: Governing public transport in Santiago, Chile

This chapter details how the City of Santiago, Chile transitioned its privatized, atomized, and weakly regulated public transport industry into a more accountable, transparent, efficient and integrated system. It is the story of how a resource-constrained, democratic government of a still developing nation reinserted itself as an active participant in a critical public service industry previously left to fend for itself. Over a span of 20 years, the Chilean State reclaimed on behalf of the public the ability to plan, the capacity to regulate and the willingness to be held accountable for the performance of a service that has “public” on its name.

This is also the story of how public transportation of one city became the dominating item in the public discourse of an entire nation. After decades of invisibility, it took a long succession of planning mistakes and financial mishaps to place effective, efficient and equitable urban transport services at the forefront of the policy agenda in Chile. To be sure, the transition implicit in this reform inflicted severe pain to many of the stakeholders involved. But even in the face of plummeting approval rates and of dire financial instability, the key protagonists of this story -from both the public and the private sector- found ways not only to save but to strengthen a system that will at the end leave the users of public transportation and the citizens of this great city better off.

When analyzed from a distance, the 20-year history of the strategies used by the planners and implementers of public transport reform in Santiago reminds of a pendulum. No matter from which side the pendulum is released, it eventually finds its own equilibrium, until a new disruption sets it in motion once again. This observation is perhaps not notable in itself. The world of politics and of policy demands occasional shocks to open windows of opportunity for radical reform. In fact planners and regulators in cities with similar public transportation industries, navigate this pendulum continuously, changing the ways they deal with the financial constraints and political interests that provide context for their efforts. Bus operators will demand a fare increase, or stop service, or deliberately lower service-standards, and authorities will either concede or fight them, until eventually a new equilibrium is found. Despite the occasional “big bang”, this equilibrium *becomes* public transportation policy. What is powerfully different in this case, however, is that at each turn of the pendulum, the authorities of Santiago enhanced their planning and regulatory capacity to demand increasingly stringent standards from the private

sector, while simultaneously finding ways to compensate them for their efforts. While this process was slow -and on occasion even briefly regressed- a long-run analysis shows how both public and private counterparts strengthened their relationship and positioned themselves to pursue more ambitious transportation goals.

Today disputes with operators are settled in court and not breaking protests in the streets. Bad service performance implies a financial loss for operators. Subsidies are transparent, discussed publicly, and closely audited. Investing in public transportation is less risky than before, and a market exists where the only way to guarantee permanence is ability to deliver better service. Public authorities can not only establish standards by decree, but they can also closely monitor everyday service performance. In fact, today it is the authorities and not the long gone cartel of private operators that is able to extract value from the system. The bus system complements instead of competing with the Metro system, and the bus route network increasingly responds to the needs of the city and not to the territories of rent seekers. Since buses no longer carry cash, they are no longer robbed, and since fare discounts are automatically applied through the smart-card system, drivers no longer discriminate the elderly or students. Drivers work 8 instead of 16 hours per day, buses are maintained properly, and accidents, congestion and emissions are lower than they would have been without this reform.

Of course not all the promises of the system have been realized. The gap between what is socially desired and practically feasible; and between what is technically possible and financially sustainable, is so large that progress is slow to come by. Much planned infrastructure remains unrealized. Implementers have to thread finely between measures that benefit many by a little, while harming some by a lot, and between implementing measures that take the city closer to a world class public transportation system, while continuing to charge the public with fares that most people are able to afford. This has implied increasing the level of fares and subsidies significantly, opening questions about the desirability of pursuing second-order transportation goals at the expense of other social needs. Perhaps one conclusion for planners is that an overnight “big bang” cannot deliver the type of reform that is necessary to build the public transport system that now exists in Santiago. But another conclusion, hopefully as persuasive, is that there is hope: As the pendulum fluctuates from one side to the other, in Santiago it also moves forward.

But let us start at the beginning, when the Chilean State decided that the best way to plan and regulate public transportation policy was paradoxically not to plan or regulate at all.

Part I. The era of laissez-faire (1973-1989)

The Chilean path to deregulation

On September 11, 1973 a military Junta toppled President Salvador Allende and seized power in Chile, putting an end to months of escalating conflict between groups with radically opposing views about the appropriate role of the state in the economy. Allende had won the 1970 presidential election by a razor thin margin, with votes almost evenly distributed evenly between the left, the right and the centrist Partido Demócrata Cristiano (DC).⁴²³ This three way-split became two-way, as Allende's coalition of socialist and communist parties -the Unión Popular (UP)- aggressively implemented its "Chilean Path to Socialism."⁴²⁴ The country was polarized, and soon "there wasn't a household in Chile that wasn't either fervently in favor of Allende or against him."⁴²⁵ The transportation industry was no exception. In fact, the leader of the national trade association of truck and lorry operators -the Confederación de Camioneros- called for a national strike in October 9, 1972 protesting plans from "the marxist-state dictatorship" to create a state enterprise to control all land, maritime and air transport firms in the southern region of the country. The truckers denounced that Allende's true intention was "to liquidate all privately owned means of transport, beginning in Aysén and ending in Arica".⁴²⁶ At least fifteen national trade associations, *including* the organization of private operators of public transport services (the Confederación Nacional de Chóferes de Taxis de Chile) joined the strike, transforming it

423 The election was split three-way: Allende won with 36.6% of the votes, versus 35.2% obtained by Jorge Alessandri, the candidate representing the right, and 28.2 obtained by Radomiro Tomic, from the Christian Democrat Party (Taylor 2006 p. 23). For a good, concise, overview of the history of Chilean politics prior to this election see (Oppenheim 1999 p. 3-31).

424 This was the title of the speech delivered by Allende to the Chilean Congress on May 21, 1971.

425 (Lagos Escobar 2012 p. 26)

426 (Alexander 1978 p. 303). See also (Rojas 1976 p. 111-115; Kaufman 1988 p. 108 and 200). The heightened rhetoric was both ways. The government owned newspaper La Nación dismissed the movement as "a strike by the bourgeoisie against the workers" (Kaufman 1988 p. 80).

into a broad based national movement opposing Allende's economic policies⁴²⁷. This standoff paralyzed the economy for 45 days, cost the country approximately US \$100 million, narrowed the margin for compromise and set the stage for the military revolt.⁴²⁸

Members of all parties that opposed Allende in the 1970 election now supported the coup, *including* the Christian Democrat Party. In fact, throughout 1974, Allende's predecessor in the presidency Eduardo Frei Montalva (1964-1979) publicly justified the coup, stating that Allende was an aspiring dictator, and that the military had no alternative but to intervene.⁴²⁹ Legitimized by the political class, the Junta appointed General Augusto Pinochet as president in December 1974. The General filled his cabinet with a combination of military officials and young graduates from the University of Chicago, soon known as "the Chicago Boys." This administration overturned Allende's programme in a few years, implementing a wide range of reforms inspired in the teachings of Milton Friedman⁴³⁰ "that would have been almost impossible to implement under democratic rule," and that "dismantled labor organizations."⁴³¹ These included enactment of business-friendly fiscal and labor reforms, the elimination of barriers to international trade, the privatization of close to 300 state-owned, state-controlled or "intervened" companies,⁴³² the privatization of health and social welfare programs, and the deregulation of key sectors such as energy, telecommunications and mining. Urban policy was not unaffected. The military regime eliminated in 1976 the "green belt," a strict urban growth boundary established in the 1960 *Plan Regulador Intercomunal*, and starting 1979 expanded the allowable area for urban development from 38,000 to 99,935 hectares, encompassing vast areas in the agricultural hinterlands and high

427 The strike was organized by the Confederación de Camioneros (62,000 trucks owned by 52,000 members). The fifteen organizations included the National Chamber of Commerce, the national manufacturer's organization (Sociedad de Fomento Fabril), the national builders organization (Cámara Chilena de la Construcción), as well as small industries, artisans and agricultural producers. The full list is available at (González Pino and Fontaine Talavera 1997 p. 503-505). Bus and taxi operators of Santiago had paralyzed service earlier, in May 23, 1973, demanding fare increases and subsidies to buy imported spares and vehicles. See (González Pino and Fontaine Talavera 1997 p. 645-646)

428 "The growing economic problems, acts of sabotage and terror, and the near paralysis of the country triggered by the truck owner's strike, contributed to the determination of the generals to take the country's destiny into their own hands" (Kaufman 1988 p. 131). See also (Alexander 1978 p. 301-305).

429 See, for example, Frei Montalva's letter to the president of the World Union of Christian Democrat Parties (Frei Montalva 1974).

430 In addition to having taught many of Pinochet's advisors, Friedmann visited Chile as a government advisor in March 1975, recommending the need for "shock treatment" to eliminate inflation (Oppenheim 1999 p. 121; Collier and Sater 1996 p. 365)

431 (Huneus 2007 p. 2-3)

432 (Collier and Sater 1996 p. 366)

in the mountain slopes surrounding Santiago.⁴³³ These measures liberalized the urban land market and accelerated sprawl. When it came the turn of public transportation, the shift was just as profound: Pinochet reduced to a bare minimum the role of government as provider, planner and regulator of services.

To be sure, publicly owned transit agencies supplied only a small fraction of public transport services in Santiago at the time of the coup. In 1968, President Eduardo Frei Montalva had approved a comprehensive plan to build a subway system comprising 5 lines and 62 kilometers of rail track by 1980, and to simultaneously reorganize all bus routes in the city.⁴³⁴ Construction of the first two subway lines had indeed begun in June 1969 and October 1973, respectively.⁴³⁵ However, the combination of subway construction costs proving to be significantly higher than expected, and Pinochet's distaste for such a large scale government-run endeavor, stripped out the surface transport component of the plan, and significantly slowed down subway construction. The first 8 kilometers of line 1 -barely enough to make a much of an impact in a rapidly growing city- would not be open to the public until 1975. Only that year, subway construction costs absorbed 29.7% of the total national public works budget, and similar proportions would persist in subsequent years.⁴³⁶ Line 2 would not open until 1978, and the project to build line 3 would be postponed indefinitely in 1985⁴³⁷. Budgetary limitations had also prevented governments prior to Pinochet from expanding services provided by the Empresa de Transportes Colectivos del Estado (ETCE) -a public bus and trolleybus company with roots in

433 (Pavez Reyes 2009; Zegras and Gakenheimer 2000 p. 55)

434 (Ministerio de Obras Públicas y Transportes 1968). The consortium presenting this plan to President Frei Montalva was composed of the Bureau Central d'Etudes pour les Equipements d'Outre Mer (BCEOM) and the Société Française d'Etudes et de Realizations de Transports Urbains (SOFRETU) from France, and by CADE-Ingenieros, from Chile. For details of the origins of the Metro plan, see (Morales 1988). A 1969 evaluation alerted that the plan represented "both a political and an economic problem... since the decision to dedicate these resources to public transport in Santiago implies sacrifices in other areas of national investment" (Gakenheimer et al. 1969 p. 33).

435 (Cadiz 2007)

436 (Morales 1988)

437 This decision had been long discussed within government circles, particularly after the 1982 devaluation of the Chilean peso, that brought its value down by 88% (Collier and Sater 1996 p. 371). However, it was not until an earthquake shattered the central region of Chile in March 1985 that the Chilean government formally announced its decision to shift its investment priorities away from the subway.

the 1945 expropriation of the electric trolley system.⁴³⁸ At the time of the coup, ETCE struggled with an insufficient fleet of 710 buses, approximately 35% of which was routinely out of service awaiting for repairs and spare parts.⁴³⁹ Even in its heyday, ETCE served only 9% of the travel demand in Santiago⁴⁴⁰. Thus by the early seventies ETCE's buses were complemented by approximately 2,500 buses and 1,500 taxi buses (known as "liebres," avg capacity: 20 passengers), operated by hundreds of individual entrepreneurs, each owning one to two vehicles, on average⁴⁴¹. These small-scale private operators emerged spontaneously in the 1920s and 1930s, originally employing improvised vehicles dubbed "góndolas,"⁴⁴² that multiplied rapidly amidst the frequent worker strikes and limited reach of the trolley company.⁴⁴³ These private operators soon organized as "líneas," to establish informal property rights over routes, determine service frequencies and homologue fares. Over time, however, their incipient rules were adopted and legitimized by the state, so that by the time of the military coup private operations were actually tightly regulated⁴⁴⁴. The central government established fares, authorized routes, and controlled market entry by means of permits. Also, since the market was closed for imports, private operators were often dependent on authorities to obtain spares and new vehicles. Private operators had to buy ticket rolls from the state bank, a mechanism designed not only as an efficient way to tax operators and to keep tabs on their accounting ahead of periodic fare negotiations, but also to prevent the emergence of informal services. According to Estache and Gómez Lobo, this period was characterized by "chronic shortage and low quality of services" (2005 p. 140).

The Military Junta created the Ministry of Transportation and Telecommunications (MTT) in July 1974, charging it with "materializing the Junta's transportation plans and

438 The private electric trolley company was first intervened in May 1941, after a protracted worker strike that paralyzed transit services for several days in Santiago. Workers demanded wage increases, and in turn the company demanded either a subsidy or a fare increase from the government. Intervention did not solve the economic problem underlying this conflict, partly explaining why authorities resorted to "tolerating" informal private bus operators to complement services.

439 A 1973 government press release admits 25% of ETCE's fleet out of service for repairs. See (González Pino and Fontaine Talavera 1997 p. 645). The 35% figure is taken from (Coeymans J.E et al. 2008).

440 (Fernandez 1994)

441 According to Fernández and Muñoz (2007 p. 28), average firm size varied between 1.4 and 1.5 vehicles.

442 (Collier and Sater 1996 p. 296)

443 At its peak in 1930, the electric trolley network in Santiago carried approximately 200 million passengers. By 1958, this mode only carried 15 million passengers (Morales 1988 p. 21).

444 For a short history of this period, see (Figueroa 1990).

programs.”⁴⁴⁵ Deregulation of the public bus industry began in 1975 with the relaxation of requisites to participate in the market, and with significant budget cuts to ETCE. However, the project gained momentum in 1978 with the appointment of José Luis Federici, an economist trained in the USA, as head of the MTT. Previous to taking on this responsibility, Federici was charged with streamlining the state owned railroad corporation, EFE, by laying off approximately 14,000 workers.⁴⁴⁶ By the end of Federici’s tenure at the MTT in December 1979, anyone with a suitable vehicle could once more become a public transportation entrepreneur, design routes and determine service frequencies. This process was paired with Pinochet’s urban land reform, which enlarged the boundaries of Greater Santiago, opening up vast sways of farmland for real estate development. Soon massive *comunas* for poorer populations emerged in Santiago’s periphery⁴⁴⁷, and their transportation needs were swiftly covered by spontaneous private bus and taxi bus operators. According to one of them, “the only rigidity of the system was applying to operate a service, practically always authorized. Absolutely nothing else. Quality of service controls were non existent, and there was no supervision over our operations. Everything was non regulated.”⁴⁴⁸ The Chilean government dissolved ETCE in 1981, with many of the old buses sold to former workers of the company as part of a purported government effort to promote “popular capitalism”.⁴⁴⁹ Fares were fully deregulated by 1983⁴⁵⁰. Except for discounted student fares, which continued to be set by the government, operators could modify fares by simply advertising changes on their windshields. That year, the tax on real sales previously paid by operators was replaced by a lump sum tax (“*renta presunta*”, computed as 1% of the replacement value of the vehicle), and the requirement to buy ticket rolls from the state bank eliminated. Between 1977 and 1982, the Pinochet Regime also liberalized the importation of vehicles and spare parts from abroad, a policy that certainly increased the number of vehicles available, and

445 Decreto Ley 557/1974

446 (Barria Reyes 2008)

447 (Oppenheim 1999 p. 152-155)

448 Dosque, Simón. Personal interview. 15 June, 2012. The quote is consistent with the description offered in (Fernandez 1994 p. 167): “The Transport Ministry kept the power to authorize through a resolution the acceptance of new vehicles on existing routes or the incorporation of totally new routes, but it never denied an incorporation application, except for formal reason.”

449 This policy was employed in the privatization of many state owned companies. For a discussion, see (Huneus 2007 p. 314-317).

450 Fares were first liberalized via the Presidential Decree No. 320, dated November 2, 1979, and fully deregulated by 1983.

lowered the investment cost required to enter the industry.⁴⁵¹ Furthermore, collective action by workers was profoundly weakened through “anti-union practices enshrined in the authoritarian labour code”⁴⁵², reformed in 1978 and 1980, which allowed vehicle-owners to pay low salaries and establish exploitative work conditions. The climax of bus deregulation came March 30, 1988, with the passage of Law 18.696. Article 3 stipulated that “remunerated transportation services... will be allowed without requiring any authorization, sufficing to have a certified technical revision that establishes that the vehicle is apt for the service it provides.”⁴⁵³ Advocates of these reforms believed that the absence of government regulation would result in reliable and efficient service, “under the assumption that free entry would reduce fares and that lower fares would control entry.”⁴⁵⁴

As a result of deregulation, supply of public transport services in Santiago certainly increased. Between 1977 and 1990, the number of buses and taxi buses in Santiago increased 266%, from 4,760 to 12,678,⁴⁵⁵ while passenger demand remained relatively stable at an average of 1,050 million passenger trips per year.⁴⁵⁶ Approximately 30-35 thousand people were employed in the bus transport sector, including 18,000 full time drivers, 12,000 part time drivers and about 1,000 route assistants, known as *sapos* (toads). The transit network expanded organically, with the number of bus routes increasing from 80 in 1979 to 110 plus 325 variants in 1989,⁴⁵⁷ and with the average route length increasing from 37.1 kilometers in 1976 to 47.38 kilometers in 1984.⁴⁵⁸ The network became so dense that it was possible to hail a bus after

451 (Paredes, Sanchez, and Sanhueza 2001; Morales 1988)

452 (Taylor 2006 p. 64-67 and 107). Among the key points of the labor reforms under Pinochet were employer’s right to fire workers without reason and to hire replacement non unionized workers during a strike. The reforms of 1978 and 1980 actually softened early decrees by the Junta. Decree Law 198/1973 banned union elections and collective bargaining over new contracts until further notice, and required unions to report planned meetings to the police 48 hours in advance. This decree stayed in place until 1977 (Alexander 1978 p. 426-430). For a discussion on the diminishing power of worker unions under Pinochet, see (Angell 1991; Oppenheim 1999 p. 175-176).

453 (Ley 18.696, Chile)

454 (Paredes and Baytelman 1996 p. 200)

455 (Paredes, Sanchez, and Sanhueza 2001). While figures reflecting the size of the bus fleet vary slightly according to the source consulted, the trends are consistent. Other sources with vehicle fleet size estimations are (Figueroa 1990; Estache and Gomez-Lobo 2005; Diaz, Gomez Lobo, and Velasco 2004).

456 (Fernandez 1994)

457 (Darbera 1993)

458 (Morales 1988 p. 38)

waiting an average of 3 to 4 minutes⁴⁵⁹, and to reach most major destinations without transferring to a different bus. The number of operator organizations participating in the industry also increased, from 79 *líneas* in 1980 to 108 in 1990.⁴⁶⁰ The aesthetics of the system changed with deregulation. ETCE's green buses were replaced by multicolored chromatics that identified different *líneas*. Not only did average wait times and distance to bus routes dropped, but average vehicle capacity utilization was reduced to 55% for buses and to 32% for the smaller taxi buses."⁴⁶¹ This meant that users were much more likely to find a seat -even at peak periods-, and thus travelled more comfortably. And perhaps most importantly, these noticeable improvements were achieved mostly without government subsidies.

However, deregulation also produced a range of problems. Lax vehicle standards led to an increasingly old and poorly maintained fleet, mostly running on highly polluting diesel. By 1988, there were more than 400 different kinds of vehicles offering service⁴⁶², and the average vehicle age increased from 7 to 12 years for buses and from 5 to 10 years for taxi buses.⁴⁶³ According to Fernández (1994), 71% of the material emissions with breathable particles found in Santiago's atmosphere during this period came from public transport vehicles. The city became clogged, as 80% of bus routes overlapped in only six main avenues, and most buses entered the city's central core.⁴⁶⁴ At the same time, less profitable areas in the periphery were severely neglected. Since drivers were paid a low base salary plus a percentage of daily revenues, they engaged in cut-throat, curbside competition for passengers, which significantly impacted accident rates. In short, public transportation became one of the main contributors to air pollution, congestion and accidents in Santiago.⁴⁶⁵

459 (Figueroa 2013 p. 90; Estache and Gomez-Lobo 2005 p. 142)

460 (Figueroa 2013 p. 90)

461 (Cruz 2001)

462 (Fernandez 1994 p. 169)

463 (Figueroa 1990)

464 (Malbrán 2001)

465 To be sure, public transportation was not the only cause of transport related externalities in Santiago. Motorization rates surged in this period, as a result of General Pinochet's decision to liberalize the import of private vehicles.

Counter-intuitively, fares more than doubled in real terms, from Ch \$51.3 (US \$0.13) in December 1979 to a peak of Ch \$125.5 (US \$0.33) in June 1990.⁴⁶⁶ Part of this increase has to do with economics: In an atomized market every bus appearing at a stop holds a “pseudo monopolistic” position. Operators are able to increase fares without losing much ridership, since passengers face a structural incentive to pay the surcharge. Once a “high fare” bus appears, many passengers will tend to board it, given the uncertainty of how long they would need to wait until a “low fare” bus appears. This, over time, acts as an incentive for all buses to increase fares. Furthermore, even if demand was so elastic that lower fares resulted in significantly increased passenger demand, operators couldn’t possibly capture the potential gains. Since buses and taxi buses have limited capacity to accommodate additional passengers, additional revenues from this strategy are limited.⁴⁶⁷ In fact, by raising fares, operators actually managed their capacity constraints. According to Figueroa (2005), per bus average ridership fell as a result of pinochetista reforms: the number of passengers per bus per year in Santiago was 32% lower in 1989 compared to 1978. In contrast, their business thrived. During that same period, the average revenues per bus per year increased almost 50% in real terms.

The negative externalities and the increase in fares discussed above are a function of the industrial structure that emerged from government deregulation. To be sure, informal, private, regulation of services persisted, similar in kind to the agreements that had originally justified the creation of the *líneas*, with little intervention from state authorities. As Figueroa (1990b, 24) concluded in his early analysis of this period, “the abolition of the state’s regulatory role as guarantor of this public service gave place to *private*, unchecked regulation and to the hegemony of transport operators, leading to an activity dominated by private objectives.” As we will see, the private operator industry was gradually constituting a cartel.

Trade associations and federations: A free market that wasn’t so free

Pinochet’s advisors believed that in a free market, the *líneas* would professionalize and optimize their operations to slash costs and gain a fare advantage. In theory, inefficient organizations would be priced out, or at the very least have their membership rolls streamlined.

466 Figures by (Fernandez 1994), expressed in 1992 Chilean Pesos. Conversion by author, using 1992 exchange rate of US \$1=Ch \$380.22.

467 For a detailed explanation of the economic model that underlies this logic, see (Fernandez and Muñoz 2007). An alternative offered to explain the increase of fares during this period is the increase in fuel prices. This explanation is not persuasive, since except for 1985, the price of oil was higher in 1979 than any of the following years until 2000. See (Diaz, Gomez Lobo, and Velasco 2004) for further discussion on this.

However, once the *líneas* replaced the state as the true regulators of service, the risk of being displaced by competitors radically diminished. After all, consolidated, specialized, “modern” operators were unlikely to contest their market dominance. On the one hand, no such players existed in Chile at the time, and on the other, the market was rapidly saturated by thousands of “micro bus” and “taxi bus” operators. Instead, deregulation made this industry attractive for thousands of middle to lower income Chileans who feared losing their jobs as a result of the ongoing liberalization in other sectors of the economy. They approached the *líneas*, seeking to include their vehicles into existing routes, or to gain employment as *sapos*, drivers or mechanics.

To formalize their activities, *líneas* constituted as “asociaciones gremiales” -trade associations-, a figure inserted into Chilean law in 1979 that enabled members to participate jointly in a productive activity without necessarily sharing ownership of productive assets employed.⁴⁶⁸ These “not for profit” trade associations served four main purposes: 1) establish informal property rights over a particular set of bus routes, 2) coordinate members to offer regular, stable service, 3) pool resources to gain access to basic services or common infrastructure, and 4) represent member interests when dealing with other trade associations or with the government. The typical union was named after the points of origin and destination of the *línea* that had originated it. However, as membership increased, trade associations opened up additional routes and variants. By the end of the eighties, the largest public transport trade associations in Santiago were the Maipú-Cerrillos, led by Juan Pinto, the Ovalle-Negrete, led by the Marinakis Family, and the San Cristóbal-La Granja, led by Manuel Navarrete, each with several hundred members. Most of the remaining trade associations were much smaller, typically comprising 30-40 buses owned by approximately 20 individuals.⁴⁶⁹

468 The concept of “asociación gremial” was promoted by Jaime Guzmán, one of the key civilian advisers to Pinochet, and included into law in 1979. Conceptually, it unified small business organizations and professional associations, distinguishing them from unions that represented workers. For details on the “gremialista” movement, see (Huneus 2007, chapter 7). For the remainder of this text I will refer to the asociaciones gremiales of private transport operators as “trade associations.”

469 These figures were reported by Carlos Román (personal interview), and confirmed by several other sources, including Demetrio Marinakis and Juan Pinto.

Trade association members working in the same route coordinated their fares, and painted their buses in the same color.⁴⁷⁰ Membership provided access to basic services, such as bus dispatch at terminals. These organizations also protected members from internal and external competition. For example, *sapos* were deployed at various points along a route to ensure drivers maintained appropriate headways, and to alert about the presence and location of buses from rival organizations.⁴⁷¹ Conflict between organizations certainly occurred. When two unions claimed the same route, authorities tried to mediate and suggest alternatives. However, as acknowledged by former trade association leader Dominga Nogales, “we frequently accepted only half of the suggestions and invaded other routes, and it was then when problems began: The crashes, the races and all else”.⁴⁷²

To survive and thrive in such market, individual operators needed to find strength in numbers. Joining an organization with sufficient sway and muscle was so critical, that buses sold in the market at a significant price premium when affiliated with a major organization. Similarly, smaller trade associations sought alliances with larger organizations, forming federations. Optimization of resources was not a priority, as organization leaders found that it was more important to expand their influence and power by growing their membership base. Larger organizations could control larger territories, access a larger pool or common resources, and were more likely to establish alliances with other organizations. The result was a very hierarchical system, where every player -from *sapos* to *línea* leaders- knew their place.

By the end of the eighties, there were 106 trade associations in Santiago, aligned under 6 different federations. The largest were the Asociación Gremial Metropolitana de Transporte de Pasajeros (AGMTP, known informally as “*la gremial*”), and the Federación Gremial de Dueños de Taxi Buses de Santiago (FGDTS, known informally as “*la federación*”). The former originally affiliated mostly bus owners, while the latter represented owners of taxi buses, but this distinction faded over time. Paradoxically, as this consolidation took place, the public transportation industry in Santiago remained highly atomized. By 1989 there were 3,900 “one

470 Dominga Nogales, former operator and leader of one of these associations, recalls: “A typical passenger arrived to a street-corner and found 40 taxi buses, all looking alike, and could hardly distinguish which to take home. This is why we established a common color for each *línea*. Ours was white with dark and light blue stripes. Each *línea* picked a different color, made things simpler.”

471 While *sapos* earned their income from tips paid by drivers, they were usually affiliated to a particular association.

472 Nogales, Dominga. Personal interview. 13 July, 2012.

vehicle” owners out of a total of 6,200 operators, with an average of 1.8 vehicles per owner.⁴⁷³

Demetrio Marinakis, for a long time president of the AGMPT, recalls: “Here everybody was an artisanal mini-entrepreneur, as most had only one, two, three machines. I had 1,500 partners, each responsible for fixing their own buses and hiring their own drivers, and yet everything worked out. We had the most disordered order.”⁴⁷⁴

Of course, one of the key factors explaining the incentive to expand the membership base in each trade association, was that more members paid more dues. In addition to the one-time entry fee attached to each bus (sometimes reaching as much as US \$3,000 dollars), trade associations typically charged members a daily due per vehicle, in the form of a quota called “planilla”, that provided access to dispatch terminals. This quota varied by route, but was not trivial. In turn, each trade association contributed financially to its federation, often through a monthly payment intended to cover administration costs, and to pay for services offered to affiliated members. In addition to these fees, the AGMTP and the FGDTs financed themselves through two additional sources. The first was the sale of “carnets” to students, required by drivers on board buses to grant the discounted fares. Students had to renew their carnets yearly, or pay full fares. The second source of additional revenue was the sale of ticket rolls to individual bus operators, a function that was taken by the federations when government authorities determined that purchasing them from the state bank was no longer mandatory.

The amount of resources pooled by the trade associations and their federations were significant, enabling the leaders of these organizations to undertake more complex activities. For example, the largest federations established insurance-like programs, offering vehicle repair and legal representation services to members involved in accidents. Some developed ‘mutual help’ funds, available to pay for funerals or other personal emergencies. Many offered medical care to members and their families. Dominga Nogales recalls, “The Federation manufactured and sold ticket rolls to affiliated *lineas*, and charged a margin for each roll to finance itself. We therefore had spare money. This is when we created a medical department, equipped with doctors and dentists. This service lasted decades...” “As trade associations, we could purchase real estate, build

473 (Fernandez 1994)

474 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

our own terminals, build a casino. At our *línea*, we employed a full time mechanic and a painter. I installed a gas station in our terminal and purchased gas wholesale.”⁴⁷⁵

Each trade association elected a governing structure, usually comprising a president, vice president, treasurer and three to seven directors.⁴⁷⁶ The president was in charge of “*solving problems*.” They would talk to police in case of accidents, negotiate agreements with the presidents of other *líneas*, and seek discounts from spare part suppliers on behalf of members. These actors concentrated significant power within their organizations. They had access to information about who wanted to buy or sell buses, and weighted on whether a new member should be accepted. They decided whose buses could operate on the most profitable routes. In most cases, *línea* leaders had a lot of discretion on the use of common funds, and many exploited them for their personal benefit. Each federation elected a similarly structured governing body. Federation leaders had access to higher level public officials, and negotiated with supply wholesalers. While not critical, being active in the politics of your organization was important to ensure financial success.

Unanticipated outcomes of *laissez faire*

The hands-off approach adopted by the Pinochet government enabled trade associations to dissuade large firms from entering the market, and to limit participation to members going through the ranks, to establish and sustain an informal system to coordinate fares and divide the territory, and to reward rent-seeking behavior. Each of these unintended outcomes is briefly summarized below:

- **Dissuasion of large firms from entering the market**

Trade association leaders knew that better capitalized firms could displace them. Demetrio Marinakis described the proactive approach taken to prevent this possibility: “As a *dirigente*, I told members that the only way to keep large entrepreneurs out of our market was to ensure that profit and liquidity levels in the business remained at a low percentage. We have a lot of wealthy people in Chile, that could enter the sector. My thought was always that we needed to maintain low profit margins in order to dissuade the appetite of moneyed individuals.”⁴⁷⁷ A key

475 Nogales, Dominga. Personal interview. 13 July, 2012.

476 The description offered in this paragraph is based on interviews with trade association leaders such as Orlando Panza, Demetrio Marinakis and Juan Pinto.

477 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

strategy to implement this policy was to deliberately increase the number of buses operating in Santiago. Despite lowering the profit levels of individual bus owners, flooding routes benefited the trade associations and the federations, as they financed themselves from dues from members. More members implied collecting more dues, and control over larger territories.⁴⁷⁸

To outsiders, this industrial structure seemed like a saturated, chaotic market. Many potential investors surely concluded that participating in the public transportation market as a bus operator was a risky, marginally profitable, venture. As summarized by Fernández (1994 p. 171), “the system lacked a framework of basic rules, establishing the conditions that an eventual private investor should follow, with clear and stable rules of the game.” However, those participating in the socio-organizational labyrinth of the trade associations, found a clearly delineated career path to follow. New trade association members typically emerged from within the organization. “Sapos” became bus drivers, and bus drivers eventually bought an old bus from their employer. Then, as members, they participated in the plethora of committees that conformed the government of the trade association, not with the objective of becoming the captains of a large transportation company, but of gaining more responsibilities within the union. As such, members groomed into the organization were from the start invested in preserving, rather than challenging the existing power structure.

• **Fare inflation**

As previously discussed, deregulation amidst industry atomization creates a structural incentive to increase fares.⁴⁷⁹ However, decisions about the timing and the magnitude of fare adjustments still require coordination, provided by trade associations and federations. Furthermore, since an increasing number of routes overlapped in key avenues, almost instantaneous comparison of fares was indeed possible. To prevent a fare war, the leaders of stronger organizations colluded, pressuring weaker organizations into modifying fares to their preferred level at the agreed moment. Once agreement was reached about how much to charge passengers, *línea* leaders ensured the fare was respected by members of their organizations. Juan Pinto describes the mechanism: “We talked. A group of friends would meet, and someone at the

478 Of course, this strategy did not benefit individual vehicle-owners. One of them recalled, “there was competition within our own línea, because too many buses worked on it. My drivers fought against the others to maximize revenues. We had to compete within our línea! And against any other líneas that overlapped our streets! There were over 400 Líneas!”

479 (Fernandez and Muñoz 2007)

table would say ‘we are short on cash, so the fare is going up by 10 pesos’. When someone resisted, we simply asked ‘are you going to raise them or not?’. At the end, everybody adjusted their fares, some happy and some scared, but the fares were adjusted and the city worked”.⁴⁸⁰

As a result of these agreements the fares in Santiago were mostly flat, and did not account for the length of trip, demand levels on different routes or quality of the vehicle.⁴⁸¹ This fare structure certainly raised suspicions of collusion among government authorities, but Pinochet’s Antimonopoly Preventive Commission never took action against the cartel, due to “its inability to demonstrate satisfactorily the existence of agreed (monopolistic) behaviors”⁴⁸². In fact Paredes and Baytelman (1996) reviewed more than 20 collusion-related complaints against bus operators, discussed in Pinochet’s Antimonopoly Preventive Commission between 1982 and 1994. Trade associations threatened individual bus operators resisting fare hikes with expulsion from their organization, or “punished” them by reassigning their vehicles to less profitable routes. The Commission typically ruled against the plaintiffs, arguing that even in the face of expulsion, the affected operator could lower its own fares if so desired. While technically true, such belief was tremendously naive.

• **Territorial division and institutionalization of conflict resolution**

The *líneas* defended their territory from competitors, initially by force. “Collision denunciations, physical aggressions, and damaged windows and seats, were common. These practices, even when they are not necessarily generalized, have dissuasive consequences, mainly if they are easy to commit and are difficult to control or demonstrate in court”.⁴⁸³ However, once the cartel was fully structured, disputes could be settled in a more civil (but still forceful) manner. Demetrio Marinakis, who served as president of the AGMTP, recalls: “When one *línea* elongated its route and affected the interests of another, I simply called their leaders into my office, and got them to agree on what I considered just... we had no conflicts because we were united.”⁴⁸⁴ Conflicts existed of course, only the federations of trade associations created a forum to institutionalize negotiations and enforce resolutions.

480 Pinto, Juan. Personal interview. 27 July, 2012.

481 This was different from Valparaiso, where the presence of a trolleybus company, unaligned with the cartel, acted as a fare regulator.

482 (Fernandez 1994 p. 170)

483 (Paredes and Baytelman 1996 p. 204)

484 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

• **Rent seeking**

The trade associations provided vehicle insurance and maintenance, legal representation and health services, which were very valuable to members. Once these services became established, the cost of exiting the system grew further, leaving few to question the need to pay membership dues to finance them. Soon, the management and financing of such activities became an additional source of income and power to many leaders, often more than their own activities as vehicle-owners. They provided access to side deals and commissions, and control over a large patronage network. The personnel hired to deliver these services quickly became part of a bureaucratic structure that reinforced the control of the *dirigentes* over their organization. As the value of controlling an organization became clear, the power of the *dirigentes* in each trade association grew, and so did their ability to extract rents from the system.

Strong enough to challenge Pinochet?

The stated commitment to free market principles did not mean that government authorities and private operators did not negotiate under the dictatorship. Demetrio Marinakis, who served both as president of the AGMTP and as president of the Consejo Superior, recalls: “We thrived under the military regime because the military regime did not mess with us. In fact, we were among the first to hold a strike under the military regime.”⁴⁸⁵ To be sure, there were service stoppages even under Pinochet, but these were *not* designed to challenge the regime, but rather to get its attention regarding service related concerns. For example, bus operator organizations stopped service in 1984-5 to demand exemption from the vehicular restriction policy implemented in Santiago, and to demand less discretionary mechanisms for pollutant emission testing. However, it is also true that as social unrest in the country grew, Pinochet’s civilian Minister of the Interior, Sergio Onofre Jarpa, interceded with military officials serving as MTT ministers on behalf of bus operators.⁴⁸⁶ They frequently conceded to bus operators’ demands, probably as a deliberate strategy to prevent them from joining protests occurring

485 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

486 Under Pinochet, the MTT had seven different ministers, five with a military background. This in stark contrast to other cabinet posts, like the Ministry of Economy or Finance, overwhelmingly dominated by civilian technocrats. For a discussion on the composition of Pinochet’s cabinet see (Huneus 2007 p. 207-213).

amidst the severe economic crisis that affected Chile during 1982-3⁴⁸⁷. That year, official unemployment rates stood at 19.6%, despite a massive temporary work program (the PEM, “programa de empleo mínimo”) implemented by the regime. The seeds of grass roots opposition to Pinochet were planted amidst this crisis,⁴⁸⁸ and bus operators used the occasion to request and obtain financial support from the government. While the Pinochet administration consistently denied their pleas for operational subsidies, it did authorize US \$80 million dollars in credits at preferential rates for operators to purchase new vehicles, renegotiated bus and taxi bus owner’s outstanding debt with banks (offering government backed guarantees), and authorized discounts in fuel prices.⁴⁸⁹

In 1988 -the same year Chile held a national plebiscite to decide whether or not General Pinochet should continue in power for eight additional years- the AGMTP and the FGDTS joined to create the Consejo Superior de Transporte (Superior Council of Transportation). Operators created this umbrella organization to increase the leverage of trade associations when dealing with government authorities.⁴⁹⁰ This was a period of mounting political tension, linked to the uncertainty surrounding the plebiscite, and to the rising social costs of the regime’s economic policies. As the iron grip held by the military over the rest of Chilean society weakened, relatively frequent acts of sabotage against the regime took place, and some of these events ended up with buses burnt down. After all, the low quality of bus services and the high price of fares was identified as part of the policies of the regime⁴⁹¹. At least on one of such occasions the *Consejo Superior* ordered members to stop service for a day, demanding that the Pinochet administration increase policing on the streets, and requesting government coverage of the damages. When authorities granted this request, trade association members certainly took advantage. Juan Pinto recalls, “basically, the Pinochet government agreed to compensate the owner of any machine that was burnt, and we exploited this. I had colleagues who burnt their own buses when they were

487 In this period there was unrest in among labor and small business interests: On the one hand, the copper worker union struck in 1983, and on the other small businesses threatened with paralyzing services. For a description of the “entrepreneurial revolt,” see (Campero 1991p. 140). However, these forces never joined, partly due to a “stick and carrot” strategy implemented by Pinochet: Sticks to workers, carrots to groups like the trade associations.

488 (Huneus 2007 p. 365; Oppenheim 1999 p. 176-177).

489 (Fernandez 1994 p. 168; Huneus 2007 p. 369-371, 389)

490 (Darbera 1993 p. 53)

491 In fact one TV ad used by the “Campaign for NO” in the 1988 plebiscite featured a citizen unable to board a speeding, smoke-exhausting bus.

short on cash... They got paid Ch \$20 million (US \$81,756) when the machine actually cost Ch \$10 million (US \$40,878). They used these funds to pay their debts and to buy another bus. Mischievous.⁴⁹²

Bus operator federations built an aura of invincibility around them, partly as a result of a growing perception that they could get away with abusing both citizens and the government, and partly due to the sheer number of people participating in the industry. The importance of the *Consejo Superior* as a political instrument to protect bus operator interests only grew as the transition to democracy became a real possibility. This unifying body allowed bus operators to participate in high level discussions about the future of the country, and linked its leaders to decision-makers in both sides of the political dispute. The Consejo Superior had a seat within the Multigremial de Transporte, a national organization of transportation business interests, led by the politically powerful truckers, whose strike had triggered the military coup in 1973. It also had a seat in the Confederación de la Pequeña y Mediana Empresa, the national organization of small industries, commerces, and small exporters. Both of these organizations were concerned about the potentially disruptive impact of regime change, and kept lines of communication open with key players in both sides of the political spectrum. While the Consejo Superior was careful never to issue a full blown endorsement of the forces opposing Pinochet, there is some indication that trade associations felt sufficiently secure that their interests would not be affected if the dictatorship ended. In fact, former trade association leaders interviewed in the course of this research claimed personal connections to key opposition figures during this period, and stressed that they actively used their buses to mobilize voters in the 1988 plebiscite.

The return of democracy

Throughout his government, Pinochet claimed that Chile would have a transition to democracy, except it never came. In 1980, his government organized a plebiscite, asking whether the country should have elections or keep the military in power for eight more years. The left-leaning parties had been banned and dissolved, and it was the DC that led the campaign against the general. It did not matter. Pinochet had such a grasp over the country -not only controlling the media and government spending, but the feared *Carabineros*- that he easily won. Eight years

492 Pinto, Juan. Personal interview. 27 July, 2012. Conversion to US \$ added by author, using the December 1988 exchange rate (US \$1=Ch \$244.63).

later, the country had suffered from a terrible economic crisis, the opposition to Pinochet was better organized, and it was time to vote again. The “Concertación de partidos por el NO”, a 17-party alliance that for the first time teamed up the christian democrats with the socialists, carried the plebiscite held on October 5, 1988. After the triumph, the Concertación held a primary election, selecting Patricio Aylwin, from the Christian Democrat Party (DC) as its presidential candidate. To be sure, the 38-page government plan set out by the Concertación mostly focused on the items that united, rather than divided members of their broad based coalition: Defense of human rights and reestablishment of democratic institutions.⁴⁹³ Aylwin was careful to ensure that his economic proposals did not suggest anything resembling a radical return of the Allende years. In fact, many Concertación ideologues “were adamant that their new regime would not succumb to populist pressures.”⁴⁹⁴ Rather than overturning Pinochet’s economic agenda -which had resulted in annual growth rates of 7.9% since 1985⁴⁹⁵- the DC-led Concertación sought to ensure that the gains of policies implemented in the prior 16 years were better distributed. It promised “growth with equity.” As Aylwin summarized during a campaign rally, “the meaning of justice is that the advantages of growth, of the diversification of exports, and of the modernization of the economy -all of which is good- benefit not only a small minority, but all Chileans, whose work contributes to the production of this progress and richness.”⁴⁹⁶ On December 14, 1989, the Concertación carried the election, and on March 11, 1990, Patricio Aylwin was sworn in as president. Democracy had returned to Chile.

The public transportation system in Santiago left behind by Pinochet was composed on the one hand, by a subway network with only two lines, 37 stations and 27.3 kilometers of track, operated as a publicly owned corporation with legal, administrative and financial autonomy from the central government⁴⁹⁷, and on the other, by a dense private bus and taxi bus system operated by thousands of individual private operators organized as a cartel. According to Collier and Sater, in 1989 no visitor could fail to notice “that the Santiago smog was one of the most noxious in the

493 Incidentally, this text has no explicit references to the words “city” or “transportation” (Martelli 2011).

494 (Taylor 2006 p. 117)

495 (Huneus 2007 p. 8)

496 For a detailed description of the policy objectives of the Concertación’s first government, see (Boeninger 2008 p. 33-41)

497 Pinochet enacted Law 18.772, removing the subway from the purview of the Ministry of Public Works (MOP), and creating Metro, S.A., an autonomous corporation to build and operate it. Curiously, this Law was enacted on January 28, 1989, only 42 days prior to the change of government. Similar last minute reforms affected the water treatment companies of Santiago and Valparaiso. For more on this, see (Huneus 2007 p. 442).

western hemisphere -caused partly by the sheer rise in the number of automobiles (approaching 1.5 million in Chile by the mid 1990s) and partly by an uncontrolled increase in bus traffic” (1996 p. 375). Little was left from the integrated plan envisioned in 1968, as both modes in fact competed for passengers, to the point that at peak hours roughly 1,500 buses and taxi buses ran on the very same corridor served by line 1 of the subway.⁴⁹⁸ The commitment to inter-modal competition was such, that instead of forcing both modes to complement each other, subway expansion projects and operational subsidies were cancelled to ensure this mode achieved financial self-sufficiency and didn’t enjoy unfair advantage. This of course resulted in a grossly underutilized subway system, and in surging air pollution, congestion, and accident rates on the surface. Many within the Concertación questioned the state’s lack of involvement in the urban transport sector under the military regime, pointing to the market failures and oligopolies that accompanied the ample degree of freedom bestowed on bus operators⁴⁹⁹. Would the new government leverage the economic strength of the country to expand the subway system and re-regulate the buses? Would it expand state capacity to use transportation policy as a tool for “equitable growth”?

498 (Alvarez 1991). According to Collier and Sater, “at the end of the 1980s Santiago was reputed to have as many buses as Buenos Aires, a city three times larger” (1996 p. 375, footnote 12).

499 (Figueroa 2009 p. 11)

Part II. The reinsertion of state regulation (1990-2000)

Forcing the tiger into the cage

The main road in Santiago is Libertador Bernardo O'Higgins, a ten-lane avenue (5 each way) that crosses the city from east to west, running beside the Mapocho River, and providing access to the city's downtown. It is popularly known as "La Alameda", a name reminiscent of colonial times, when it was bordered by cottonwood trees -álamos-⁵⁰⁰. La Alameda has critical importance for efficient passenger transportation in Santiago: Line 1 of the subway runs underneath it, and in the early nineties, it was congested by thousands of minibuses and taxi buses. Héctor Moya, a trucker that had gained notoriety for leading the faction of the iconic national truck and lorry operator organization that announced its support for the return of democracy, and who now served as president of the *Multigremial de Transporte*, received an invitation to meet with newly elected President Aylwin. At that meeting, Mr. Moya was asked to convey to bus operators that profound changes would be coming to the industry with the arrival of the Concertación, and that their cooperation would be appreciated. President Aylwin pointed to the congested, polluted and perilous Alameda, and told Mr. Moya that such service was unacceptable for the Chilean people.

The political context was propitious for sweeping and conspicuous reforms in Chile. This was the first democratic government elected in 16 years, immensely popular, and with a clear mandate to shake things up. Further, public transportation in Santiago was one of the public services that received lowest ratings from the public, an outcome clearly associated to Pinochet's laissez faire. Surely it would be possible to re-regulate transportation services distinguishing "the aspects where contribution from the market is expected and where public regulation ought to take charge of the failures of the market."⁵⁰¹ Intervention in this sector offered a clear opportunity to signal that the new government was at least as concerned about the quality of urban public services as it was committed to national economic growth. For these reasons, President Aylwin instructed his newly appointed head of the Ministry of Transport and

500 The name of this street during the spanish colony was "Alameda de las Delicias."

501 (Figueroa and Orellana 2007)

Telecommunications (MTT), Germán Correa,⁵⁰² to “find deep solutions.”⁵⁰³ Correa rapidly recruited a competent team to strengthen the institutional capacity of the Ministry, and ordered a city-wide origin and destination survey (completed in 1991) to base plans to intervene the sector. Correa prepared an ambitious, overarching reform agenda that included: (1) establishing clear and stable rules to govern privately operated public transportation services, (2) tightening regulation to address transport externalities (congestion, accidents and pollution), (3) establishing incentives for modernizing bus operator management, improving control and supervision mechanisms, (4) modernizing the public transport vehicles and (5) creating economic disincentives for the use of private vehicles.⁵⁰⁴

Mr. Moya recalls talking with the leaders of the major public transport trade associations on behalf of the president: “We tried to build an agreement with the *microbuseros*, that would allow us to work together, by consensus, in meeting the president’s desire to inject order in the system. There was no way”.⁵⁰⁵ After years of deregulation, bus operators felt entitled. Furthermore, they were confident of their ability to block any proposed reform that threatened their business by going around the MTT and negotiating with the heads of more “political” Ministries, such as the Secretary General of the Presidency or the Ministry of the Interior. They had indeed done this to military heads of the MTT under Pinochet. Since transport is a critical service, linked to the everyday governance of cities, transit operators naturally develop relationships that expand above and beyond areas directly tasked with transportation. These relationships serve as “back doors,” used to lobby for or against a particular policy. The leaders of the Consejo Superior utilized these doors seeking assurances that the new government would respect “ownership” of “their” routes. They approached Aylwin’s Minister of the Interior, who was a member of the DC and not a socialist like Correa. They also reached out to senators and congressmen. However, part of the conditions established by the Socialist Party and by Correa to accept responsibility for the MTT under a Christian-Democrat president, was that transportation

502 Germán Correa is a sociologist, trained at UC-Berkeley, and a high profile member of the Socialist Party of Chile, part of the Concertación. Previous to the military coup, he briefly worked in President Allende’s administration, and then went into exile, working in favor of the return to democracy from abroad.

503 (Correa, Germán. Personal interview. 13 June, 2012)

504 (Hohmann and Fernandez 1990)

505 (Moya, Hector. Personal interview. 21 June, 2012)

concerns would be resolved exclusively at his desk. This agreement was upheld, and for this reason trade association leaders were turned back and forced to acknowledge Correa's authority.

When Correa met with the leaders of the AGMTP for the first time, at his ministerial office, one of the trade association leaders scoffed at the suggestion of changing the rules that govern the system: "Many Transport Ministers have sat in your chair, while the rest of the individuals present in this meeting have been here for more than 10 years. We will continue to be here after you leave."⁵⁰⁶ Correa responded "I would love to implement the president's orders with your cooperation. That is my purpose here. But if you insist on blocking me, I will implement these reforms against your will."⁵⁰⁷ Such was the start of a very rocky relationship.

To further empower Correa, President Aylwin sent a bill to Congress to modify Article 3 of Law 18.696, shaking the very foundations of Pinochet's free market approach to public transportation. The revised article, enacted December 12, 1990 stipulated that:

"National remunerated transport of passengers, public or private, individual or collective, on streets or roads, will take place freely, notwithstanding that the Ministry of Transportation and Telecommunications (MTT) establishes the conditions and dictates the norms within which these services will function, with regard to the mandatory observance of technical norms and polluting emissions from the vehicles, and regarding the operational conditions of the services of passenger transport and use of roads."

"... The MTT may, in the event of road congestion, deterioration of the environment, and/or of the safety conditions for people or vehicles resulting from vehicular traffic, decree the use of streets for certain types of vehicles or services, through public tender process."

"... Also, the MTT will be authorized to dictate the technical norms that refer to safety and pollution, that enable declaring the definitive technical obsolescence of vehicles destined to passenger transport and its resulting exit from the vehicle fleet."⁵⁰⁸

In other words, private operators now required ministerial authorization to run their services, and Correa was now empowered to grant the exploitation of existing roads, in exclusivity, to whomever won a competitive tender. Furthermore, the Ministry had ample

⁵⁰⁶ Both this meeting and this quote were confirmed by both Mr. Correa and by Mr. Juan Pinto, one of the trade association leaders present.

⁵⁰⁷ (Correa, Germán. Personal interview. 13 June, 2012)

⁵⁰⁸ (Ley 19.011 Chile)

freedom to mandate exit of “obsolete” vehicles from the streets. These were major, radical reforms. Correa reflects on its importance: “The Law entitled *me* to determine the conditions, the Law gave *me* the power to determine if a tender was necessary, *the Ministry* -do you get this? It was a Law that gave me extraordinary powers, with a few lines of text I had all the legal power I needed.”⁵⁰⁹

Working under a new set of rules

The first challenge facing Correa was to reinvent the relationship between private operators and his Ministry. Going forward, the state had formal capacity to unilaterally change technical specifications, route alignments, service levels, and any other aspect of public transport service. However, it wasn’t advisable to forcefully break a system in equilibrium. While the rules in place allowed the Transport Ministry to be profoundly bold, Correa exercised restraint. After all, the transportation system was embedded in a larger social structure that could only be gradually modified. As he put it, “transport operators tend to be a socially deprived sector, with little social recognition, and nonetheless hard working; the *mafiosos* are their leaders, not the operator who repairs his bus until two or three in the morning.” Negotiations about the content of the two main ultimately projects promoted by Correa -a bus retirement program and a tender to award route-based concessions- took place almost daily. “These were very strange meetings in which I negotiated and conceded some points, but also continued to hit them hard. When we fought, they reacted with some display of force, for example by stopping service in a particular *línea*. I responded to such threatening moves by adding two or three additional items of proposed regulation to the discussion...so that the next time we sat at the table I was positioned to concede one or two points, and still come out ahead. My strategy was to slowly corner them, as they knew that fighting the government was not in their best long term interest.”⁵¹⁰ Rather than the details of the regulation, the underlying point was to establish the state as the player with ultimate authority at the table.

An example may illustrate this. One of the trade associations that operated taxi buses had been particularly combative, and refused to attend the meetings at the Ministry. Correa reacted by suggesting in public that taxi buses would no longer be permitted in Santiago. This possibility

509 (Correa, Germán. Personal interview. 13 June, 2012)

510 Ibid.

brought disgruntled operators speedily to the negotiation table. The actual decree eventually published, dated February 1991, was significantly less harsh than the statement had indicated. It banned taxi buses only from La Alameda, which represented a major change, but still demonstrated willingness to compromise.

Bus operators lived through this period with intense frustration. Orlando Panza, then president of a trade association, recalls: “Everything became a conflict after the military government ended. The new socialist authorities wanted the scape tubes in our vehicles to point up, then to point down; they wanted us to switch to petrol that would not smoke, but it smoked because the petrol sold by the market was bad quality. They wanted us not only to change our ways, but to absorb the costs of their proposals, while the state never invested in street paving or in improving petrol.”⁵¹¹ Others took it personally. For example Dominga Nogales -who served as president of the FGDTS for some time- referred to the transportation minister as “evil, very evil, a destroyer of the trade associations” and described his re-regulation efforts as the socialist vengeance against the private transportation industry “since it was us who provoked the military coup.”⁵¹² However, it would be quite a stretch to describe the conditions of the bus retirement program and of the route concession tender that emerged from this negotiation process as aggressive.

An attractive bus retirement program

On December 31, 1990, Correa signed a ministerial resolution stipulating that buses and taxi-buses of models earlier than 1973 were no longer authorized to provide public transportation services in Chile, and that later models required passing a new technical revision to remain in service.⁵¹³ To be sure, the vehicle age limit of 18 years was quite generous. Any strict analysis would consider buses of such age fully depreciated. Yet, the fleet was so old, that this resolution still meant that 2,600 buses (owned by approximately 2,000 individuals) had to exit the system immediately. To mitigate the social dislocation implicit in this reform, President Aylwin promoted a bill in Congress to fund a cash-for-clunkers (*chatarización*) program. Law 19.040, approved January 25, 1991, established a fund to purchase and destroy buses and taxi buses “affected by the measures to retire vehicles from the public transport fleet stipulated by the

511 (Panza, Orlando. Personal interview. 19 July, 2012)

512 (Nogales, Dominga. Personal interview. 13 July, 2012). She was referring to the fact that bus operator organizations in Santiago had joined the 45 day strike against Allende organized in 1972 by the Confederación de Camioneros.

513 (Resolución No. 157 que establece disposiciones sobre la circulación de vehículos de locomoción colectiva)

MTT.”⁵¹⁴ Prices offered were generous: Owners would be paid between US \$2,669 and US \$7,710 dollars per vehicle, depending on the model year. The government’s mitigation efforts also covered potentially displaced workers. To participate in this program, bus owners had to fully pay any pending social security contributions (cotizaciones previsionales) of their employees in full. But in addition, Law 19.040 established that drivers “made redundant as a consequence of the sale of their vehicles to the state” were eligible to receive additional financial compensation from the government. Redundant drivers would receive between US \$445 and US \$949 dollars depending on the number of years worked.⁵¹⁵ This benefit applied also to redundant inspectors, cleaners, and administrative personnel working at the the trade associations. According to Correa, the full cost of this program to the Chilean Government was USD\$14 million.

Several trade association leaders claimed the government’s “generosity” simply acknowledged the strength of their organizations. “When Germán Correa did what he did he paid us. Your bus was sent for scrappage, you relinquished the license plates, collected a green piece of paper, and got Ch \$2 million (US \$5,931), or whatever the bus was worth, and simply used the money to get a new one. Obtaining such concession was only possible because the trade associations were united.”⁵¹⁶ But to be fair, the Law also stipulated that moving forward, any vehicles added to the fleet had to be new, and that any operators surprised providing services with vehicles that had not passed the MTT’s technical revision, or that were older than authorized, would be severely fined. While the average vehicle age in Santiago remained high, the MTT had started a process to gradually modernize the fleet *with* the cooperation of transport operators. The impact was immediately noticeable, as many bus operators did in fact use the money as downpayment to purchase new vehicles.⁵¹⁷

514 (Ley 19.040 Chile). Figures in original source are Ch \$900,000 to Ch \$2.6 million. Conversion by author using the January 1991 exchange rate (US \$1=Ch \$337.23).

515 Ibid. Figures in original source Ch \$150,000 to Ch \$320,000.

516 (Pinto, Juan. Personal interview. 27 July, 2012). Pinto was contrasting this to what happened later, in 2005 with Transantiago, where no compensation was offered.

517 This number, mentioned by Juan Pinto, was confirmed by looking at the “bump” of 1991 model year buses that composed Santiago’s public transport fleet in the early 2000s.

Designing the framework for a negotiated tender

In addition to retiring old buses, Correa used the other instrument available to the MTT since the reforms to Law 18.696: The public tender process. Arguing that most streets in Santiago met the condition of “road congestion, deterioration of the environment and/or of the safety conditions,” Correa set out to tender all bus routes in 1991. Such option may appear forceful, but in reality the bases detailing who could participate and under what conditions were the result of protracted negotiations between MTT officials and private operators. In fact, the conditions finally accepted were structured in such way that only operators already participating in the market would find it attractive to bid.

The rules did not call for a redesign of the transit network nor for the cancellation of redundant or unnecessarily circuitous routes. Instead, they simply formalized the services designed organically by operators during years of deregulation. The bases did not require operators to include new vehicles nor to optimize their fleets, but simply acknowledged the number of buses already servicing in each route as the accepted baseline. They did not force trade associations to consolidate as corporations, and accepted bids presented by trade associations on behalf of their members. The rules established that operators could determine their own fares, except they could no longer increase them beyond a maximum price established in the bases. The fear of cost inflation was assuaged by the creation of a fare

adjustment mechanism included in the tendering rules, designed to periodically adjust for fluctuations in the cost of critical inputs, like fuel. Furthermore, contracts offered by the MTT were very short-term, lasting only 18 months⁵¹⁸. And finally, the rules required interested parties



⁵¹⁸ This term could be extended to 36 months if the vehicle fleet was composed by at least 80% new vehicles, or if 50% of the fleet was owned by a consolidated company and not by individual owners (Figuroa 2013 p. 93)

to have the required bus fleet available at the time of the bid (“*flota presente*”). Both of these final conditions made participation significantly less attractive to new players. In addition to likely concerns about whether or not the state would be able to restrain unauthorized competitors from contracted routes, new investors would need to (a) acquire their buses before knowing whether or not they would win the contract, and (b) develop a business model that ensured a profit in a very short time.

With the benefit of hindsight, many former trade association leaders agree today that this tender process posed little threat. According to one of them, “The new system would maintain the routes that for many years had existed in Santiago. There would be no regulation about the property of the vehicles. We could maintain the individual property of buses and still participate as trade associations. Regulations regarding vehicles would be basic, and no rules would be established about who we could hire as workers and under what conditions. None of that. We would still be free, working under complete informality”.⁵¹⁹ One critic suggested that the most transcendent transformation achieved by Correa during this period, was getting all operators to agree to paint their buses color yellow, and to identify their existing routes by numbers, rather than by their points of origin and destination. The resulting system -popularly known as the “*micros amarillas*”- would consist of the same buses, running on the same long, convoluted and overlapping routes, operated by the same organizations. In other words, while revolutionary at the time, the new rules represented only a slow and gradual expansion of state capacity, preserving much of the status quo. Even if successfully implemented, the tender would not result in new players entering the transit market, in less curbside competition for passengers, or in less artisanal bus operations.

Yet, the negotiated approach to the bus retirement program and to the city-wide tender of bus routes actually made sense. It immediately addressed the most pressing concerns of the public: a) doing something about congestion, b) controlling the increase of fares, and c) reducing the emission of air pollutants. At the same time, it began a previously unthinkable process toward reestablishing the state as planner and regulator of public transportation service in Santiago. Correa reflects on this period: “I knew that it was not politically feasible to move forward by piling changes on top of changes. When you do this the possibilities of defeat and of a bad

⁵¹⁹ (Dosque, Simón. Personal interview. 15 June, 2012)

outcome increase exponentially. You need to make a change, and only when this change is consolidated, move onto attempting the next one. That is, you do need a strategic design that encompasses all, but you can't get to the final objective in one trip". Correa's objective at that time was not to replace the existing bus operators, but rather to contain them. "We had a tiger roaming the streets of the city and we needed to place it in a cage. This unregulated tiger was destroying, killing, causing most of the accidents... our task was to put it in the cage of a state that regulates, of a state that says "this service will not be delivered in such fashion, but in ways that benefit the people".⁵²⁰

Despite Minister Correa's attempts to secure the buy-in of bus operators for his reforms, negotiations soon hit a wall. In early April 1991, bus operators broke talks and scheduled a one-day general stoppage of service throughout Santiago. The tiger was not willing to enter the cage willingly.

The first tender attempt and the first city-wide service strike: Action and reaction

When analyzed from the perspective of trade association leaders, resistance was understandable. The long term survival of the business model of the trade associations depended on preserving an atomized industry structure, where individual operators would retain ownership over their own bus, where routes would remain flooded, and where the purchase of older buses by former drivers served as the main entry point to the market (e.g. a path that allowed leaders to reward discipline and loyalty). While the tendering rules agreed with Correa implied no immediate changes to the existing socio-organizational structure of the trade associations, the process certainly empowered the transportation ministry. Even if only by means of a cosmetic formality, for the first time in years it would be the public authorities and not the leadership of the trade associations, who authorized whose buses serviced which streets. The tender did preserve the status quo, but at the same time carved out more capacity for the MTT, and empowered public officials to attempt bolder changes in the near future. Once the new contracts were in place, trade associations would lose their ability to move into new territories, adjust their operations and increase their fares unilaterally. These losses were not only of rhetorical nature. In order to be awarded a contract, operators would be required to take an onerous bond (*boleta de garantía*), that the MTT could execute if operators failed to meet the agreed terms.

⁵²⁰ (Correa, Germán. Personal interview. 13 June, 2012)

To be sure, progressive trade association leaders recognized that transforming their organization into firms, consolidating membership, optimizing operations, and bidding at a lower fare level to win additional contracts could prove beneficial⁵²¹. However, most were limited by their role as representatives with delegated power. Acceptance of the tender threatened to fuel internal opposition within their organizations, with fellow members challenging them out in assemblies for “selling out”. Most rank and file organization members, both defenders of the status quo (whom I will refer to as “*gremialistas*”) and modernizers (whom I will refer to as “*empresarios*”), soon concluded that the tender was not in their best immediate interest. They realized that once the awarded contracts expired a new tender would probably take place, re-opening the door for the MTT to revisit the rules negotiated with Correa. Regardless of whether they personally opposed or were willing to consider a negotiated reform, the outcome could not be considered sufficiently stable for them to commit to changes, at least not yet. So, instead of participating in the tender, they agreed to strike. On one morning of April, 1991, the people of Santiago saw no buses in the streets.

The city was paralyzed: the subway system quickly collapsed and taxis were unable to handle demand. Smaller cities throughout the country also suffered, as their local transport trade associations stopped service in solidarity. The response of Chilean Governments to public transport strikes before and during the dictatorship, had usually consisted in a rushed search for compromise to reestablish service. This time, however, Correa strategically leveraged service disruption to elicit public support for his reformist agenda.

Correa organized a press conference, not at MTT headquarters, but at the Presidential Palace of La Moneda. He appeared on television screens throughout the country, flanked by the Minister of the Interior, the Secretary General of the Presidency, and the most important members of President Aylwin’s political cabinet. The scene had such formality that any observer would assume the country had been invaded by a foreign power. The press conference was designed to convey a clear message to the trade associations: The fight they had chosen to fight was not be against a rouge minister, but versus the state united. Correa recalls using his speech to frame the leaders of the trade associations and their federations as a mafia, and to describe

⁵²¹ In fact, members of Correa’s team were enthusiastic about eliminating the 2,600 older buses from the streets, as they thought that this measure would be stronger supported by the bus operators that would remain in the system, as they could reap an immediate windfall from less internal competition within their routes.

Presiden Aylwin's reform agenda as "a fight on behalf of the great majority of Chileans who have no alternative to move around the city".⁵²² He stressed that regardless of the strike, bids would be accepted on April 13, 1991 as established in the tender bases. The MTT certainly won the public relations battle. The great majority of Chileans reacted negatively to the strike. Correa recalls, "they gave us the opportunity to expand the conflict, so that it was no longer the usual scenario of bus operators vs government authorities, but a direct confrontation of bus operators vs the public interest". As a result of this strike, the government's transportation reform agenda became immensely popular, and the public pointed to the trade associations as an obstacle for progress.

Partly because of such supportive public reaction, and partly because the stoppage costed money to thousands of bus operators living day to day, service was reestablished the next day. However, the protest had not ended. Operators simply resorted to a different tactic to oppose Correa: Boycotting his efforts by not submitting bids. Bus operators were confident they could not be evicted from the system. As previously discussed, the tendering rules made external competition unlikely, and in the event Correa awarded a route to a newcomer, bus operators pledged to sabotage its entry, by running "pirate" (unauthorized) buses on the same route. This alternative strategy was certainly more effective than the strike. The government tendered 255 routes, covering 85% of the territory of Santiago, and yet only 7 bids (for seven different routes) made their way to the MTT before the deadline. This outcome is certainly a consequence of the socio-organizational logic that still guided decisions within the trade associations: "Collusion was evident, and was obviously organized by the mafia, by these *dirigentes*, who were quite able to punish indiscipline. Whomever broke ranks would immediately be black-listed, never able to find work again in Chile as bus operators. Whomever was blacklisted had to take his bus home, because the news of treason spread. 'Bye. Mr. Pedro Pérez is dead, he will have to eat or sell his bus, whatever, because he is not operating it anymore'. Such was the strength of their organization at that time."⁵²³

In reaction to the boycott, public authorities sought other available instruments to regain leverage. Correa turned to the Chilean Antimonopoly Preventive Commission, accusing the most notable trade association leaders of collusion. This Commission had analyzed more than 20

522 (Correa, Germán. Personal interview. 13 June, 2012)

523 (Correa, Germán. Personal interview. 13 June, 2012)

similar accusations during the Pinochet regime, almost always dismissing the case.⁵²⁴ While the Commission investigated, members of the Aylwin cabinet started to question whether Correa's "negotiated" approach made sense. At least one alternative project was on the table: President Aylwin formally announced that his administration was committed to building a new subway line. It is at least indicative that this announcement came soon after the failure of the 1991 bus route tender, and despite the fact that Correa was on record opposing the project.⁵²⁵ In any case, the Commission ruled on September 12, 1991, that the trade associations had engaged in anti competitive behavior, and ordered the MTT to call for a new tender.

The second tender attempt and the collusion of bus operators.

Consistent with his previous strategy, Correa reacted to the tender boycott by tightening regulations. On August 1991, he signed a decree stipulating that buses older than 12 years (manufactured before 1979) and taxi buses older than 10 years (manufactured before 1981) would no longer be permitted within the city's congested downtown⁵²⁶. He also announced the creation of the National Registry of Passenger Transport Services, establishing that any bus offering public transport services had to be registered. Perhaps more aggressively, he modified the language of the tender rules, so that new entrants could participate. "Since they did not want to participate, the second tender would be open to anyone. I modified two lines of the tendering rules, and with that simple change anyone could bid. Instead of demonstrating ownership of the bus fleet at the time of the bid ("flota presente"), interested parties would be given a reasonable time period to produce the buses, after the contracts had been awarded."⁵²⁷

Correa consulted with bus manufacturers in Brazil and Mexico to identify the time required to produce new buses and have them ready in Santiago. He then inserted this time frame into the tendering bases, so that participants could bid without a readily available bus fleet, only purchasing vehicles after being awarded a route contract. In addition, Correa suggested that the Chilean Government would guarantee loans required by new entrants to purchase new buses.

524 (Paredes and Baytelman 1996)

525 (See, for example Alvarez 1991). On August 30, 1991, President Aylwin announced that his administration would build Line 5 ("jumping" over lines 3 and 4). Construction would not begin until 1994 and its inauguration would not occur until 1997.

526 (Decreto No. 145 que regula el funcionamiento de servicios de locomoción colectiva en área que indica)

527 (Correa, Germán. Personal interview. 13 June, 2012)

Such measures were really a scare tactic, as the investment in new buses would hardly make sense to new entrants given the short contract duration. Furthermore, participants competing with new buses, would probably require higher fares, making their bids easy to beat. However, the change in language -and the ruling of the Antimonopoly Commission- certainly influenced the behavior of the trade associations. This time they would participate.

On 27 December, 1991, the last day the tender was open, the MTT had suitable bids for 226 of the 255 tendered routes.⁵²⁸ Notably, the Ministry received only 307 proposals in total, on average 1.2 per each available route, meaning that most of the services were simply claimed by the incumbent trade association. Simón Dosque explains the calculus from the perspective of operators: “Since it was, more than anything, an ordering process where no third parties were involved, the fundamental incentive we had was to preserve services we already operated. You would not bid for someone else’s route, unless you had previously been displaced by someone else. There was no real competition in these bids.”⁵²⁹ Armando Huerta, who succeeded Dominga Nogales as president of the FGDTs, agrees: “The tendering processes of the 90s were among ourselves. I had three routes and I was clear about where and at what fare I could bid. There was a level of respect among us. I would not touch your side of town and you would not invade mine. When we participated in tenders during that period all of our organizations got in, keeping our routes. There was no mayor problem.”⁵³⁰

Unsurprisingly, the bids for all of the routes came at a very similar fare prices. If there was a benefit to this “competitive” tender, it was not terribly evident in the price of fares. The nominal fare decreased only slightly, from US \$0.27 to US \$0.25 (Ch \$100 to \$91.5), *after* the tender⁵³¹. Cristián Marinakis, son of Demetrio and then working at the AGMTP, gives a good reason why: “since these huevones (referring to the most important dirigentes) decided to go for the maximum possible fare, nobody dared to bid 5 pesos (US \$0.015) below.”⁵³² The visible results of this tendering process amounted to little more than a photograph of the prior, deregulated system, albeit with buses now displaying a vibrant yellow color. However, this

528 (Paredes, Sanchez, and Sanhueza 2001 p. 30)

529 (Dosque, Simón. Personal interview. 15 June, 2012)

530 (Huerta, Armando. Personal interview. 18 July, 2012)

531 (Diaz, Gomez Lobo, and Velasco 2004). Conversion by author, using the October 1992 exchange rate (US \$1=Ch \$373.10).

532 (Marinakis, Cristián. Personal interview. 20 June, 2012)

photograph offered a baseline for future work. It wasn't that the authorities were naive, they simply pushed as much as was feasible given the existing resistances, hoping that the initial results would mark the start of a broader process of state capacity expansion. As summarized by Sanhueza and Castro (1999 p. 228), "more than introducing competitive elements that improve the efficiency in the supply of services, the tendering system has been a way of regulating the functioning of the sector."

"Legalizing the Cartel"

Germán Correa left the MTT in 1992 to become president of the Socialist Party of Chile,⁵³³ but the framework he left behind would continue throughout the 1990s. The new rules of the game allowed the MTT to play a much more active role governing the system. Regulations established by the Ministry were expected to become more stringent over time, and bus operators would be either invited or forced to catch up. Contracts would complete their lifespan, and thus new opportunities to improve service would periodically present themselves as part of re-negotiations between operators and authorities. Correa reflects: "I always saw this as a problem that had to be solved in stages, and thought of my contribution during the 90s as clearing the terrain, hoping that once cleared we would proceed to build a house."⁵³⁴

Two more tendering processes took place in that decade, one in 1994 and one in 1998. These tenders continued to protect incumbent operators from any significant outside competitive pressure, but each included marginal adjustments compared to the preceding one, with changes conceptually designed to continue a gradual but consistent transformation. When looking at the numbers, it appears that much was achieved. Between 1988 and 1997, the average age of the buses running in Santiago fell by more than half, from 12.1 to 5.1 years.⁵³⁵ In addition to the 2,600 buses retired due to the 18-year vehicle age limit established in December 1990, 2,000 additional buses were retired in the context of the tender of 1994. This time, however, no

533 The context of Correa's resignation was the rapidly approaching primary election to select a new presidential nominee for the Concertación, scheduled for May 1993. While the coalition would remain united, discussions about which party should head the ticket were not devoid of tension. The PS ultimately lost the primary, but Correa returns to government as Minister of the Interior under President Frei Ruiz-Tagle (DC), elected in 1994, and then returns to this story as a key protagonist in 2002.

534 Correa, Germán. Personal interview. 13 June, 2012.

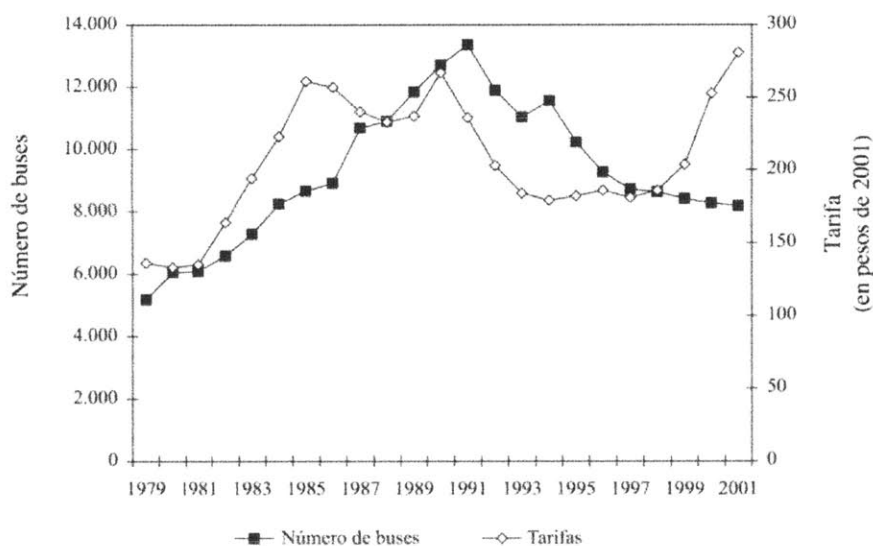
535 (Paredes, Sanchez, and Sanhueza 2001 p. 37)

compensation was paid to the owners.⁵³⁶ The type of vehicles utilized was effectively standardized, and the distinction between buses and taxi buses became only rhetorical. But the most notable indicator of the transformation was the dramatic reduction in that number of buses operating in Santiago. Before Correa's policies were implemented in 1991, the number of buses in Santiago had reached a peak of 13,353. Ten years later, in 2001, the number was only 8,179. Capacity utilization rates doubled, and the number of passengers transported per day per bus went from 268 to 523. Fare escalation was effectively curbed. In fact, as shown in the figure 3.3, the real price of fares fell by about 30% from 1991 to 1993, and their level was maintained practically unchanged until 1998.⁵³⁷

During this decade, most of the transport trade associations transformed the way they were legally constituted, transitioning -on paper- from a member-based trade association to joint-stock or limited liability companies. They did this exclusively responding to the tendering processes of

the nineties. While having a firm was not a strict requirement to bid, the tendering bases established a point system to determine which bid would win the contracts, giving some point advantage to those presented by companies rather than trade associations. The leaders of several

Figure 3.3 Price of fares and number of buses in Santiago (1979-2001). Source: (Diaz, Gomez Lobo, and Velasco 2004 p. 10)



536 (Figueroa and Orellana 2007)

537 (Diaz, Gomez Lobo, and Velasco 2004)

associations established shell companies, and collected additional payments from individual members, and/or transferred the property titles of real estate owned by the trade associations (terminals, offices, recreation centers) to capitalize them. Nonetheless, most continued to operate as they always had. As Jorge Monteguiaga -a supplier of equipment who closely interacted with these organizations- explained, “there was no effective consolidation of their assets -the buses- as patrimony of the firm. Drivers continued to end their working day delivering a plastic bag full of coins to the owner of the bus. These firms existed only on paper, and probably this was as much change as was feasible at the time, given the power of the trade associations.”⁵³⁸ Cristián Marinakis explained how this worked in practice, at least in his family’s trade association: “The trade associations constituted companies starting 1991, to please the Government. However, we really didn’t use them until 2005. In 1991, the Ovalle-Negrete trade association created Ovalle-Negrete, S.A. We had these two entities within our organization. During that period, the money flowed as always, from the passenger to the old guys driving and owning their buses, but the binders sent to the Ministry during the tenders had the name of the firm (sociedad anónima) on the cover.”⁵³⁹

Savvy officials knew this was happening, but nonetheless hoped that at a virtuous cycle would emerge from this process. State capacity to trigger a round of organizational restructuring would harbor more state capacity to demand higher standards of service. Even if artificial, the creation of these shell companies made some trade associations think hard about why, how and when to “modernize” their operations, and to begin to distinguish their new role as entrepreneurs from their old role as trade association representatives. Having too many member-partners not only reduced the level of profits that they could draw from exploiting a bus route, but also became increasingly cumbersome for decision-making. Governing a firm by consensus was simply not an efficient way to deliver a coordinated operation and to secure advantageous financing conditions. For trade association leaders predisposed to becoming *empresarios*, the events of the nineties served as an epiphany. For example, Juan Pinto, describes the nineties as

538 (Monteguiaga, Jorge. Personal interview. 18 June, 2012). A report later written by Correa acknowledged that these firms “existed only on paper” (Comite Asesor Transporte Urbano 2000 p. 39).

539 (Marinakis, Cristián. Personal interview. 20 June, 2012)

“the beginning of our transformation, from something akin to amateur soccer clubs, into true transportation companies.”⁵⁴⁰

However, the majority of more traditional trade association leaders -the *gremialistas*- were not inclined to making such transformation. They were not really interested in efforts to maximize profits from exploiting bus service provision. Instead, they banked on maintaining a status quo that allowed them to extract rents and consolidate significant power. They would follow through the government tenders because they had to, but either continued to conceive their business as one of extracting rents, or were sincerely committed to protecting a traditional and artisanal way of life, on behalf of their members. Soon, the *gremialistas* realized that their business model could be preserved, perhaps even improved, by simply turning Correa’s strategy on its head. Rather than opposing the government through strikes and tender boycotts, they could negotiate with authorities to expand their own capacity to govern the system. In this, they were certainly successful, as one of the interesting side effects of the tendering processes of the nineties, was the gradual empowerment of the trade association leader as an essential middle man. They were so able to negotiate favorable terms, that according to critics, “these were not really tendering processes, but political agreements. A huge and perhaps necessary step, but still concerted politically”⁵⁴¹.

Despite thousands obsolete buses retired from the system during this decade, the number of organizations awarded contracts throughout the tendering processes remained practically the same, ranging from 106 in 1992 to 119 in 1998. There was practically no company submitting a bid lacking a direct connection to the trade associations. While regulations occasionally affected individual members of their organizations, leaders almost always survived unscratched, and actually thrived during this period. In the words of Héctor Moya, the outcome of reform efforts in this decade “can be summarized in one phrase: The government legalized the cartel.”⁵⁴²

Three unanticipated outcomes of the reforms of the 1990s

- **Empowerment of the *dirigentes* of trade associations**

Constant re-negotiation over the terms included in the tendering bases and over the technical norms established by the MTT contributed to making the role of trade association

540 (Pinto, Juan. Personal interview. 27 July, 2012)

541 (Diaz, Guillermo. Personal interview. 6 August, 2012)

542 (Moya, Hector. Personal interview. 21 June, 2012)

leaders valuable and indispensable, both to the government -that needed rules to be accepted-, and to individual bus owners -who ultimately carried the burden of complying. Orlando Panza recalls, “During those years, we needed to negotiate a lot of issues, everyday. They began to say that our vehicles were too big, then too small. They wanted us to paint them red, then green, then yellow. They continued to ask for things, and we had to mediate on behalf of our members.”⁵⁴³ Individual bus owners looked up to the leaders of their trade association for guidance, and these in turn looked up to the leaders of federations that had direct access to the highest level decision-making circles within the bureaucracy. This process made leaders powerful among the rank and file. As one former operator told me, “they could fix things.” Simultaneously, these *dirigentes* became valuable to government, because they represented a convenient and efficient tool to communicate, negotiate and enforce policies within the sector. By negotiating with only a dozen *dirigentes*, they could determine and implement policies that would be observed and accepted by thousands of bus owners.

• **Empowerment of the trade associations**

The contracts awarded through the tendering processes of the nineties gave formal title to the trade associations -or rather, to the shell companies created by the trade associations- over particular routes. In other words, it was not individuals but organizations who had the right to exploit the service. To be sure, individuals had worked through trade associations for a long time, but the tendering processes legitimized the informal socio-organizational structure that had been created through the years. Now, to participate in a route, a trade association could *legally* demand a fee. This process also legitimized the informal mechanism established by the trade associations to enter the market and thrive in the industry -starting up as a “sapo”, driving a bus, and working your way up the ranks of your association’s bureaucracy. Furthermore, people quickly realized that some trade associations provided access to better routes and services than others, creating substantial demand to be admitted into them. With control over the career ladder of members on the one hand, and with a large pool of applicants desiring to join on the other, trade associations were increasingly able to extract rents from members and to demand financial contributions from suppliers seeking to sell fuel, tires, oil, tools, etc. The result was rather simple: “The trade

543 (Panza, Orlando. Personal interview. 19 July, 2012)

associations came out of the nineties with impressive economic power.”⁵⁴⁴ They became, in the words of a trade association president, “rich organizations formed by poor members”.⁵⁴⁵

• **Empowerment of the federations of trade associations (particularly the AGMTP)**

Paradoxically, regulations created to rein in bus operator organizations actually made the federations of trade associations stronger. Weaker trade associations needed to belong to a strong federation in order to survive. While each trade association kept its individual identity, in practice many of the smaller ones were fully absorbed or became mere satellites. According to Demetrio Marinakis, roughly 60% of all bus operators in Santiago affiliated to the AGMTP during this period. This organization thrived both financially and politically. At its peak, it directly employed 150 full time employees, including administrative staff, lawyers, accountants, doctors, dentists and mechanics. In addition to offering health services, legal representation, and vehicle insurance to members, the AGMTP became an important financial contributor to political campaigns. When asked which political party had the support of the powerful AGMTP, Demetrio Marinakis (president in 1994)- simply responded, “I distributed money to everyone”.⁵⁴⁶ The growing organizational and financial strength of this federation certainly provided access to power. According to Juan Pinto, treasurer of the AGMTP during this period, “We had good contacts with politicians. The Zaldívar brothers⁵⁴⁷ were friends of the bus operators, and several other politicians made their rounds for support, since as you know there are intermixed relationships and closeness to politicians from all sides. In fact, when we inaugurated our headquarters, during the Frei Government, it was the Minister of Public Works Ricardo Lagos who attended the ceremony. He was our friend. He talked to us.”⁵⁴⁸ The building in question was a 7-floor corporate building located close to the heart of downtown Santiago, with a pool in its

544 (Moya, Hector. Personal interview. 21 June, 2012)

545 (Panza, Orlando. Personal interview. 19 July, 2012)

546 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

547 Andres and Adolfo Zaldívar, high ranking politicians from the DC, part of the Concertación. Both were Senators at the time, and Adolfo would become one of the staunchest opponents of the Transantiago project in the next decade.

548 Pinto, Juan. Personal interview. 27 July, 2012.

Figure 3.4 Former headquarter building of the AGMTP in downtown Santiago (now occupied by a university). Photo by the author, July 2012



rooftop⁵⁴⁹. It was only one of several investments made by the AGMPT. In fact, the organization took over the Santiago Morning, a professional soccer club.

The efforts designed by Correa in the earlier part of the decade to expand state capacity to guarantee better transport services, had been turned on their head. There is no denying that the two first governments emerging from the Concertación initially drew bus operator organizations out of

their comfort zone, and forced

them into accepting a set of rules unthinkable during the era of *laissez faire*. According to Correa, “after I left, those responsible didn’t build anything. They faced a cleared terrain and yet did not build anything, and Santiago regressed.”⁵⁵⁰ To understand why, we must review the actions taken under the Presidency of Eduardo Frei (1994-2000).

Twisting the arm of the government

On December 11, 1993, Eduardo Frei Ruiz-Tagle (DC) won the presidential election on behalf of the Concertación.⁵⁵¹ Frei easily defeated Arturo Alessandri, the candidate from the

549 When asked about the pool, one of the AGMPT leaders explained: “I thought that if we managed the organization well we would continue to run it as old men, influencing the younger ones. We would become the Elder Council, and this Elder Council would use these facilities, take a swim, play cards, enjoy themselves. I built it and designed it, but it never worked that way”.

550 Correa, Germán. Personal interview. 13 June, 2012.

551 Eduardo Frei Ruiz-Tagle became the candidate of the Concertación after defeating Ricardo Lagos (PS) in a primary election held May 23, 1993. He is the son of former President Eduardo Frei Montalva (1964-1970), but only became politically active in 1982.

coalition of right leaning parties,⁵⁵² obtaining 58% of the vote in the first (and definitive) election round. His presidency began on March 11, 1994, and would last for 6 years, until 2000.⁵⁵³ To head the MTT, Frei Ruiz-Tagle appointed Narciso Irueta, a 70 year old lawyer and founding member of the Partido Demócrata Cristiano, who had served as member of Congress for eight years until Augusto Pinochet dissolved it in 1973, and who challenged Frei Ruiz-Tagle in 1991 for the leadership of the party.⁵⁵⁴ The new minister was nowhere close the new president's inner circle, and his inclusion to the cabinet owed more to intricate DC politics than to a bold vision for Chile's transportation future. Minister Irueta led the MTT for two years, and was replaced by his under-secretary, Claudio Hohmann, who completed Frei's term. This was the second presidential term headed by the Concertación, and Germán Correa was invited to serve as Minister of the Interior,⁵⁵⁵ but on close analysis it is difficult to define this administration as the continuation of prior work⁵⁵⁶. Few members of the original team brought in by Correa remained at the MTT, and the strategic negotiation of public transport regulation, designed to gradually expand state capacity, mutated into a mechanism exploited by trade association leaders seeking to entrench their control over the future of the system.

The Frei administration is frequently characterized by its technocratic leanings, partly because of the personality and previous experience of the new president, staying away from active politics and working as an engineer for a multinational private conglomerate.⁵⁵⁷ President Frei tasked an inter-ministerial commission (comprising the heads of the MTT, the Ministry of Public Works (MOP) and the Ministry of Finance) with planning major transportation investments, and established the Secretaría Interministerial de Planificación de Transporte (SECTRA) to provide permanent technical support to this commission. In 1995 SECTRA formulated a plan comprising all modes of transportation in Santiago, the first of its kind since

552 Since the end of the military regime, right leaning parties created their own coalition to present a unified front in presidential elections. The main parties in this coalition are the Unión Demócrata Independiente (UDI) and Renovación Nacional (RN).

553 Presidential terms before the Pinochet Regime lasted for 6 years. However, since the return to democracy, Chile has been going back and forth between shortening the period to 4 years (as was the case for Aylwin and Bachelet), and 6 years (as was the case under Lagos and Frei).

554 (España 2002 p. 23; Otano 2006 p. 229-231)

555 Correa would serve in this position less than one year due to intra-party political infighting in the Concertación.

556 This may apply to other areas as well. In fact, only 2 ministers and 4 underministers from the Aylwin administration remained in their posts under Frei Ruiz-Tagle. For details on this transition, see (Otano 2006 p. 419-423)

557 (Martelli 2011 p. 84).

1968. Such effort is indicative of the ambitious, system-wide vision of the new president, as well as of his personal commitment to continuing the unfinished work started by his father. In December 1995, the Commission approved the “Urban Transport Investment Plan 1995-2000,” and in July 1996, an “Urban Transport Policy” followed suit. Just like its 1968 predecessor, these comprehensive plans explicitly recognized the role of the state as “planner, regulator and supervisor” of public transportation and emphasized that all projects should be evaluated and prioritized in terms of their social benefits.⁵⁵⁸ And, similar to the prior plan, privately operated bus services that had dominated the MTT’s agenda under Aylwin, were dismissed as an easily manageable piece to a much grander puzzle.

The Frei Administration certainly had grander plans than simply improving the bus system. The seeds of an ambitious program to build urban highways and underground parking lots across Santiago using private financing were planted in this period. The new administration not only embraced the challenge of completing subway line 5, which had only begun construction two months before Aylwin left office, but committed to extending the original design to bring the line into the heart of downtown Santiago. In contrast to Aylwin’s Administration, Frei prioritized expanding the metro over reforming the buses. Benefiting from a period of sustained economic growth, Frei inaugurated 10.3 kilometers in 1997, and by March 2000 had practically completed the 2.7 kilometers added to the project to connect line 5 with line 2 at the *Plaza de Armas*. With MOP taking the lead in the urban highway and parking projects, SECTRA drawing up comprehensive transport plans on behalf of several ministers, and Metro spearheading construction of line 5, the role of the MTT was practically limited to avoiding frequent, disruptive and contentious standoffs with bus operators, that could easily consume the agenda. Furthermore, the AGMTP had by that time established important alliances with key DC parliament members, such as the Zaldívar brothers in the Senate, who certainly lobbied on their behalf. A direct confrontation with the trade associations put Frei’s government at risk of being accused of “authoritarian regression.”⁵⁵⁹ Perhaps as a consequence of this combination of reasons, the presidency of Eduardo Frei Ruiz-Tagle is also characterized by harboring a much

558 Cited in (Martelli 2011 p. 50)

559 Garretón (2002 p. 61), writing about Frei Ruiz-Tagle’s presidency, noted that: “demands and social mobilization were subordinated to the political goal of stability, avoiding any situation that could be interpreted as risk of an authoritarian regression.”

smoother relationship between private bus operators and transport authorities. Surely, planners at MTT had a vision for a “modern” bus system. However, they worked in an administration increasingly disposed to compromises with the status quo.

Consistent with the approach followed under Correa, route contracts were re-tendered by the MTT in 1994 and in 1998, both times negotiating the terms with incumbent operators. At each iteration, however, bus operators expanded their capacity to water down or fully eliminate proposed regulations they particularly disliked. Some service-standards continued to be gradually improved, and the number of buses and their average vehicle age of the fleet continued to fall, but proposals that threatened the capacity of the cartel to extract rents and prevent external competition were effectively sabotaged, and collusion among operators persisted. “Had the process continued as we had planned”, reflects Correa, “the AGMTP would have obviously disappeared and its leaders knew it.”⁵⁶⁰ Bus operator Juan Pinto remembers that in this period back-door negotiations returned. “With Minister Narciso Irueta and President Frei we came back to zero. The political ministers intervened and twisted the arm of the transport ministers.”⁵⁶¹ The leaders of the AGMTP thrived by simultaneously having public confrontations and private negotiations with government authorities. These *dirigentes* struck deals with authorities, usually supported by lobbying outside of the MTT, and presented every compromise as major triumphs to their membership. This process consolidated their leadership and made them popular among the ranks as a result. Then, they used the leverage they had gained over the gremio to extract further compromises from authorities.

The president of the AGMPT in this period is a good example of the above. Demetrio Marinakis was a third generation Greek immigrant, whose family had been in the business of public transportation for several decades. He was a committed *gremialista* and one of the most vocal opponents of reform of the bus sector. He personally owned five vehicles, but governed an organization of several thousand. His trade association, the “Ovalle-Negrete”, was one of the largest, and by allying himself with Manuel Navarrete, from “San Cristobal-La Granja”, and with Juan Pinto, from “Maipú-Cerrillos”, secured firm control over the AGMTP for several years.

⁵⁶⁰)Correa, Germán. Personal interview. 13 June, 2012). Such critique may be expected from a protagonist of the previous administration, but similar sentiments were shared by other knowledgeable sources. For example, Hector Moya stressed that “under Frei’s government, the original strategy started to water down, and the cartel maneuvered so that Correa’s vision wasn’t followed through.” (Personal interview. 21 June, 2012).

⁵⁶¹ (Pinto, Juan. Personal interview. 27 July, 2012). When Chileans refer to “political” ministries, they usually refer to the Ministry of the Interior and the Secretary General of the Presidency.

During this period, it made no sense for “*gremialistas*” like Marinakis to become an “*empresario*”. The business model of the former was based on getting as many partners as possible to maximize dues, while the business model of the later would imply optimizing costs to maximize profits. Even those predisposed to explore such alternative, like Juan Pinto, balked at the prospect of alienating the rest of the members of their organization, or of “optimizing” their routes only to suffer encroachment from rivals or risk external competition. Furthermore, the status quo promised plenty of power and money. A collection of quotes from my interview with Demetrio Marinakis, sheds light on how he conceptualized his role, vis a vis his peers (“... whenever there was a conflict, I was the one to ‘cut the cheese’, I was the law.” “Excuse me for saying so, but I was the capo di capo.”) and vis a vis the government (“...I reciprocated with authorities. Most members wanted to increase fares to students, but the minute I shook hands with the minister, the fare remained untouched. And then we would get something in return”⁵⁶²). This was a golden period for the AGMTP as an organization. According to Demetrio Marinakis, Narciso Irueta was “the best minister we ever had: we shook hands and never had to sign any paper.”⁵⁶³

The mechanism of negotiated reciprocity functioned well for authorities too, at least while the country’s economy thrived. There was credit available, and the foreign currency was relatively cheap, and so in exchange for conditions that minimized the threat of external competitors submitting a bid, bus operators agreed to continue retiring old buses and to import new ones, even if the government no longer offered a subsidy to do this. However, Chile continued to be an export-oriented economy, susceptible to external shocks. After navigating the “tequila crisis” of 1994-1995 with relative ease, the 1997 Asian crisis triggered a local recession. From achieving sustained GDP growth rates of 7.8% between 1994-1997, the Chilean economy grew only 1.1% between 1998 and 1999.⁵⁶⁴ The Chilean peso suffered a devaluation in this period and this change in conditions affected the negotiations for the 1998 route tender significantly. In fact the trade associations, unwilling to bear the costs of stricter regulations proposed by the MTT, abandoned the negotiating table to hold a strike on October 1997⁵⁶⁵. The

562 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

563 Ibid.

564 (French-Davis and Muñoz Goma 2002 p. 247)

565 (Rivera 2008 p. 20)

MTT made concessions, and confidently called for bids in November 1997, establishing April 5, 1998 as the date in which the new concession contracts should be in force⁵⁶⁶. However, negotiations over the terms carried on despite the published bases, with the leaders of the AGMTP pressuring authorities into accepting much softer standards than originally agreed. Rather than threatening operators with opening the market to external competition, as Correa had attempted to do, Minister Hohmann found no alternative but to fully cancel the ongoing process, and on April 15, 1998 organized a new, “complementary,” call for bids, conceding once again.⁵⁶⁷ In this iteration, “the gremio successfully negotiated increments to the fares, extended the maximum allowable vehicle-age from 10 to 12 years⁵⁶⁸, and obtained significant leeway in meeting technical norms.”⁵⁶⁹ By the time the bids were due at the MTT, only one proposal arrived for the vast majority of the 280 routes tendered, and 97% of these proposals went for the maximum fare permitted of Ch \$190 (US \$0.41).⁵⁷⁰ Collusion was not even hidden. “It says a lot that the majority of the envelopes containing the offers arrived together to the Ministry.”⁵⁷¹

Perhaps more illustratively, Demetrio Marinakis candidly described how operators colluded to coordinate bids. “When someone wanted to bid for a route variant that was already occupied, I tried to find an appropriate accommodation. All problems were solved in my office, sometimes very late at night. Before I became president of the gremio, there were many different fares across Santiago, because the tendering rules gave extra points for bids offering lower fares. For the tendering process of 1998, I established a unique fare. If all of us had the same costs, how could a *huevo*n bid at Ch \$190 (US \$0.41) and another one at Ch \$150 (US \$0.32)? That behavior hurt me. I made all the *huevo*nes agree, without any consultant present! I had all the bids in my office, all the binders, I knew which routes were going to whom. If at the very last minute someone wanted to play on his own, I took away his rights, I took away his current route. I ordered all the *huevo*nes at a single fare, and that had never happened before”.⁵⁷²

566 See MTT’s Exempt Resolutions No. 2.085/1997 and 244/1998.

567 See MTT’s Exempt Resolution No. 588/1998. The new tender was later officially titled “Licitación de Vías 1998-II.”

568 See numerals 2.4.5, 2.4.9 and 2.4.10 of the tendering bases of 1998.

569 (Diaz, Gomez Lobo, and Velasco 2004 p. 25)

570 (Sanhueza and Castro 1999 p. 222). Conversion to US \$ by author, using the exchange rate for July 1998.

571 (Diaz, Gomez Lobo, and Velasco 2004 p. 25)

572 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

But the power of the cartel went well beyond coordinating bids to the maximum allowable price. Trade association leaders were increasingly able to (1) abuse regulations, skimping on compliance and transforming them into side business opportunities, and (2) block proposals that threatened the trade's atomized industry-structure. To illustrate, the next section presents two powerful, concrete examples.

Abusing regulations

The case of the automatic fare collectors: From good concept to side business.

One of the goals pursued by regulators at the MTT was reducing cutthroat curbside competition for passengers in the streets of Santiago. This could not be accomplished simply by granting exclusive rights over a route to a single organization. Routes overlapped at various points, leaving buses from different organizations to compete for passengers. But most importantly, bus owners continued to pay drivers a variable wage composed of a small fixed salary and a percentage over daily sales⁵⁷³. This system derived in making bus drivers the most "entrepreneurial" actor in the production chain of the trade, since their earnings depended the most on maximizing the number of passengers boarding their vehicle. This compensation mechanism gave bus drivers every incentive to step on the gas and to overpass other buses on the same streets -even those from the same trade association-, or to hold back and increase headways as to allow potential ridership to accumulate. This salary model benefited owners since it ensured maximum effort from drivers for minimal monitoring costs, and benefited drivers since it allowed them to maximize their own income. However, it also resulted in maddened drivers behind the wheel, fighting over passengers and oblivious to risk.⁵⁷⁴ In addition to the negative effect on safety, this compensation mechanism also resulted in discrimination of certain types of "low-value" passengers during peak hours: Eldery and handicapped users were left curbside, because they would take too long to board, and stations typically boarding students were bypassed, to "win" potential clients down the road that paid full fares.

573 The complete earnings of most bus drivers in Santiago resulted from combining 4 revenue streams: (1) A small salary paid by the bus owner (and used to calculate social security contributions owed by the bus owner to the state), (2) a percentage of daily fare revenues, agreed with the bus owner, (c) the full amount of the discounted student fares, either with knowledge of the bus owner or not and d) stolen fare revenues, estimated by sources at 30% of daily fare revenues.

574 For a lively description, see (Tomic and Trumper 2005; Trumper 2005).

To eliminate incentives guiding this behavior, Congress passed a law in January 1997, “strictly prohibiting drivers from simultaneously performing the functions of driving and fare collection or ticket dispenser” and stipulating that “a fare collector must be present or an automatic fare collector machine must be installed.”⁵⁷⁵ The deadline to comply was set at one year, and the MTT announced that the technical specifications of the authorized machines would be soon forthcoming. Minister Hohmann wanted private operators to install automatic fare collection machines in each vehicle. Revenues from all buses in a route would be pooled and deposited into a general fund, and then distributed equitably to the bus owners operating the route, who would then pay a fixed salary to their drivers. On the face of it, this was an attractive proposition to all actors involved. Drivers would earn higher salaries, bus owners would no longer be robbed, and vehicles from the same organization would not race against each other. However, trade association members vigorously resisted the idea. According to Orlando Panza, “people did not want these automatic fare collection system to work. They would not only be paying a hefty sum to equip their buses, but would place themselves at risk of being robbed by their *dirigentes*.”⁵⁷⁶ Bus drivers reacted in similar fashion. Despite the promise of a higher fixed salary, the new system would curtail their ability to cream off fare revenues, leaving them at the end worse off.

Even after Congress enacted the law, trade associations forced Minister Hohmann to negotiate. What alternative did he have? Beyond imposing symbolic fines, he couldn’t credibly threaten to revoke the concessions of operators, especially as he felt that their participation on the 1998 tender was indispensable. Discussions carried on for months. Operators first argued that the equipments did not exist in the market, and later that they were too costly. In February, a month after the original deadline to comply, Congress approved an extension to comply by December 31, 1998.⁵⁷⁷ This requirement was inserted into the tendering bases, to little effect, and the MTT seldom imposed any fines over the issue. Instead, between 1998 and 2002 the MTT was cornered into accepting no less than eight deadline extensions,⁵⁷⁸ until the issue turned moot as the next administration announced its plans to centralize fare collection and administer it through a third party, while compensating operators by vehicle-kilometer rather than by passengers transported.

575 (Ley 19.495 Chile)

576 (Panza, Orlando. Personal interview. 19 July, 2012)

577 (Ley 19.552 Chile)

578 (Ramirez 2002)

In the interim, however, the MTT granted trade associations freedom to decide how to comply with the law. A few trade associations resorted to “*cobradores humanos*” -human collectors,- which was nothing more than incorporating a second worker to each bus. However, most trade association leaders soon turned compliance into a profitable side business: No less than 17 suppliers of fare collection machines approached them, offering commissions in exchange for their members’ patronage.⁵⁷⁹ Approximately 5,500 fare collector machines were actually installed, using a multiplicity of technologies, only to suffer malfunctions soon after. Tokens would get stuck in the slots, or fail to give change. Planners at the MTT suspected sabotage from drivers and vehicle-owners, while owners argued that the equipment sold was simply low quality. According to one operator, “the automatic fare collectors never worked well, the conditions were not given, the law was not applied, the regulation was not clear, and finally the whole idea got discarded despite significant investments made to comply.”⁵⁸⁰ The whole project turned into a major media fiasco, and consumed Minister Hohmann’s tenure at the MTT. In the end, the only actors that benefited were equipment suppliers and trade association leaders.

Blocking norms that threatened the atomized structure of the industry

The case of the failed efforts to corporatize: One step forward and two back.

Authorities in the Transport Ministry since Correa knew that one of the key obstacles to demand stricter standards from private suppliers and to deliver more efficient bus transport service in Santiago was the atomized nature of the industry, organized around powerful trade associations rather than around legally constituted firms. Part of the rationale for holding frequent, negotiated, route-based tendering processes was to create an environment where trade association leaders would see the value of transitioning member-based trade associations into consolidated transportation companies, with a corporatized ownership structure. Presumably, under the new structure operators would seek to optimize their operations and streamline their costs, instead of trying to enlist as many members as possible to increase dues and political influence. Rather than representing the interests of individual bus owners, managers of bus firms would try to maximize value for their stockholders. While planners at the MTT were not naive enough to believe that the tendering processes resulted in any real competition, they still thought

579 (Monteguiaga, Jorge. Personal interview. 18 June, 2012)

580 (Román, Carlos. Personal interview. 6 July, 2012)

that by going through the processes of creating shell companies and of retiring older buses from circulation, trade association leaders would see the benefits of corporatization. After all, incorporated firms with legal rights and liabilities distinct to those of their stockholders, potentially make better, faster management choices and can find more attractive financing than trade associations governed by consensus.

This process of corporatization, dubbed “*empresarización*,” was however fiercely resisted. According to bus operator Orlando Panza, “nobody in the rank and file wanted the ‘*empresarización*’. When you are the owner of the bus you call the shots. You buy supplies from whomever you want, and sell your bus to whomever you want, whenever you want. No individual bus owner wanted to lose this freedom.”⁵⁸¹ Simón Dosque offered a similar argument: “No individual bus owner was interested in relinquishing property over his key asset -the bus- to a third party. Individual bus owners are very attached to their vehicles. For them it was very difficult to understand that their vehicle would be owned by a firm, and that their income would no longer be related to their individual ability to exploit their vehicle, but to the overall performance of the firm.”⁵⁸² Once separated from their bus, individual bus operators could indeed be vulnerable. In the opinion of the staunchest *gremialistas*, like Armando Huerta, “the idea was perverse. Larger capitals could come in at any time and buy us out, or leaders would simply appropriate the firm for themselves, and we would no longer be able to work.”⁵⁸³ But in addition to resistance from the rank and file, and to the ideological qualms of some members, most trade association leaders were simply not interested in exploring a new business model. “The old guys with the buses generated a lot of cash, and that cash flowed up, to the *dirigentes*”, explained Cristián Marinakis, “when you have a thousand guys giving you a thousand pesos every day to represent them, you are not interested in messing the system up”.⁵⁸⁴ In Demetrio Marinakis’ own words: “I knew that the ‘*empresarización*’ was going to fuck us all.”⁵⁸⁵

581 (Panza, Orlando. Personal interview. 19 July, 2012)

582 (Dosque, Simón. Personal interview. 15 June, 2012)

583 (Huerta, Armando. Personal interview. 18 July, 2012)

584 (Marinakis, Cristián. Personal interview. 20 June, 2012)

585 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

Correa knew that advocating too aggressively for “empresarización” would derail the reform project as a whole. Thus, the 1992 tender approached “empresarización” timidly: rather than making it a requirement, the MTT offered “extra points” to bids presented by firms rather than trade associations, promising to evaluate them more favorably or to grant longer contract terms. This “carrot” strategy was replicated in 1994, but the second-round effect was marginal. Trade associations did little beyond creating shell companies to checkmark the requirement, and continued to operate as always, with trade association members maintaining property and management of their vehicles. However, in 1998 Minister Hohmann wanted to take the strategy one step further. The terms for the 1998 route contract tender *required* legal entities presenting bids to own at least 10% of their bus fleet. A few trade association leaders reacted positively. Juan Pinto recalls: “My trade association had 500 buses and I created a firm that bought 50 of them, to meet the 10% requirement. Other *dirigentes* responded similarly. The idea was that firms bidding for routes would buy 10% of the fleet that year, and maybe next year we would buy another 10%, and gradually, the trade associations would transform and modernize themselves.” Since corporate ownership was a *requirement*, entrepreneurial trade association leaders like Pinto could defeat internal resistance to corporatization. However, the stronger *gremialista* wing of the AGMTP and the FGDTs would have no part on this. Sidestepping the MTT, they used their “back door” channels to the Ministry of the Interior, leveraging the ongoing economic recession and the internal political dynamics of the Concertación coalition to their advantage.

The context surely helped. The slowing down of the economy had sparked serious questions about Frei’s ability to deliver on the promise of “growth with equity.” During 1996-1999, Frei’s government faced mounting critiques from varied social groups, but specially from an increasingly vocal student movement.⁵⁸⁶ This was not only hurting the Concertación at the polls⁵⁸⁷, but more importantly, it was hurting the Partido Demócrata Cristiano precisely when the time to determine which party would lead the coalition in the next presidential election loomed near. The Ministry of the Interior, by then headed by Raúl Troncoso, a senior DC

586 (Ramis 2011)

587 In the December 1997 election, the Concertación retained its slim majority in Congress. However this was mostly due to the inability of the opposing coalition to capitalize on citizen insatisfaction, reflected in 1.1 million emitted votes -17.75% of the total- nullled or left unmarked (España 2002 p. 32-35).

member and political strategist for both presidents Frei Montalva and Frei Ruiz-Tagle, was interested in tempering down policies that could fuel student opposition to the administration. The long overdue increment to the discounted student transit fares was clearly one of them. Soon enough, trade association leaders accepted to postpone this increment in exchange for dropping Minister Hohmann's 10% rule from the route contract tendering bases. Juan Pinto explains what happened: "The ministers of the time were nice guys... good friends of ours, we used to eat pork steak with them and make deals... I was present at one of these lunches when Demetrio (Marinakis) negotiated the elimination of the 10% requirement, offering to withhold increasing the price of student fares in exchange... Days later, we were formally notified by the MTT that student fares would stay put, and that the requirement of 'empresarización' was formally cancelled. I immediately called my trade association into assembly, and sold back the 50 buses to members. I dismantled the firm immediately, and so did other dirigentes."⁵⁸⁸

Changing of the presidential guard

By the end of the nineties, the trade association were more intransigent than ever. The state did reinsert itself into the industry, but its ability to establish standards was contingent on the willingness of the *dirigentes* to cooperate. The relationship between the public and private actors that participated in the bus industry grew increasingly transactional, with authorities often bartering money and rules to preserve current levels of service rather than to radically transform the industry. The ambitious plan to adjust the bus network to complement rather than to compete against the subway, did little beyond adding 21 "Metrobús" feeder routes⁵⁸⁹ while leaving the rest of the grid unchanged, despite studies commissioned by SECTRA constantly warned about "significant public transport capacity duplication between buses and metro in several important corridors," and "practically negligible numbers of combined mode (bus-metro) trips."⁵⁹⁰ The strategy established by Minister Correa to gradually enhance the capacity of the MTT to govern the cartel, appeared to evolve in the opposite direction. Furthermore, officials working in the Chilean Government became accustomed to politically expedient compromise, particularly with regards to fare policy. While in theory the price of fares is adjusted automatically using a formula that considers changes in the price of key inputs such as fuel, the trade associations frequently

588 Pinto, Juan. Personal interview. 27 July, 2012.

589 (Diaz, Gomez Lobo, and Velasco 2004 p. 13). Notably, the contracts to operate these Metrobús routes were awarded to trade associations with linkage to the AGMPT.

590 (Fernandez y De Cea Ingenieros 1999)

accepted to postpone increases in exchange for the relaxation of rules and standards. There is of course nothing inherently wrong with seeking to keep fares low, but most other policy objectives pursued at the MTT were slowly negotiated away. Several of the individuals interviewed in the course of this research -from both the public and private sides- suggested that these negotiations increasingly correlated with the electoral calendar.

The country was changing politically, perhaps in a different direction. After two Concertación administrations led by PDC members, many questioned whether it was time to elect someone that could accelerate the Chilean quest for equity by pursuing bolder reforms. To be sure, Aylwin and Frei Ruiz-Tagle had been tremendously successful presidents, and much of Chile's international credence as the emerging "latin american jaguar" was due to their work⁵⁹¹. However, the Asian crisis had indeed resulted in a spike in unemployment, and many "authoritarian enclaves" left by the dictatorship remained untouched. For many Chileans, the first two democratic governments after Pinochet had been all too eager to compromise. For this reason, in a May 1999 primary election, the balance of power within the Concertación shifted to the left. Ricardo Lagos -a former member of the socialist party, and one of the most visible spokesmen of the "Campaign for No" during the 1988 plebiscite⁵⁹², easily defeated PDC candidate Andrés Zaldívar, who incidentally was one of the key "back doors" used the transport trade associations to influence policy.

Trade association leaders had grown comfortable with PDC administrations, and were uncertain about what this "shift to the left" would imply for their business. On the one hand, they had met Lagos before in his role as Minister of Public Works under Frei, and some trade association leaders claimed to have a personal relation with him. On the other, Lagos was known to be a courageous hardliner, rising to national preeminence in 1988 after using a rare nationally televised interview to speak directly to Pinochet, accusing him of torture, assassinations and violations of human rights. He was also pragmatic. Despite his socialist credentials, he had paradoxically spearheaded a plan to finance highway improvements using private tolls, awarding

⁵⁹¹ I first encountered the term "latin american jaguar" in (Oppenheim 1999 p. 239).

⁵⁹² Lagos served as Minister of Education under Aylwin and as Minister of Public Works under Frei-Ruiz Tagle. He was the founder of the Partido de la Democracia (PDD), created in 1987 to build momentum for the plebiscite, at a time when key figures in other left-leaning parties like the PS were hesitant about participating in an election likely to legitimize Pinochet.

long term concessions to large, foreign, private consortia.⁵⁹³ As president, he could certainly attempt to apply this model to draw private investment into public transportation. Perhaps due to this uncertainty, trade association leaders sought to demonstrate their support by postponing a fare increase slated to occur by the end of 1999, practically coinciding with the presidential elections. Polls showed Ricardo Lagos, in a dead heat against Joaquín Lavín, the candidate from the Alianza por Chile, the coalition of center-to-right political parties that included the Unión Demócrata Independiente (UDI) and Renovación Nacional (RN). The presidential election took place in December 1999, resulting in victory for Lagos by only by 30,000 votes. Since the Concertación received less than 50% of the votes, a runoff election was scheduled for January, which Lagos won again, this time by a slightly larger margin. It is impossible to know whether the negotiation with the transport trade associations to postpone adjusting bus fares in Santiago played any role in this outcome. What is certain, however, is that key *dirigentes* of the AGMTP and of the FGDTS staunchly believed that the newly elected administration was indebted to them.

593 For Lagos' own description and justification of his decisions at MOP, see (Lagos Escobar 2012 p. XI; 137-140).

Part III. A bold vision for public transportation in Santiago (2000-2006)

PTUS: An ambitious urban transport agenda

Ricardo Lagos was sworn in as president of Chile on 11 March, 2000. If there was any doubt about his intentions, Lagos merged the the Ministry of Public Works with the Ministry of Transportation and Telecommunications, creating the MOPTT, and appointed his former coordinator of concessions, Carlos Cruz, as the new bi-minister. According to Cruz, the decision to merge both bureaus “responds to the need to articulate and replicate criteria used in public works concessions to (urban) transportation policy”.⁵⁹⁴ One of the first actions taken by Minister Cruz was to convene, in May 2000, an advisory committee on urban transport, informally dubbed “the four wise men.”⁵⁹⁵ This committee was charged with updating President Frei’s 1996-2000 Transportation Plan, expanding its vision until 2010, the year of the country’s Independence Bicentennial. Notably, Germán Correa was the only former participating minister. Other members were Sergio González Tagle (Under-Minister of Transportation under Correa), Eduardo Abedrapo, (advisor to former Minister Hohmann), and Sergio Solís (businessman). With the support of SECTRA, this team reviewed Santiago’s past and ongoing public transport projects, and looked at best practices from other cities. They only briefly glanced at Bogotá. That city was in the course of building the first phase of its now famous Transmilenio BRT (which would be inaugurated on December 4, 2000), but soon discarded as a model for Santiago since it only promised to reach a few main corridors, leaving the rest of the city untouched. The “four wise men” wanted a “global intervention,”⁵⁹⁶ something akin to Curitiba’s Rede Integrada de Transporte (RIT), except at a much grander scale.

Their 107 page report⁵⁹⁷ served as basis for the 2000-2010 City of Santiago Urban Transportation Plan (PTUS), formally adopted by the MOPTT in November 2000, and launching pad of what today is known as Transantiago. With the PTUS, “the authority proposes the ordering of the urban transport system of Great Santiago, orienting and articulating the necessary initiatives to provide the city with a modern and efficient transport system, environmentally and

594 (Cruz 2001 p. 17)

595 (Hidalgo and Graftieaux 2007 p. 7, footnote 6)

596 (Correa, Germán. Personal interview. 13 June, 2012)

597 (Comite Asesor Transporte Urbano 2000)

economically sustainable, consistent with the demands of mobility, accessibility and quality of life of citizens.”⁵⁹⁸ The PTUS sought to:

- Incentivize public transportation as “the principal mode of transport” and improve the quality and safety of the system, with the goal of maintaining the current share of motorized trips done by public transit (estimated at 69%).
- Incentivize the rationalization of the use of the automobile, “with the goal of making the users of private transport become aware of the real costs of this modal option.”
- Influence the location of homes and activities, with the goal of reducing the average trip-distance.
- Reorganize the institutional framework related to the transport system of the city.⁵⁹⁹

To advance these objectives, the PTUS called for “a leading role from the state to order and correct the imperfections of the urban transportation market,” and for an “equilibrium between market regulation and competition.”⁶⁰⁰ The PTUS included 13 wide-ranging programs, including the creation of a new metropolitan authority of transport, the revision of land use policies, and the reassessment of the city’s policies governing public and private transport, motorized and non motorized. It outlined an ambitious agenda to build tolled urban highways, expand the metro, establish a network of underground parking lots, and improve conditions for non motorized transit. And of course, Program 1 of the PTUS referred to the “modernization, ordering and integration of public transportation services.” PTUS implied a profound changes to the public transportation system in Santiago. Once (and if) fully implemented, the bus and metro networks would be physically, operationally and fare integrated. Automatic, contact-less fare cards would replace cash onboard buses and subway stations. Instead of tendering several hundreds of bus routes, the MOPTT would award a few contracts to operate “service areas” (later called feeder units) and “structuring corridors” (later called trunk units) the later of which “must be equipped with exclusive busways, segregated for public transport vehicles.”⁶⁰¹ The original version of the plan (figure 3.5) considered 284 kilometers of segregated busways in 10 main avenues, as well as 35 transfer stations, including 8 intermodal (where passengers could

598 (MOPTT 2000 p. 1)

599 (Ibid. p. 8)

600 (Ibid. p. 9)

601 (Comite Asesor Transporte Urbano 2000 p. 25)

Figure 3.5 Network of bus-exclusive infrastructure considered in the PTUS.

RED DE VÍAS EXCLUSIVAS PARA BUSES

PROYECTOS PRESUPUESTO 2001

MINVU

- A1 Sistema Sta. Rosa y par San Francisco / San Isidro Tramo II (Av. Matta - P. Cicarelli)
- A2 Av. Grecia (V. Mackenna-C. Errázuriz) y Nudo Grecia-San Eugenio-Bustamante

MIDEPLAN-SECTRA

- C1 Sistema Gran Avenida-San Diego y par Nataniel Cox (Placer - A. Vespucio)
- C2 Av. Independencia (Sta. María - A. Vespucio)
- C3 Av. San Pablo (A. Vespucio - Matucana)
- C4 Av. Pajaritos (C. Melipilla - Alameda)

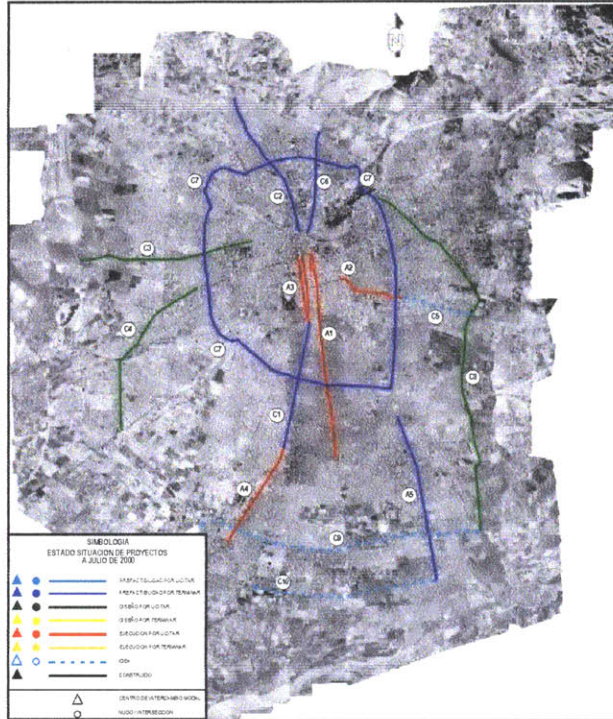
PROYECTOS POSTERIORES AL 2001

MINVU

- A3 Sistema Gran Avenida-San Diego y par Nataniel Cox (Alameda - Placer)
- A4 Sistema Gran Avenida-San Diego y par Nataniel Cox (A. Vespucio - Sta. Marta)
- A5 Av. V. Mackenna (A. Vespucio - Eyzaguirre)

MIDEPLAN-SECTRA

- C5 Av. Grecia (Los Presidentes - Tobalaba)
- C6 Av. Recoleta (Sta. María - A. Vespucio)
- C7 Anillo Intermedio
- C8 Sistema Sánchez Fontecilla - Tobalaba
- C9 Corredor El Peñón-Gabriela Poniente-Lo Blanco
- C10 Corredor Eyzaguirre (V. Mackenna - Los Morros)



Source (MOPTT 2000 p. 13)

switch between city buses, interurban buses, metro and taxis).⁶⁰² Additional infrastructure, such as thousands of roofed bus stops, would be built throughout the city.

With regards to the subway, the advisory group sought to convince the minister and the president to prioritize projects that increased ridership of the existing subway network -such as the overhaul of the bus route grid-, rather than building costly additional lines.⁶⁰³ However, this was one suggestion discarded by the new government. In fact, President Lagos had promised during his political campaign to bring the subway to Puente Alto, a poor suburb located in the south of the city⁶⁰⁴, and he had made up his mind about extending the subway before the

602 (Muñoz and de Grange 2010; Morande and Doña 2007)

603 (Comite Asesor Transporte Urbano 2000 p. 46)

604 El Mercurio, “Lagos inauguró la nueva Línea 4,” 1 December, 2005.

advisory committee had even submitted its report. On May 24, 2000, Lagos announced a 5.6 and 2.5 kilometer extension to subway lines 2 and 5, respectively, and was already considering Metro's proposal to break ground on line 4 -the line needed to keep his promise. Despite this divergence of opinion, the PTUS represented the first time that the bus component of Santiago's public transport system was targeted by a Concertación government in such a comprehensive, ambitious way. Unsurprisingly, the biggest challenge identified by the "four wise men," and embraced as such by the PTUS, was the fragmentation prevalent in the private bus operator industry. As they put it, "to meet the aims of the PTUS it is indispensable that public transport firms emerge, that are able to take advantage of economies of scale; that can efficiently administer and maintain their fleet of vehicles; that are able to technologically innovate; that compete in tendering processes and not in the streets; that formalize their labor relations with drivers... and that formalize their tributary regime."⁶⁰⁵ The plan outlined the type of private partners that would henceforth be sought by government authorities: "with a clear property structure, professionally administered, subjected to the general fiscal regime, able to ensure quality and efficiency, and with labor regimes that motivate friendly and safe behavior"⁶⁰⁶

The PTUS was clearly designed to mark a before and after. It embodied the long postponed Concertación promise to balance national growth objectives with equitable development at the local level. It promised radical, systemic improvements to the quality of urban services experienced by the vast majority of santiaguinos, and particularly by the poor, which relied on public transport the most. In many ways, the negotiated bus-route tenders of the nineties and the expensive but still quite limited expansions to the subway undertaken under Aylwin and Frei Ruiz Tagle fell short, and public transport deserved its place as one of the lowest-rated public services in Santiago.⁶⁰⁷ The abusive service, the hours wasted commuting, the congestion on the main thoroughfares, the perilous street crossings and the deteriorating air quality served as constant reminders that state capacity to use transportation policy as a tool for urban planning remained as limited under the Concertación as it had been under Pinochet. The first government led by a socialist since Allende was committed to correcting this.

605 (MOPTT 2000 p. 14)

606 (MOPTT 2000 p. 9)

607 Gómez Lobo (2007) refers two polls showing this result. One by Solimare, where public transport came out as the lowest rated, except for "municipal services", and one by ProCalidad and Adimark, where public transport was the third worst service evaluated among 22.

From vision to reality

Despite its far reaching implications, the regulatory reform implied by the PTUS quickly fell under the radar. Part of the reason was that both the president and Minister Cruz used their bully pulpits to highlight other elements of the plan, such as the extensions to the metro network, the construction of multimodal transfer stations, as well as the establishment of both bus *priority* lanes during peak hours throughout the city, and of bus *exclusive* lanes on a few mayor streets. Beyond the language contained in the PTUS, the first two years of the Lagos administration offered no indication that the government seriously wanted to challenge the bus operator cartel. At most, Minister Cruz made a point of appeasing existing operators, declaring that “if they accept the challenges (implicit by the PTUS) it will be possible for them to obtain long term concessions that will allow them not only to recoup and monetize their investments, but also to prevail over the periodic crises facing the sector”.⁶⁰⁸ More frequently, however, Cruz explained that improving the infrastructure used by public transportation vehicles should precede any new regulations on bus operators. “The usual is to impose changes and then generate the conditions. We are acting in the opposite manner, and for this reason we expect a better disposition from the *dirigentes* of transport.”⁶⁰⁹ The immediate implementation of bus priority and bus exclusive lanes -to be used by same old buses, racing drivers and unaccountable trade associations- soon frustrated those expecting radical change. As published in the editorial page of *El Mercurio*, “public transit exclusive lanes, even though they aim to improve the flow of public transport, constitute an irritating preference, since the service offered by the buses using them is of low quality... unfortunately, transport authorities of every Administration have lacked enough force to break the lobby power of the transportation organizations.”⁶¹⁰ In reality, however, plans to fundamentally modify how the Chilean government planned and regulated bus services in Santiago were discussed quietly but intensely since day one of the Lagos administration.

During his tenure at the MOP, President Lagos had what Bill Clinton later described as a “Nixon-going-to-China moment”⁶¹¹: Despite being a committed socialist, Lagos realized that the

608 *El Mercurio*, “Inversión de \$1,000 millones: Cambio total para servicios de transporte en Santiago”, September 17, 2000.

609 *El Mercurio*, “Medidas aplicadas al tránsito son positivas pero mejorables,” Carlos Cruz, April 4, 2001. p A1 and A19.

610 *El Mercurio*, “Editorial: Plan Maestro de Transporte,” February 22, 2002.

611 (Clinton 2012)

introduction of market forces could paradoxically expand state capacity. Opening highway projects to private investors reduced the financial burden of expanding critically needed infrastructure, while also enabled authorities to set regulation. His instructions to Minister Cruz were explicitly to adapt this model to public transport in Santiago. The window of opportunity to design an attractive framework, find willing investors, and launch the new system was not very big: Everything had to be ready by 2003. That year, the bus operating contracts awarded in the tender of 1998 would expire, affording the administration a critical juncture to radically change the rules of the game. Germán Correa recalls being summoned to the Presidential Palace of La Moneda in August 2001, where discussions were already taking place to analyze how the “highway concession model” could apply to public transport. Among the ideas floated at the time was fully privatizing the system, awarding one or a few number of contracts to large private investors to build 9 metro lines and to replace the existing buses with light rail and hybrid vehicles.⁶¹² Correa reacted by pointing out the key way in which highways and buses were different: “I explained that this proposal implied killing the micreros, and that doing so would cost a lot of money. His government could not remove several thousand people from the activity without expecting to compensate them, and neither could it send them to unemployment.”⁶¹³

The mere possibility of opening the surface transport sector to external competition raised several implementation questions for the government. How likely were world class bus operating companies to invest in a place like Santiago? What type of business model would attract them, and what if any would be the financial outlay on the part of the government? How could the government manage the transition from existing operators to the new investors? Would existing operators need to be compensated, and how strongly would they resist the project? The lack of definitive answers contributed to separating the subway and the bus components of the PTUS. Due to its high, up front, capital investment cost, its centralized and predictable revenue stream, and its more established list of potential investors, subway extensions fit much more closely with the highway concession model. The Metro was institutionally well-established and

612 According to Correa, this plan was advocated by Matías de la Fuente, president of the Bicentennial Commission and close advisor to Lagos. Fernando Bustamante, president of the Metro, and Germán Molina, Director of Concessions at MOP, were present in this meeting.

613 (Correa, Germán. Personal interview. 13 June, 2012)

in a good financial position: It operated without operational subsidies since 1994,⁶¹⁴ and on July 2001 successfully issued a first series of bonds, raising cash from the private sector to refinance its impending capital debt (extending its re-payment obligations to 25 years) and increasing its borrowing capacity.⁶¹⁵ In other words, adding the buses as part of the same package added significant “noise” to what seemed to be a financially sound financial strategy already underway at the subway company. Perhaps for these reasons, Lagos gave the green light to the construction of Line 4 of the subway, a decision announced by the president of Metro on November 21, 2001.⁶¹⁶ Nonetheless, the conditions to move forward with the PTUS as a package, including the buses, continued to be discussed in utmost secrecy for several months, until a not entirely unrelated national political scandal forced the resignation of Minister Cruz in January 2002. The “highway concession model” implemented at MOP was not universally heralded as a success, and opposition parties had long sought to establish a direct connection between the contracts awarded and President Lagos’ campaign funds. In 2001, a link was apparently established: Money paid in 1999 by the MOP to a private consulting firm owned by a member of the Socialist Party circled back to several MOP officials, as “compensations.” The official explanation was that these “extra” payments enabled the ministry to pay competitive salaries to officials managing the concession program, but the scandal escalated nonetheless. Beyond claiming that this compensation mechanism was illegal, the opposition argued the money was really used to finance the campaign.⁶¹⁷ Only the resignation of Cruz kept the investigation from raising questions about the president’s own involvement.

Amidst the scandal, Lagos appointed Javier Etcheberry as new bi-minister and recruited Germán Correa to formally come back to government, serving as the Coordinator of the *Directorio de Transporte Urbano*, a new inter-ministerial commission tasked exclusively with

614 (Metro de Santiago 2007 p. 49). The budgetary balance at Metro was partly due to its chosen strategy to compete against from the buses. Given the ubiquitous competition, Metro targeted a higher income market segment, offering more comfort for higher fares than the buses.

615 (Metro de Santiago 2012 p. 95). The first seven bond emissions (series A to G) took place between July 2001 and September 2005. All of these bond series were backed by the Chilean central government.

616 El Mercurio, “En octubre del 2002 comenzarán obras de línea 4 del Metro,” November 22, 2001. During the event, Metro president Fernando Bustamante announced that the 33 kilometer project would cost US \$1,007 million, and that US \$650 million would be financed with a 15 year, 3% interest loan from BNP Paribas.

617 El Mercurio, “Obras públicas indaga sobresueldos de jefes,” November 2, 2002.

implementing PTUS. Etcheberry was known as a no-nonsense technocrat: He was an engineer with a PhD in operations research, credited with revamping the Chilean Internal Revenue Service. The president ordered them to move the PTUS forward, from planning to implementation. The days of Cruz's conciliatory statements to the press appeared to be over.⁶¹⁸ Thinking of the upcoming battle with the leaders of the trade associations, Etcheberry used his first public appearance as minister to stress his instructions were "to modernize this country, not cowed by special interest lobbies."⁶¹⁹ Only days later, Correa publicly outlined the government's strategy: "The upcoming tender of 2003 will fundamentally change the existing bus route structure. It is absolutely illogical to have 113 of the existing 334 bus routes currently in Santiago overlapping in Vicuña Mackenna Avenue. Something similar happens on Alameda, and we can't allow it. Most importantly, we need existing trade associations to become professional transport companies. The sector is highly informal, and can't continue like this. Having many entrepreneurs on the same bus route leads to internal competition: In the future we want firms that own the vehicles, and that have formal contracts with their employees... My role will be to lead the great challenge of ordering public transport in Santiago, to radically modernize it, as President Lagos instructed."⁶²⁰

Details about the exact content of the regulatory framework proposed by the government would come later, but the key underlying point was clear: The objective of replacing the trade associations with corporatized firms was no longer negotiable. The state would use market competition as a tool to enforce this regulatory objective. Trade associations could either adapt and take this challenge head on, or step aside and allow someone else to take their place. The leaders of the AGMTP surely took note, and many drew out their drums of battle. Their position was clearly stated by Manuel Navarrete, who along with Marinakis and Pinto was the most

618 The contrast was clear to people that interacted with both ministers. "Etcheberry was much tougher than Carlos Cruz. Etcheberry cared little about what the micreros had to say. He was tough, and seldom talked to them directly" (Díaz, Guillermo. Personal interview. 4 August, 2012).

619 (Etcheberry, Javier. Personal interview. 17 July, 2012)

620 La Nación, "Germán Correa: Los objetivos de la licitación son intransables," March 10, 2002

powerful trade association leader in Santiago. Primed by a newspaper reporter, he dryly warned: “reasonable people do not talk when threatened.”⁶²¹

Beta-testing market responsiveness: Finding operators for Metrobús services.

Despite heightened rhetoric, threats were nowhere near credible. A recent, low key effort to attract private investors to Santiago’s public transport system had failed as recently as June 2001. The contracts of

the trade associations operating a handful of bus routes that fed passengers to key metro stations -services known as ‘Metrobús’ - had expired, and MOPTT organized a tender to renew them, demanding higher standards of service. The potentially affected trade associations were affiliated to the AGMPT, and their leaders decided to boycott the process. As they expected, MOPTT received no alternative bids, the process was indefinitely postponed, and the incumbent operators nonchalantly continued to operate these routes. Metrobús services could be operated with 250-300 buses. If the government was unable to defeat a boycott and to elicit market interest for a relatively small project, how could it expect to succeed in a city-wide process threatening thousands of operators at the same time?

Etcheberry and Correa decided to relaunch the Metrobús tender, not only to demonstrate to cartel leaders that suitable alternatives did in fact exist, but perhaps more importantly, to learn

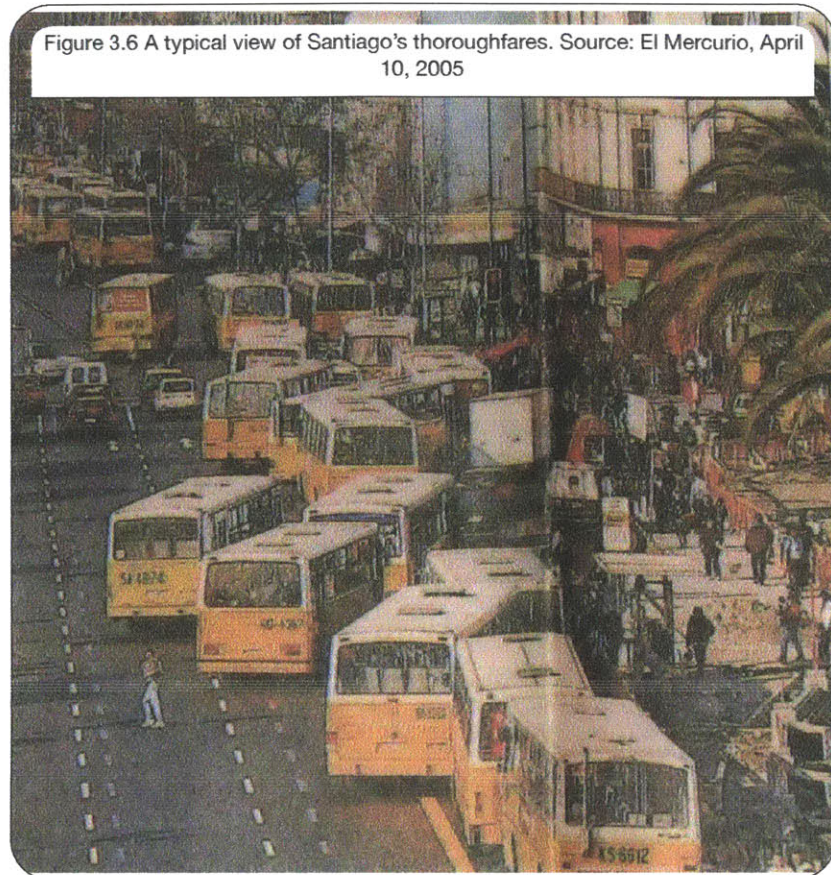


Figure 3.6 A typical view of Santiago’s thoroughfares. Source: El Mercurio, April 10, 2005

621 La Tercera, “Surgen primeros roces entre Germán Correa y Microbuseros,” March 9, 2002.

more about the true appetite of the market in advance of the upcoming, city-wide process. They found that the outlook was not promising. According to Guillermo Díaz, who joined MOPTT as Under Minister of Transportation and worked recruiting investors, “there was a bad assessment of this sector as a business opportunity. Potential entrants did not know for sure if the banks would offer financing, and the MOPTT was not perceived as a trustworthy counterpart... considering that the results of every single previous bus tendering process had been pre arranged. Who would believe that we were actually serious about awarding contracts in a competitive manner? (Potential bidders) saw politicians promising a lot of things, who would surely continue the tradition of negotiating with the micreros.”⁶²² Apparently, the strategy of compromising with trade associations during the nineties had come back to bite state authorities. Now potential investors gave no credence to the government’s promise to competitively award contracts. To be sure, the Metrobús contracts were not particularly attractive on their own, if only because it made little sense for passengers to take a bus to a metro station when there were plenty of bus routes offering point to point services.⁶²³ To counter private investor hesitations, Etcheberry personally reached out to representatives of large european conglomerates, assuaging their fears, and framing the Metrobús contracts as a strategic investment. As he put it, firms entering the market now have a foot in the door of Santiago’s large public transport market, precisely when the Lagos administration launched an aggressively competitive process to award contracts city-wide.

One of the firms invited to submit a bid for Metrobús was the french conglomerate Connex (now Veolia). In addition to running public transport operation in several continents, this firm operated solid waste management facilities in Chile since the nineties, and owned a minority stake in *Ciudad Móvil*, one of the consortia that operated BRT buses in Bogota’s Transmilenio system. Another was ALSA, a spanish company already running an inter-urban bus service between Santiago, Valparaíso and Viña del Mar, and with broad international experience, including the operation of public transport services in Zaragoza, Spain. Their participation would certainly send the desired signal to the trade associations. They were large, well capitalized and had experience in similar markets. According to Alberto Urquiza, who represented Connex in Chile, “the government asked us by every possible means to participate in the Metrobús, but my

622 (Díaz, Guillermo. Personal interview. 4 August, 2012)

623 Also, the contract period offered was only 3 years, not enough to recoup the investment if someone came in with new buses. Changing these terms was risky: “We couldn’t get creative, because there weren’t too many external actors interested,” recalls Díaz (ibid.)

superiors in France were very uncertain about the true viability of a long-term business plan”.⁶²⁴ With large conglomerates uncommitted, Chilean authorities turned to local alternatives. They reached out to their contacts within the trade associations, trying to enlist a local player willing to break the boycott. As it happened, the AGMPT was experiencing internal turmoil. In May 2001 Juan Pinto had left the organization, taking with him nine trade associations controlling approximately 1,000 buses to create a new federation, *Siglo XXI*. It is impossible to confirm if news about the PTUS had anything to do with this rupture, but authorities had for months nurtured their relationship with the more entrepreneurial trade association leaders like Pinto. According to Correa, “I gave (Pinto) more information than the rest... tried to empower him as leader. I knew he was trying to convince the most backward members of his organization of the positive aspects of the policies pursued by the government”.⁶²⁵ Such nurturing approach was not reserved to consolidated trade association leaders. Jaime Sánchez, the son of a bus owner unaligned with the AGMTP saw the Metrobús tender as an opportunity to enter the market without having to go through the ranks of cartel bureaucracy. Owning no buses, and with scant experience, Sánchez created Red Bus, a firm that Etcheberry acknowledges “was created, partly, in response to overtures made by us.”⁶²⁶ But even with such support Sánchez had good reason to withhold to the last minute his decision to bid: “Once my intention was known, I began receiving messages, stating that I would be shot. I stopped going to my office, and only met people in public places.”⁶²⁷

As the deadline approached, the process seemed likely to fail for a second time. Both Pinto and Connex announced their decision not to participate, asserting that “the numbers did not make sense,”⁶²⁸ and the AGMPT stood firm in its decision to boycott the process. According to

624 (Urquiza, Alberto. Personal interview. 11 July, 2012) Guillermo Díaz offered confirmation: “We actively tried to recruit them... the first attempts were not successful, but Javier Etcheberry gave them a lot of certainty that this process was serious” (Personal interview. 4 August, 2012).

625 (Correa, Germán Personal interview. 13 June, 2012)

626 (Etcheberry, Javier. Personal interview. 17 July, 2012)

627 (Sánchez, Jaime. Personal interview. 23 July, 2012) ALSA and Connex representatives also received “invitations” to withhold their bids, albeit in a much more civilized tone. “The micrero leaders approached all firms considering a Metrobús bid. You can call the former managers of ALSA and they will tell you a story similar to what I experienced personally: They warned us, claiming that we would not survive in this market” (Urquiza, Alberto. Personal interview. 11 July, 2012).

628 (Pinto, Juan. Personal interview. 27 July, 2012) In separate interviews, Simón Dosque and Alberto Urquiza offered similar explanations.

Etcheberry, “we offered to support whomever made an effort to modernize. They listened, but did not believe me, or simply did not want to participate. They thought they had more power than they actually had, and convinced themselves they could effectively block our efforts”.⁶²⁹ Indeed, they even staged protests. On July 25, 2002, incumbent Metrobús operators organized a semi-paralysis of service on the Alameda. They placed one bus in each of the lanes of this critical avenue, and ran them at 5 km/hr, producing a massive traffic breakdown, right in front of MOPTT headquarters. The leader of these trade associations, Marcel Antoine, promised to organize a larger strike if the government did not cancel the tender. Fortunately for the authorities, their efforts paid off. They received viable bid commitments from ALSA, the Spanish firm, and from Jaime Sánchez’ Red Bus. So, on July 30, Correa summoned the the AGMPT leaders, and notified them that failure to submit bids would “end in tragedy”: The 540 buses currently serving Metrobús routes would automatically lose their authorization to operate, an outcome that “only forecasted the business challenges they would all face in the tendering process of 2003.”⁶³⁰ Albeit barely, the threat was now credible.

On August 6th, 2002 The MOPTT awarded seven contracts to operate Metrobús services. It would be the first time that a large, foreign owned private conglomerate operated public transit services in Santiago since the electric trolley era. ALSA’s Chilean subsidiary -Bus Lit- won three of these units, while Red Bus won other three. Rodrigo Pérez Calaf, a local entrepreneur with no previous experience in the sector, won the seventh unit after submitting a last minute bid. To be sure, bids presented were far from ideal, and in fact Jaime Sánchez had to sell Red Bus soon after its contracts were awarded, lacking financing to deliver the promised vehicles on its own.⁶³¹ Similarly, ALSA was so uncomfortable with its own bid, that its managers offered to partner with displaced Metrobús operators immediately after winning.⁶³² However, this battle had immense significance: The Chilean authorities had successfully created a market where none existed before, demonstrating to potential investors that the government was in fact committed to

629 (Etcheberry, Javier. Personal interview. 17 July, 2012)

630 El Mercurio, “Como fracasó el último diálogo,” August 19, 2002

631 According to Jaime Sánchez, large bus manufacturers aligned with the cartel pressured his bank to withdraw previously promised financial support to his firm. Sánchez sold to José Yuraszeck, a former public official during the dictatorship, that in 1983 oversaw the privatization of Chilectra, the national electric utility, and emerged from the process as one of the wealthiest men in Chile. For more details on Yuraszeck, see (Huneus 2007 p. 311).

632 The reason this did not happen was probably because Manuel Navarrete and the AGMPT pressured Metrobús operators not to.

awarding contracts on a competitive basis, and expanding its capacity to use the threat of competition as an instrument to modify the rules governing bus services city-wide. “This was the first real face-off between this government and the trade associations,” recalls Alan Thomas, former official at SECTRA. “Had we failed then, operators would probably succeed organizing a boycott to the larger reform effort”.⁶³³ Instead, the government’s success attracting bids forced trade association leaders to adjust their tactics. According to Juan Pinto, “the gremio felt a debacle was coming... Many thought: ‘What happened to (the Metrobús operators) will surely happen to us.’”⁶³⁴ A few trade association leaders took this as an opportunity to accelerate the transition of their organizations into real corporatized firms, able to compete in the upcoming city-wide tender. The broad majority, however, were overwhelmed by the fears of an infuriated member base that demanded a united, resolute and militant response to the PTUS.

Escalating conflict: The road to the Santiago bus blockade of 2002

The outcome of the Metrobús episode triggered frantic calls from the offices of transport trade association leaders. They tried to enlist the support of politicians to go around the MOPTT, but their key allies -mostly centered in the DC- were too far from Lagos’ decision making circle. Senators Andrés and Adolfo Zaldívar, known as “friends of the gremio,”⁶³⁵ had in fact opposed the candidacy of Lagos within the Concertación. The Minister of the Interior, José Miguel Insulza (PS), had contact with the trade associations, but in any case Etcheberry -a member of the PPD- had a significant degree of political autonomy that resulted not only from his close connection to Lagos, but from a career-long reputation as an uncompromising technocrat. Lacking “back doors” to influence policy, the Consejo Superior de Transporte had little results to bring to the rank and file members of their organizations. Their only alternative was martyrdom. The Consejo Superior agreed that bus operators in Santiago had to present a united front against the threat of external competition, and convened an urgent general assembly. Several trade association leaders described how such assemblies typically worked: “A bus owner with aspirations to become leader would grab the microphone and ask the current leaders of his organization whether or not they were capable of standing up to government abuse. Normally, the assembly would clap and shout in agreement, and thus the next speaker would feel

633 (Thomas, Alan. Personal interview. 15 June, 2012)

634 (Pinto, Juan. Personal interview. 27 July, 2012)

635 Ibid.

encouraged. He would say ‘Mr. Leader, grow a pair!’⁶³⁶. By the the time it was the turn of that leader to speak, he would normally need to show he had a pair by asking ‘Do you want to paralyze the city?’ And everyone would respond, yes!”⁶³⁷ On this occasion, the assembly took place in a large theater in Santiago, and every speech was predictably more incendiary than the previous one. Roughly 600 people were present. “We explained what had happened with the Metrobús, and warned that if we allowed the government to continue, we would be next!”, recalls Cristián, the son of Demetrio Marinakis.⁶³⁸ “The consensus was that we needed to derail this project and stop the tendering processes for good. Nobody opposed that”, recalls Armando Huerta -then leader of the FGDTS⁶³⁹.

Discussions, however, centered on exactly how far to take the protest. Some passionately advocated barricading major intersections, causing a city-wide traffic collapse.⁶⁴⁰ Others felt withholding service for a day or two would suffice to force the government back to the table. Luis Willumsen, a consultant working for the AGMTP, recalls that there were essentially two camps represented in the assembly: “One that wanted to launch total war, even bringing down the government if that was what it took to force the government to back down, led by Demetrio Marinakis. Another group was willing to find a workable accommodation, but only as long as entry to the market by external competitors was forbidden, led by Manuel Navarrete.”⁶⁴¹ The more radical group carried the day, and preparations for the protests began immediately. Members of every transport trade association in Santiago were pressured to participate, and only a few organizations that had already decided to embrace the PTUS -mostly those affiliated to Juan Pinto’s Federación Siglo XXI- refused.⁶⁴² Rumors of the coming standoff reached the

636 The actual quote is “tiene usted los pantalones?” (do you have the pants?)

637 This quote is from Juan Pinto, but a similar story was offered by Demetrio and Cristián Marinakis.

638 (Marinakis, Cristián. Personal interview. 20 June, 2012)

639 (Huerta, Armando. Personal interview. 18 July, 2012)

640 “Some bus owners were not only willing to withdraw their vehicles from service, but also advocated preventing other bus owners from working. They were ready to blockade terminals of any bus organization unwilling to join the protest.” (Panza, Orlando. Personal interview). Another trade association leader, who asked to withhold his name, mentioned “I know some leaders who even planned on dumping gravel and construction material at the doors of subway stations.”

641 (Willumsen, Luis. Personal interview. 20 June, 2012). His description is consistent with Demetrio Marinakis’ own framing: “Within the gremio we had two wings. One, the strongest led by myself, and another one, led by my friend Manuel Navarrete, who along a few other leaders galloped toward ‘empresarización’.”

642 As explained by Simón Dosque, “this was our opportunity to demonstrate that not every bus owner organization was equal, and that at least ours were willing to sit on the table and discuss changes that were reasonable” (Personal interview. 15 June, 2012).

MOPTT, and authorities learned that the plan was to blockade 50 intersections on the morning of Monday, August 12, 2002. A protest of that scale had not taken place in Santiago since the Allende years. Guillermo Díaz tried to talk down the trade association leaders, and in fact met several times with Demetrio Marinakis seeking to defuse the protest. However, positions were too far apart to reach a compromise,⁶⁴³ and perhaps more importantly, trade association leaders were now bound by an assembly vote.⁶⁴⁴ Their own position within the trade would suffer if they were perceived as too willing to negotiate.

“We knew they would go on strike”, recalls former Minister Etcheberry, “but never did we imagine that they would attempt to blockade the whole city. President Lagos was furious”. A response task-force was installed at La Moneda, led by President Lagos himself. The Minister of the Interior, the Intendent of Santiago, the General commanding the *Carabineros*, as well as MOPTT officials Etcheberry, Correa and Díaz were present. Once it was clear the protest would happen, Chilean authorities understood that this was a show of force. “We concluded that it was imperative to defeat them at their own game, employing force -always within the law, but with force nonetheless.”⁶⁴⁵ The government issued an unusually harsh warning. Not only would the contracts of bus operators participating in a blockade be declared void and their vehicles confiscated, but Law 12.927 would be invoked. This Law, “of the internal security of the state,” was used frequently during the Pinochet Regime but rarely invoked since the return of democracy⁶⁴⁶. It empowered Chilean authorities to request courts to expedite or obviate due process when dealing with threats to “public order.” People convicted under this law not only

643 According to Guillermo Díaz, “the last encounters took place the Sunday prior to the protest. I met Demetrio Marinakis on 9 am, and then again at 2 pm. His position was quite unyielding: only if we cancelled the Metrobús contracts and suspended the larger tendering project, they would refrain from barricading streets. Neither were a possibility” (Personal interview. 4 August, 2012).

644 Marinakis’ account stresses that the government tried to get assurances that the protest would not include blockading streets: “Guillermo Díaz wanted me to go on record, on a government sponsored television broadcast (“*cadena nacional*”), asking members of my organization not to blockade streets. Members would not block streets if I asked them not to, but if I did such thing, my position within the gremio would suffer. I had to maneuver” (Personal interview. 12 July, 2012).

645 (Etcheberry, Javier. Personal interview. 17 July, 2012)

646 Despite numerous strikes and social conflicts taking place in Chile throughout the 90s, Concertación governments rarely invoked this Law. The only case known to the author took place under President Aylwin, and employed against members of the Mapuche tribe, who seized land illegally. 141 Mapuche Indians were convicted and deprived of their political rights.

face prison, but are also stripped of their political rights, such as taking on leadership positions in government or social organizations -like trade associations.

A city hostage: Turning a crisis into an opportunity

Authorities knew that the transport trade associations were about to make a critical strategic mistake. This interest group was already grossly unpopular among the general public, and blockading the streets would only diminish their position and empower authorities to decidedly move forward with the PTUS. As Correa explained, “this conflict was an opportunity for us. The full benefits of our proposed reform would take years to really materialize, and our ability to implement changes would inevitably weaken in the process. By choosing to engage in an all or nothing war, the *micrero* leaders gave us the invaluable chance to break the backbone of the gremio early.”⁶⁴⁷

Seeking to take full advantage, authorities designed a three pronged strategy. First, government spokesmen filled the airwaves informing the public of what was happening. “We were calling television stations, giving as many interviews as possible. Our aim was to gear public opinion decisively against the leaders of micrero organizations”, recalls Etcheberry.⁶⁴⁸ Consistent with Correa’s strategy during the early nineties, the Chilean government wanted to ensure that when the battle line over the PTUS was drawn, the public took the side of the government. Second, authorities assembled a team to expeditiously free any blockaded intersections, and to provide alternative transportation to the public. For the former, military and carabineros were placed in high alert, and a fleet of tow trucks hired (many brought in from CODELCO, the state owned copper mining company). The plan was to tow the buses, and to retain them for several days, to ensure owners suffered financially. Authorities realized that many bus operators lived day to day, and knew that keeping their vehicles off the streets would weaken their resolve. For the later, metro authorities prepared a contingency plan, and MOPTT officials lobbied visible dissidents of the Consejo Superior, such as Juan Pinto, to ensure they kept buses running. And third, authorities actively sought evidence usable in court linking Consejo Superior leaders to the organization of the blockade, since applying the Law of Internal Security against rank and file bus owners and drivers would only dilute responsibility and not have the intended

647 (Correa, Germán Personal interview. 13 June, 2012)

648 (Etcheberry, Javier. Personal interview. 17 July, 2012)

effect. Fortunately for authorities, a little luck and some malice led Demetrio Marinakis to give a self incriminating interview on the Sunday prior to the protest.⁶⁴⁹

And so events unravelled. Demetrio Marinakis shared with the author how he experienced those critical hours: “My own son led the blockade of Americo Vespucio.⁶⁵⁰ He deployed 200-300 buses to key intersections at 4 of the morning. I began to get nervous, what would happen if someone died during the process? They would surely hang us at the Plaza de Armas... however I could not call them off. If I called them off I would appear as the biggest traitor to the gremio!”⁶⁵¹ On the morning of Monday, August 12, hundreds of buses barricaded the main streets of Santiago. A map published by El Mercurio (next page) details the location of 45 intersections blockaded, including five sites that featured skirmishes with police, and two more where tires were burnt. One of the largest concentrations of buses took place at the intersection of Americo Vespucio and Santa Rosa, two of the most important thoroughfares in the city (pictures next page). The city collapsed. According to press reports, approximately 40% santiaguinos missed work that day. 50% of the students of middle schools and 25% of the students from elementary schools missed classes. Businesses experienced 20 to 30% lower sales. The subway system experienced 42% higher ridership. Bus organizations not participating in the strike were unable to provide sufficient mobility alternatives. Juan Pinto recalls, “On that morning the entrance of many of our terminals were blocked with their buses. We operated on that day, but only with the few vehicles we were able to put out. Our bus routes were full of rocks and “miguelitos” (nails used to pinch tires).”⁶⁵²

On that chaotic morning, santiaguinos read the interview where Marinakis confirmed that the leaders of the *Consejo Superior de Transporte* had planned the protest.⁶⁵³ He explained they

649 Guillermo Diaz called Demetrio Marinakis on the phone, Sunday at 7 pm. During that call, Diaz told Marinakis that the president had agreed to spare him of any legal difficulties resulting from the protests. “I told him this would be a token of appreciation, since he had been the only micrero leader available to speak with us prior to the protest... I knew Marinakis would not appreciate this, as such special treatment would make him look bad within his organization. The strategy worked. Later that night, during halftime of a professional soccer match attended by Marinakis, a reporter approached him for an interview. Marinakis reacted as I had anticipated; Not only did he acknowledge that he was fully aware of the protest that was taking place the next day, but confirmed publicly that he was organizing it!” (Personal interview. 4 August, 2012).

650 This is the city’s ring road.

651 (Marinakis, Demetrio. Personal interview. 12 July, 2012)

652 (Pinto, Juan. Personal interview. 27 July, 2012)

653 El Mercurio, “Marinakis estima 2 días mínimo de paralización”, August 12, 2002

were reacting to the “shameful” tendering process of the Metrobús, awarded “to spanish firms that only existed in paper, lacking vehicles.” Marinakis went on to detail that the the strike would last “at least 48 hours, perhaps more,” and confirmed that participating buses were affiliated to trade associations with membership in the Consejo Superior -which he presided. This was exactly the evidence that the government needed. That day ended with 675 drivers detained and 663 buses confiscated, and with an official request submitted to the court by Intendent of the City of Santiago Marcelo Trivelli, to apply the Law of Interior Security to the leaders of the Consejo Superior de Transporte: Demetrio Marinakis (AGMTP), Manuel Navarrete (AGMTP), Armando Huerta (FGDTS), Orlando Panza (Federacion Santiago) and Marcel Antoine (Metrobuses).

The tone of protest organizers radically changed by early Monday afternoon. Armando Huerta offered a press conference on behalf of the Consejo, informing that the second day of the strike would not feature blockaded streets, and stressing that “the Consejo is open to talks with authorities, seeking a way to solve this conflict.” However, for authorities the time for talking was over. President Lagos made that abundantly clear: “What we observed today is absolutely unacceptable. I can say to my friends from the transportation industry, that all the weight of the law will fall upon them. This is a serious country and you can’t play around with Chile or with its institutions... As president of Chile, I owe myself to 15 million people, and I will not accept blackmail from a few.”⁶⁵⁴ By 8:55 pm on Tuesday, Marinakis, Huerta and Navarrete had been detained. Antoine and Panza would soon follow suit.

The outcome of the protest was the complete opposite of what bus operators expected. The Chilean authorities emerged united and empowered, with an implicit political mandate to fully implement the PTUS. In President Lagos own words, “this outcome represents the biggest victory we’ve had yet, as I believe that today we are closer to convince everyone that implementing this transportation plan is possible.”⁶⁵⁵ Public opinion was certainly enraged, and united against the transport trade associations.⁶⁵⁶ Perhaps if they had limited the protest to paralyzing services they would have kept some social standing, but by blockading the city, trade

654 El Mercurio, “Lagos endurece la mano y pide detención de dirigentes microbuseros,” August 13, 2002.

655 El Mercurio, “Lagos declara victoria del Gobierno,” August 14, 2002.

656 An editorial published in *La Tercera* on August 13 summarizes the tone of public discourse in Santiago in the aftermath of the protest: “Since the 70s, the gremio has frequently relied on its ability to paralyze the city as a pressure tool, and as a result authorities avoid conflict with bus operators. This time, however, La Moneda cannot allow itself to be cornered. Once and for all, our authorities should act firmly and decisively, not to attack the gremio, but to make it participate in a plan that this city needs with extreme urgency”.

associations succeeded in uniting most Chileans against them, and raised the costs for any potential ally to voice support for their cause. Marinakis and the more radical bus operators hoped that their detainment would turn them into martyrs, and that the strike would carry on while they were being processed. Quite dramatically, Marinakis allowed himself to be photographed raising his cuffed hands in defiance, so that members could appreciate that he was biting the bullet on their behalf. However, the unity of the Consejo Superior -and the commitment of its members to the protest- began to wither down as soon as the leaders were detained.

The ranking micrero leaders faced the possibility of serving up to five years in jail, and this by itself was sufficient reason for most cartel members to rethink whether sparring with authorities made sense. Now detained, and with the resolve of the government to carry out the PTUS clearly demonstrated, the incompatibilities of their role as *gremialistas* -representing members- and their role as *empresarios* -representing themselves- became more evident than ever. The reflections of Orlando Panza are quite telling: “The protest was a noble action. We were fighting for the jobs of our members, 3,500 microbus owners. But it was a mistake... I realized that night in jail that I was defending legless horses. I needed to get out and prepare a bid... that night I asked Navarrete and Marinakis not to request my support anymore. I told them that as soon as we left jail, I was on my own.”⁶⁵⁷ In the streets, individual bus owners also broke ranks and resumed service. Most were not prepared financially for a prolonged standoff. “Our people had financial difficulties”, explains Huerta, “and their debtors chose that time to cash in, believing that we would be in jail for a long time. It was a catastrophe”. “The problem was not only that we were in jail, but that they legally impeded us from carrying on as trade association leaders. That was a master move by the Government.”⁶⁵⁸ Cristián Marinakis agrees with this account: “our leaders were deprived of their decision making power, and were compelled to talk to authorities. In these conversations they agreed to the tendering process, and their only alternative for their survival became preparing a bid.”⁶⁵⁹

657 (Panza, Orlando. Personal interview. 19 July, 2012). Armando Huerta shared similar feelings: “There was a systematic campaign against us in radio, newspapers, television. They stigmatized us in such way that the press treated us as criminals... It was so bad that for a long time my oldest daughter wanted to conceal at school that I was a *micrero*. We were stigmatized as leaders, devastated anemically” (Personal interview. 18 July, 2012).

658 (Huerta, Armando. Personal interview. 18 July, 2012)

659 (Marinakis, Cristián. Personal interview. 20 June, 2012)

With bus services in Santiago soon reestablished, with the highest ranking leaders of the cartel debilitated and incarcerated, and with public opinion decisively supporting authorities, the path seemed cleared for reforms to swiftly move forward. Experts called on the government to “capitalize on victory”, taking advantage of this window of opportunity to “force operators to compete with Chilean and foreign firms.”⁶⁶⁰ However, even in the face of such propitious circumstances, Chilean authorities could not move forward without striking some kind of inclusive deal.

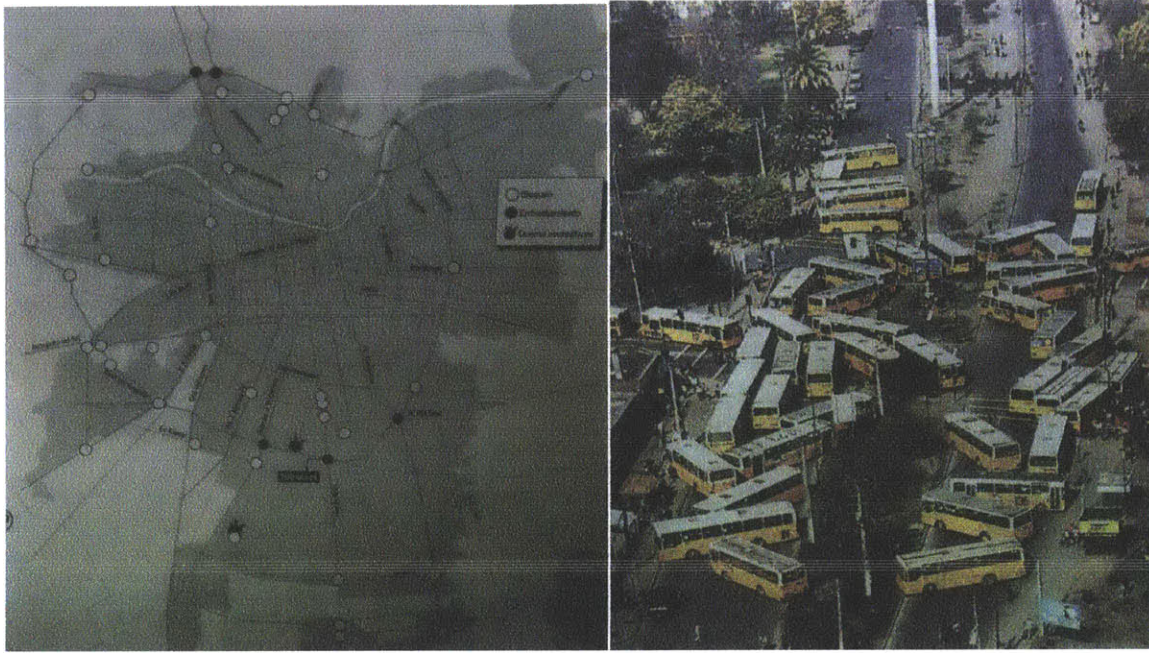
From forcing to fostering state capacity: Inventing a transition

Advisors close to Lagos -such as Matías de la Fuente (chair of the bicentennial commission and personal friend), Jaime Ravinet (Housing Minister) and Fernando Bustamante (Director of the Metro)- lobbied intensely in favor of leveraging this opportunity to do away with the loathed *micreros*. In fact, they advocated in favor of a 35-year, city-wide concession contract to SACYR, a private Spanish consortium that had informally pledged to replace buses with light rail if awarded a monopoly. This proposal would linger in the background for the coming months, but both Correa and Etcheberry were highly skeptical that it would work.⁶⁶¹ In fact, Etcheberry was not even sure reputable, well financed bus companies could be attracted to the Chilean market without committing the government to significant revenue guarantees. After all, the Metrobús experiment had produced only mixed evidence, the city-wide bus tendering bases were still being studied, and he did not yet have any formal participation commitments from larger firms. Minister Etcheberry was a technocrat, but he had a good sense of political and financial feasibility constraints. He realized that the participation of incumbent operators was *needed*. As he put it, “I did not believe those who wanted to replace existing operators with new, modern firms, that would magically do everything right... We wanted a transition to modernity, but I was certain this would take many years. Why? 1) Because this was a complex system, and it would be close to impossible to have everything working right from the get go; 2) because our country had already made an investment in the existing buses, and many of these vehicles were quite new, and 3) because there was a large number of able drivers working in the old system...

⁶⁶⁰ El Mercurio, “Expertos piden capitalizar la victoria,” August 16, 2002.

⁶⁶¹ This plan was not officially cancelled until March 2003, when a formal proposal by SACYR was deemed “poor and disappointing” by Chilean authorities. See (La Nación, “Gobierno rechaza plan de transporte paralelo de la empresa española SACYR,” April 1, 2002).

Bus blockades in Santiago, August 12, 2002



(Source: El Mercurio, August 13, 2002)

to keep costs manageable, we needed their participation. Furthermore, 4) there was a political, humanitarian consideration. We could not simply tell everyone to take their buses and go home.”⁶⁶² This point was stressed by Héctor Moya, one of the few voices that came out in support of the trade associations amidst the strike. The trade association leaders represented thousands of members who employed thousands of workers and owed millions to banks and vehicle manufacturers on their many buses. “They couldn’t simply burn and disappear them. *We had to work together to invent a transition.*”⁶⁶³

In the aftermath of the protest, with the micrero leaders still in jail, Correa held a series of meetings with individual bus owners, trying to assuage their fears. “During the nineties, the micrero leaders limited the direct communication I could have with individual bus owners. I was never able to defeat that barrier, and was forced to use them as intermediaries. But when they were in jail, lower ranking leaders got nervous, and began to approach me directly. It was through these conversations that the hold of leaders over their bases was significantly diminished.”⁶⁶⁴ During these encounters, Correa conveyed MOPTT’s message that the proposed reforms were neither unfair nor did they mean automatic displacement. He assured that bus owners that had invested in newer vehicles in the previous tenders would remain authorized to operate until their vehicle’s life cycle was completed, and that any trade association that professionalized its operations and transitioned into a formal transportation company, could conceivably remain in the new system. With the key trade association leaders incarcerated and deprived of their political rights, Héctor Moya became the official spokesman for private bus operators. In those critical days, Moya made the rounds to every major news outlet, “with the only message that could work in our favor at that time. I said that the government was destroying a group of small business owners in Chile, and that any transition needed to ensure there was room for them.” Members of congress with longstanding linkages to the bus cartel, finally began to lobby authorities on behalf of incumbent bus operators. The costs to do so were no longer as high, since the discussion had evolved away from whether or not the reform would happen, and concentrated instead on the details of how it would. Both sides, public and private, were

662 (Etcheberry, Javier. Personal interview. 17 July, 2012)

663 (Moya, Hector. Personal interview. 21 June, 2012). Simón Dosque has a similar explanation for the softening up of government. “Authorities had to recognize that we had made an investment. Replacing us and our vehicles would be very costly. We had responsibilities to the banks, to suppliers. They wouldn’t only harm the individual bus owners, but everyone behind them. They had to reserve at least a part of the new system for the old operators.”

664 (Correa, Germán Personal interview. 13 June, 2012)

gradually and perhaps naturally softening up their initial positions, and preparing for a negotiated transition.

Still in prison, trade association leaders and authorities negotiated the terms under which the new bus contracts would be tendered. While specific details would continue to be refined, authorities made several commitments such as not to penalize bids that included older bus fleets, not to require more expensive “clean-technology buses” that ran on electricity or natural gas, and to keep the required level of capitalization manageable. Moya recalls that the government wanted to require firms submitting bids to demonstrate US \$50 million dollars in capital. “We closed at US \$15 million dollars. We negotiated multiple similar changes so that small businessmen could find room in the new system.”⁶⁶⁵ A timeline that allowed existing operators to transition their organizations into firms, raise capital, and prepare their bids was also agreed. A pre-qualifying period would be open until July 2003, and the tendering bases would not be available until September.⁶⁶⁶ New contracts would not be awarded until sometime 2004, and existing contracts would be extended until this process culminated. Apparently, the fate of imprisoned micrero leaders was also among the items negotiated. “The Government softened its grip on the prisoners. Despite my efforts, application of the Law of Internal Security was not withdrawn, but I was assured that authorities would not pursue convictions aggressively,” recalls Moya.⁶⁶⁷ Notably, all five imprisoned trade association leaders were freed soon after an agreement to support the tender was reached. While months later they would be convicted, their 3-year prison sentence was commuted for monthly appearances to court. And, notably, government authorities continued to recognize Manuel Navarrete and Demetrio Marinakis as valid intermediaries with the AGMTP, despite formally losing their formal posts and their political rights as a result of the application of the Law of Internal Security.⁶⁶⁸

665 (Moya, Hector. Personal interview. 21 June, 2012)

666 This timeline would be revised periodically in the coming months. The final version of the tendering bases would not be available until early 2004.

667 (Moya, Hector. Personal interview. 21 June, 2012)

668 Trade association leaders were stripped of their political rights, and could no longer act as part of the formal leadership of their organizations. However, since authorities were not interested in enforcing this, a workable loophole was found. To comply with the court sentence, the AGMPT’s assembly appointed in October 2003 figure-heads to the top posts, and deposed Navarrete and Marinakis to subordinate managerial positions. From these positions, they continued to lead the organization informally.

The interests of trade association workers -perhaps the group that stood to lose the most from the PTUS- went unrepresented throughout this process. This is perhaps a testament to the weakness of the organized labor movement in Chile, a full decade after the return of democracy. In 1992, when the first negotiated bus route tender took place, authorities pledged to compensate not only bus owners but also bus drivers and trade association workers made redundant. Such pledge was fully forgotten in the subsequent tenders of 1994 and 1998, perhaps as a way to minimize the costs of the transition to the government. It was yet to be seen what was the attitude of the first socialist presidential administration toward this group, whose claims appeared unarticulated or marginalized at this point. Nonetheless, the headline published in *La Tercera* on October 25, 2002 summarizes this round of discussions quite well: “Requirements to micreros softened to ensure success of the Transportation Plan.” Even in the face of an apparently absolute, unquestionable victory of the government over the cartel, the Chilean government found it necessary and even desirable to adopt a fostering attitude toward the trade associations. The leaders of these organizations had come to the same conclusion. In January 2003, the leaders of the Consejo Superior de Transporte signed a letter addressed to Minister Etcheberry. In this document, the trade vowed to participate in the upcoming tendering process, and announced the hiring of Steer Davies Gleave, a world class transport consultancy, to advise them during their transition from trade associations to firms and to help prepare their bids. The tone was not merely apologetic. To move forward, the trade requested “specifics on the transportation plan advocated by authorities”.⁶⁶⁹

Creating Transantiago, a system where (almost) everybody would fit

Faced with this critical juncture, SECTRA worked hard to detail a system that made technical sense but that also fit, in the words of its top official at the time, “within alternatives deemed politically feasible by authorities.”⁶⁷⁰ Studies commissioned by SECTRA -many available since the 90s- had suggested that the existing point to point route network could be radically improved by substituting it with a trunk and feeder design. If MOPTT was able to ensure (1) optimized bus routes and frequencies, (2) the use of larger vehicles in the main corridors, and (3) the addition of infrastructure such as dedicated busways and stations, it was theoretically possible to deliver better service with a smaller number of buses. The number of trips requiring transfers would increase, but the model employed predicted that the disutility to

⁶⁶⁹ *La Tercera*, “Micreros se rinden y solicitan al gobierno precisar avances del plan de transporte,” February 3, 2003.

⁶⁷⁰ (Malbrán, Henry. Personal interview with Matías Fernández, 7 April 2012)

most passengers from changing to another bus or to the subway could be compensated with faster, more comfortable trips.

However, two constraints influenced the design of the routes and the size of the fleets eventually recommended by SECTRA, and both worked in favor of the interests of existing operators. First, authorities wanted a system with operations fully financed through the fare box, without demanding significant fare increases or requiring public subsidy. After all, as Guillermo Díaz aptly put it, “a Concertación government could not increase the cost of bus transit to the general public.”⁶⁷¹ The second constraint was in part related to the first. Authorities wanted a system that took advantage of existing buses, phasing them out only as they aged. This constraint had a technical justification. On the one hand, the bus fleet was not tremendously old -especially after considering that many vehicles had already been replaced as a result of the tendering process of the nineties-. On the other, purchasing an entire fleet of new buses was neither practical (since likely suppliers in South America did not have capacity to produce the required number of buses within the desired timeframe) nor advisable (since the resulting fleet would age at the same time). “The president wanted the whole package. He wanted to deliver a modern system but also to make everybody happy, charging the same fare but giving drivers a fixed salary and eliminating incentives for fighting over passengers. He wanted it all”, recalls Etcheberry.⁶⁷²

Such apparently contradicting imperatives influenced the design of the tendering bases: They had to be sufficiently demanding to ensure that the resulting operators were bound to deliver a significantly improved standard of service, but sufficiently accommodating to allow the participation of incumbent operators and keep costs down. By August 2003, the Chilean authorities decided to structure the new system around 5 trunk and 10 feeder area-based business units, all of which would be competitively tendered.⁶⁷³ The subway would be integrated to the system as one more “trunk unit”, further reducing the amount of buses needed. By this time, Chilean planners were paying close attention to the success of Transmilenio, the BRT system implemented in Bogota, Colombia. Drawing from that experience, they decided to pay operators

⁶⁷¹ (Díaz, Guillermo. Personal interview. 4 August, 2012)

⁶⁷² (Etcheberry, Javier. Personal interview. 17 July, 2012)

⁶⁷³ Approximately 65% of the expected passenger demand “pie” was concentrated in the trunk units, and the rest distributed among the feeder services.

based on vehicle-kilometers, rather than paying them per passenger, an approach that promised to eliminate curbside competition. Perhaps to make a clear connection to what was already perceived as a resounding colombian success, they also decided to name the emerging system Transantiago.

To meet the political and economic constraints of the project, Chilean authorities crafted the rules of the tender so that new entrants would be primarily attracted to only a few of the business units supposedly in play, while firms created by trade associations had advantages competing for the rest. Etcheberry concedes: “only in two of the trunk units did we offer long term contracts and required high quality (new and large) buses and large capitals. For the rest of the trunk units and for all of the feeder units we encouraged existing operators to create new companies and to bid using existing fleets.”⁶⁷⁴ To be sure, the two business units where authorities promoted participation of new entrants included Santiago’s transit “crown’s jewels”. One of them (“trunk 2”) included the profitable north-south Santa Rosa corridor, while the other (“trunk 4”) would serve the east-west Alameda corridor, running in front of the Presidential Palace of La Moneda. Nonetheless, crafting a tendering system that -at least for the short term- continued to favor existing operators was a notable concession to the trade associations. In many ways, it was a shrewd way to balance state and market logics previously disputing control over the design of the emerging system, as part of a “winner take all” fight. Perhaps such approach was unavoidable: “A system that relied only on new buses essentially meant duplicating the fare”, explains Guillermo Díaz, “so we calculated how many of the existing buses fit our standards, and established the number of still needed new buses as the fleet requirement of the business units that were geared toward new entrants.”⁶⁷⁵

New buses immediately in, old buses gradually out

Requirements to bid for business units “reserved” for large new entrants (trunks 2 and 4) differed significantly from the requirements to bid for units “reserved” to the trade associations (trunks 1, 3 and 5 and all feeder units). According to government plans, operators that won contracts for the prized trunks 2 and 4 would need to invest in large fleets of *new*, superior standard, buses. In contrast, winners of the trunks 1, 3 and 5 would not only be allowed to operate with used buses, but in fact would be *required* to begin operations with a combined fleet

674 (Etcheberry, Javier. Personal interview. 17 July, 2012)

675 (Díaz, Guillermo. Personal interview. 4 August, 2012)

almost as large as the current authorized fleet servicing *all* of the city (totaling 6,818 buses).⁶⁷⁶ In other words, old buses displaced from units “reserved” for firms such as Connex and ALSA, would be redistributed in the rest of the city. Excess used buses in the trunks “reserved” for the trade associations would then be gradually decommissioned, over the course of a year long “transition period,” until reaching the optimized *used* bus fleet size estimated by SECTRA of only 2,714. The process implied a complex, and carefully studied choreography, designed to minimize conflict with affected bus owners.

Table 3.1 Bus substitution schedule, as contemplated by MTT authorities in August 2005

Stage	Duration	+/-	Used Buses	+/-	New Buses	Total Fleet	
Before project			>7,279		0	>7,279	
Pre-transition period		-461	6,818	0	0	6,818	
Transition Period	I-A	Oct/05-Jan/06	0	6,818	1211	1211	8,029
	I-B	Jan/06-Apr/06	-731	6,087	147	1358	7,445
	I-C	Apr/06-Jul/06	-845	5,242	422	1780	7,022
	II	Jul/06-Oct/06	0	5,242	0	1780	7,022
Full implementation	Oct 26, 2006	-2,528	2,714	0	1780	4,494	

Source: Author, based on documents shared by former Coordinator of Transantiago

As shown in the table 3.1, operators of trunks 2 and 4 would introduce a first batch of 1,211 new, superior standard buses in the day of the launch of the transition period, allowing the Lagos administration to demonstrate a conspicuous, noticeable service improvement to the public. Roughly every three months after that date (“stages IA, IB, IC and II”) used buses would be retired and trunk units 1, 3 and 5 would shrink geographically, with the affected routes absorbed into trunks 2 and 4, and with their services overtaken with additional new buses brought in. While still painful, making the fleet size adjustments required in trunks 1, 3 and 5 was obviously easiest for firms created by incumbent trade associations, since out of the 6,818 buses required to start roughly 2,000 were models 1993 and 1994, due to exit the system anyway

⁶⁷⁶ This number does not consider roughly 1200 buses older than 12 years that were still operating in the streets and were due to exit for obsolescence. Regulations in Santiago, in place since the tender of 1998, established 12 years as the maximum age of buses offering service in the city.

for obsolescence by the end of the transition period.⁶⁷⁷ In other words, the number of additional buses they would need to retire was only 2,000, to reach the optimized bus fleet required by SECTRA by the end of the transition period. In contrast, new entrants wanting to bid for units “reserved” to the trade associations, would need to assemble a full fleet of 6,818 used buses (who would supply them?), *and* be prepared to retire 4,104 of these buses from service in a within one year (how would it be economical to run them for such a short period of time?) Such design deliberately made participation unpractical and uneconomical to anyone not currently operating buses in the streets of Santiago. In contrast, existing operators could draw from their existing bus fleet to bid, retiring their oldest vehicles as scheduled in accordance to existing regulations, and taking time to figure out on their own how to manage the rest of the required fleet adjustment.

Capital required to bid for each type of business units also varied. The rules required firms operating trunks 2 and 4 to have a minimum subscribed capital of 500,000 UF, (aprox. US \$12.1 million).⁶⁷⁸ In contrast, the minimum capital established for firms operating units “reserved” to the trade associations was only 90,000 UF (aprox. US \$2.1 million). Similarly, the duration of contracts was scaled. The contracts offered lasted thirteen years for Units 2 and 4, five years for Units 1 and 5 (extended automatically to thirteen if fleets were fully renovated before the end of the contracts) and only two years for Unit 3 (with no automatic extension possible). According to Juan Carlos Muñoz, advisor to Minister Etcheberry at the time, the rationale driving this design was avoiding a situation in which all of the contracts would be due for re-tender at the same time.⁶⁷⁹ However, the variability in the duration of the contracts also strengthened signals sent to potential investors about which units promised more stability and higher returns. In short, if the authorities forced the trade associations into accepting the

677 Part of the reason why there were so many buses close to the allowable vehicle age limit was that bus operators had stopped renovating their fleets, as they realized that their permanence in the system was increasingly in jeopardy. I thank Juan Carlos Muñoz for alerting me of this point.

678 The Unidad de Fomento (UF) is a unit of account used in Chile. The exchange rate between the UF and the CHL peso is constantly adjusted to inflation so that the real value of the Unidad de Fomento remains constant. In 2003, 1 UF = Ch \$17,000 = US \$24

679 Muñoz, Juan Carlos. Personal interview 20 July, 2012.

tendering *process*, they designed the tendering *bases* to foster a politically and economically feasible transition.⁶⁸⁰

A transparent (and perhaps desirable) case of picking winners

Anyone reading the tendering bases understood the message: The government preferred new entrants operate trunk units 2 and 4, and consortiums formed by existing operators to operate the rest of the tendered units. Etcheberry demonstrates the extent to which market and state logics had merged. “We had to offer a way for existing operators to insert themselves in the new system,” but at the same time, “we were clear that a change as important as the one we needed could not be done exclusively with them.”⁶⁸¹ The division of both types of trunk units allowed the Chilean government to get both efficiency and accountability, while avoiding (or managing) both the financial and the political costs of the transition. Officials implementing the project understood the enabling features of this dual combination. On the one hand, the official in charge of the *technical* soundness of the project at SECTRA came to acknowledge the state’s *political* imperative. As he put it, “the Concertación government was still fearful that the old operators -the Marinakis, the Navarretes- could derail or complicate the project. For this reason three trunk lines were essentially reserved for them, so that they wouldn’t complicate matters and get on board”.⁶⁸² But at the same time, the official in charge of day to day negotiations with private operators, MOPTT’s Guillermo Díaz, highlighted the economic imperative: “We knew that attracting new people to all units would be hard, since there was so much uncertainty about real passenger demand. It made sense to bring in new investors only to those corridors where we felt comfortable about guaranteeing passenger loads,” and later adds, “we knew that the more

680 This was of course deliberate, as acknowledged by the advisor to Minister Etcheberry in charge of developing the business model for each contract unit: “We expected that only foreign firms would be able to enter trunks 2 and 4, as only they could raise the required capital investment, and expected that in trunks 1, 3 and 5 and in the feeder bus units we would have national firms, as it would be impossible for foreigners to have used buses in such quantities, if only because no local operator would be willing to rent vehicles to them.” (Name withheld. Personal interview with Matías Fernández, 11 April, 2012).

681 (Etcheberry, Javier. Personal interview. 17 July, 2012)

682 (Name withheld. Personal interview with Matías Fernández, 7 April 2012). Some of the trade association leaders interviewed insisted that this political sensibility initially extended to workers, if only to reduce the costs of the transition for participating bus owners. According to Demetrio Marinakis, “Manuel Navarrete made agreements with Etcheberry, including financial support to pay for the severance packages of our drivers, which we were forced to fire” (Personal interview. 12 July, 2012). This proposal was even referenced in some of the planning documents reviewed in the course of this research, but apparently were not carried out, perhaps highlighting the absence of drivers at the negotiating table.

new buses we inserted to the system, the more pressure we would face maintaining the fare. The only way of containing the fare was to maintain a mix”.⁶⁸³

Few would believe that the the technocratic, market oriented Etcheberry had in fact established terms that decidedly favored trade associations⁶⁸⁴, but in fact such terms were probably the most efficient way to keep the PTUS viable. To be sure, the strategy was not universally accepted. Even Germán Correa expressed hesitations, which perhaps contributed to his ousting in March 2003.⁶⁸⁵ According to Correa, “the moment I left Etcheberry reestablished the micrero leaders as intermediaries, and welcomed them back to the table. The model changed toward a clientelistic scheme, a suit tailored to micrero leaders designed to ensure Navarrete and the rest would survive.” In a way, this was the same critique Correa had directed during the nineties against Irueta and Hohmann, his successors at the MTT. However, things were different now. Keeping the trade associations at the table had not negated or co-opted MOPTT’s efforts to enhance state capacity. This time, their participation made the project viable.

The threat of (limited) external competition was credible, but at the same time MOPTT offered (limited) guarantees of permanence to those who cooperated. Plans to implement Transantiago were nothing akin to a “big bang,” at least with regards to the transition of the bus operator industry. The MOPTT sought a gradual process in which firms, potentially but not necessarily owned by former trade association members, would replace the trade associations. Only those that performed well would survive over time. As Etcheberry emphasized, “we never guaranteed that (existing operators) would remain in the long term, as any new contracts would eventually expire... In fact, the possibility remained that 100% of the system would eventually end up in the hands of foreign or “modern” operators, and that traditional micreros would disappear. But we realized that this possibility could only emerge little by little.”⁶⁸⁶ After Correa resigned, the inter-ministerial commission overseeing the PTUS met on April 23, 2003 to

683 (Díaz, Guillermo. Personal interview. 4 August, 2012)

684 Perhaps this reputation acted as the enabling variable for Etcheberry, shielding him from accusations of corruption in crafting rules that benefited either trade associations or international conglomerates.

685 To be sure, tensions between Correa and Etcheberry had been brewing long before, partly triggered by Correa’s lack of formal powers over transportation policy, and by Etcheberry’s lack of political authority over Correa. Critics also point to a growing in-satisfaction within Etcheberry’s closer circle about the slow progress achieved by Correa, particularly as the project moved from planning to implementation. Aldo Signorelli took over as Coordinador General, but the role of this position in the future would be lower key.

686 (Etcheberry, Javier. Personal interview. 17 July, 2012)

formally name the upcoming system “Transantiago,” and to stress the project was moving forward as planned. However, the first version of the tendering bases was not approved and published until January 2004. Between those two dates, a simultaneous process took place. On the one hand, trade association leaders worked to rapidly transform their organizations into firms -this time for real-, and to capitalize these firms in preparation for a bid. On the other, the government aggressively reached out to large transportation companies, inviting them to participate in the upcoming tendering process.

Promoting Transantiago abroad, defending it at home

Once the bases were available, Minister Etcheberry led a series of international missions to explain the rules of the game and elicit interest on the upcoming tender. He personally traveled to Italy, France, Spain, England, Germany, Denmark and Sweden, meeting with board members of internationally renowned transport operation and bus manufacturing corporations. Guillermo Díaz made additional trips to Colombia, Brasil and Argentina with the same purpose. Gibrán Harcha and Rodrigo Urzúa visited Singapore, South Korea and Japan. It was a very aggressive promotion of the project, designed to convey the message that the reform process was already underway. Etcheberry remembers his talking points during these trips: “What I explained to foreign firms was our long term vision. While they could start by operating only two trunk units, contracts for the other business units would have a short duration and soon be re-tendered, and thus foreign companies were told that they could eventually expand their presence.”⁶⁸⁷ As we have seen, the message had a slightly different emphasis at home, where authorities stressed that trade associations could compete under equal footing, and even have preference, by adapting their business to the new rules determined by the transportation ministry. Despite the hype surrounding bus reform in Chile, international reception to the tender announcement was lukewarm.⁶⁸⁸ According to Alberto Urquiza, “the operator companies that attended meetings with Etcheberry during his trips to Europe were mostly us (Veolia, from France) and ALSA from Spain. The rest were suppliers of equipment, but not operators. The British firms are horrified about South America and there were no serious operators from Germany.”⁶⁸⁹ The story was

687 (Etcheberry, Javier. Personal interview. 17 July, 2012)

688 As described by Guillermo Díaz: “The level of incredulity was high, and few believed us” (Personal interview. 4 August, 2012)

689 (Urquiza, Alberto. Personal interview. 11 July, 2012)

similar with bus manufacturers. Mercedes Benz was not receptive, an attitude that probably reflected its investment with the status quo as the preferred supplier to traditional bus operators in Chile. “Volvo and Scania came on board only after we aggressively sold the project to them”, says Guillermo Díaz.⁶⁹⁰

During these international missions, investors stressed that despite government claims, Transantiago remained a very risky investment. It required a significant capital investment on terminals and buses, and investors were not convinced the choreographed exit of trade associations would happen as planned. Perhaps more than demanding a competitive process, these companies demanded assurances of state intervention. They feared that displaced operators would sabotage their vehicles, block access to the labor market or simply continue to operate their routes. Further, potential investors were particularly worried with the possibility that project champions had overemphasized passenger ridership estimates. What if SECTRA’s calculations were wrong and more buses were actually required? “Potential bidders and banks demanded the inclusion of financial guarantees. They pointed out that this was a profound reform, and that without State guarantees operation would not be feasible.”⁶⁹¹ However, the MOPTT was not in condition to offer such alternative. The “highway concession model” had preconditioned the PTUS to private financing. After all, the country continued to build highways financed by tolls, and the Metro had secured the loans to build line 4 backed with future fare revenues. Why couldn’t the buses be financed in a similar fashion? The Finance Ministry kept Etcheberry from making promises the government did not want to keep, and so Transantiago went back to the drawing board. As the MOPTT official in charge of designing the contracts explains, “my team was charged with redesigning the bases so that even though no financial guarantees coming from the government budget were directly incorporated to the contract, risks to new operators were minimized.”⁶⁹² Transantiago *needed* the participation of these operators. Otherwise, what would be different between this process and the previous ones during the nineties? Transantiago was back in a corner. Carlos Acha, manager of ALSA, put the issue succinctly in an interview published in Santiago: “We will be part of Transantiago only if the new bases are attractive. We

690 (Díaz, Guillermo. Personal interview. 4 August, 2012)

691 (MOPTT official. Name withheld. Personal interview with Matias Fernández, 11 April, 2012)

692 (Ibid.)

still don't know what will happen. Expectation exists in Spain, but we will only participate if the bases fit our interests. Otherwise we will abstain."⁶⁹³

The need to redesign the tendering rules was compounded by an additional, local, problem. Fernando Bustamante, director of the Metro, threatened with withdrawing from Transantiago. We should recall here that before leaving office Pinochet granted autonomy to the subway, establishing it as a limited corporation. This autonomy had enabled Metro authorities to adjust its fare structure and its service supply to balance its budget, even when doing so resulted in severely underutilized capacity. Integration with the bus system promised to increase Metro's passenger flows, but it could also disrupt its much heralded financial equilibrium. At that point, Metro fully financed its operations with passenger fares, and had successfully refinanced its capital debt by raising cash from the private sector using long term bonds. This refinancing expanded the company's borrowing capacity to the point that it was now able to self-finance 30% of the cost of its new capital investments, such as the construction of Line 4.⁶⁹⁴ Bustamante feared that fare integration with the bus system would jeopardize the financial stability of the company, constrain its ability to implement its longer term expansion program, and void the covenants agreed with banks and bondholders. According to a close aide to Bustamante, "the people planning Transantiago didn't have money to pay for coffee, while we were raising our own cash. They advocated integration to the Metro, so that they could use us to raise the money needed for Transantiago. This was not possible, and discussions over this issue put Correa and Bustamante at odds."⁶⁹⁵

Beyond any legal complication, much of Metro's hesitation came from doubting that Transantiago could increase passenger loads of the subway in the proportion predicted by SECTRA. If these estimates were wrong, implementation would not result in the expected additional vehicle kilometers for the subway (which was still operating under capacity), and thus would not yield revenues sufficient to cover expected increases to its operational costs. This outcome -under Bustamante's assessment- meant that his trains would subsidize the city's buses. And perhaps more importantly, politics played a part. We should recall that from the start,

693 El Mercurio, "Inversionistas españoles: Transantiago siembra inquietud", 24, June, 2004.

694 (Metro de Santiago 2007 p. 14)

695 (Name withheld. Personal interview with Matias Fernández, 4 April 2012)

Bustamante had supported an alternative to the PTUS that emphasized rail over buses. He had later been an advocate for the SACYR option, and to much frustration from Correa and Etcheberry, continued to push for subway extensions in spite of ongoing Transantiago planning. Unsurprisingly, Bustamante did not cherish the idea of becoming merely “one more trunk unit” of Transantiago, and had successfully leveraged his personal access to the president (they were close friends⁶⁹⁶) and the legal autonomy of the Metro to operate independently of the MOPTT and the PTUS.

To protect his company, he began to lobby against the financial integration of buses and trains, joined potential bidders demanding a business model that minimized risk to Transantiago’s operators, asked for a revenue sharing formula that increased Metro’s share, and pledged for a commitment from the Finance Ministry that the State would increase public financing to the Metro’s capital expansion program. He adamantly insisted on redesigning the proposed bus route network to prevent buses from running over existing metro lines, unless metro capacity was exceeded. To accommodate Bustamante, private bus operators would have to be paid less, fares would need to increase, or an operational subsidy would be required. Neither alternatives were palatable. According to Etcheberry, “the face-off with Bustamante was really a power struggle. He resented losing control, making Metro an appendix of Transantiago.”⁶⁹⁷ This conflict dominated public and private discussions on Transantiago during 2004, and was only solved when Etcheberry threatened to resign unless President Lagos forced Bustamante to step down from the ministerial commission overseeing on PTUS.⁶⁹⁸

Rethinking the business model to appease risk-averse private investors

MTT authorities negotiated the terms of the 1992, 1994 and 1998 bus route-contracts with the prospective operators of the time -the trade associations- to ensure their participation. The imperative to do this had not changed, except now the MOPTT was trying to ensure the participation of a new cadre of prospective investors, the large private conglomerates, and indirectly, the Metro. Dozens of firms bought the tender bases published in January 2004, and the Chilean government received 1,200 questions in return, in addition to those posed directly by

696 Fernando Bustamante led the national oil company, ENAP, under President Allende, and had gone into exile after being detained and tortured during the military coup. According to various sources, he is one of President Lagos closest personal friends.

697 (Etcheberry, Javier. Personal interview. 17 July, 2012)

698 Ibid.

Metro and by the large conglomerates visited by Minister Etcheberry directly. This back and forth -compounded with the previous cycle of conflict and compromise with the trade associations- had taken Transantiago way off schedule. The first half of the Lagos administration had certainly made an impact in Santiago. He had inaugurated extensions to Metro lines 2 and 5, broken ground on the construction of line 4, and announced the construction of a network of tolled urban highways. Yet the buses, the most heavily used mode of transportation in the city, and the most patronized by the poorest santiaguinos, remained unchanged under the eyes of the public, *even* after the highly publicized strike of August 2002. Lagos personally reviewed the changes to the new bases and mad suggestions designed to elicit more market interest.⁶⁹⁹ These changes were formalized by Etcheberry on May, 2004,⁷⁰⁰ and included:

A new basis to calculate payment to operators (both bus and metro). Instead of compensating them for *vehicle/kilometers*, the basis for the calculation would be *payment per passenger*. This change seemed anathema to the original plans -which explicitly tried to minimize the incentive to race for passengers- and was partly adopted to benefit the subway, which was expected to transport more passengers than bus operators.

A new formula to determine monthly compensation to operators, designed to yield more stable and predictable revenue flows. The basis of this formula was a “referential demand” established for each business unit tendered, to which monthly payments would be pegged. In the case that actual ridership in any given month was lower than the referential demand, the price paid to operators per passenger would automatically increase to close the deficit. Similarly, in the event that ridership surpassed demand estimates, the payment per passenger would be automatically lowered. In fact, a deviation of 10% in actual demand implied only a 1% revenue

699 Sources interviewed for this project suggested that President Lagos insisted particularly on changing the incentive structure considered in the contracts, a suggestion that led to abandoning vehicle kilometers as the basis of compensation for operators. However, the president wishes were only partially adopted, as the planners working under Etcheberry established the formula described in point B below.

700 Javier Etcheberry held a press conference, making the following statement: “The Transantiago Ministerial Committee has analyzed the observations and consultations made by participants to the bus operator tender. We received 1,200 questions from 36 firms, out of 72 that bought the bases. Most of the questions have to do with the amount and reach of guarantees, schedule of implementation, cost structure, route design, payment to operators, among others. These consultations led us to make changes such as paying operators depending on the amount of passengers transported”

change. This formula was added to facilitate the negotiations of prospective operators with banks, and was expected to result in better financing conditions on the purchase of buses. But perhaps more importantly, the new formula significantly reduced the risk shouldered by operators, as it implied that revenues to operators could never be lower than 75% of initial government estimates.

The creation of a “technical reserve fund”, designed to stabilize the price of the fare over time. Operators would contribute to this fund with a lump sum payment, due at the start of operations. When bidding, interested firms would not only need to reveal the amount of money they would be willing to accept as payment per passenger, but also the amount they would contribute to this reserve fund. This change would later lead existing operators to claim that the tendering process had really become “an auction”, and worked to further segregate the trunk units “reserved” for existing operators from the trunk units “reserved” to new entrants.

A new implementation schedule for the project. Deadline to submit bids was postponed from June to September 2004, and contracts would not be awarded until January 2005. The start of the transition period, marked by the arrival of the new buses for trunk units 2 and 4, was pushed back to August 2005, while “full implementation” -meaning fare integration with the subway, route reorganization and complete phaseout of excess buses in the rest of the network- would not take place until August 2006. Such schedule design had an obvious political rationale. Despite the slow progress, new buses would be running in La Alameda during President Lagos presidential tenure and before the elections to choose his successor.

Industry transition within the transport trade associations

The international “road show” reinvigorated opposition to Transantiago within the trade associations. In a public statement, Armando Huerta declared that “this process appears to be a readily served table, not for Chilean businessmen, but for foreigners. The requirements to bid are so stringent that most individual operators will end up exiting the system, lacking sufficient capital to remain.”⁷⁰¹ Even transport operators receptive to reform, such as Juan Pinto and Simón Dosque, reacted negatively to the intense international promotion of the project. “We made it

701 La Tercera, Dirigentes Microbuseros presentan recurso contra Plan Transantiago, March 20, 2004

clear that we disliked what was happening, and certainly had hard conversations with the authority about this strategy, which clearly seemed designed to leave us out.”⁷⁰²

This time, however, the path of action chosen by the trade association leaders differed significantly to the standoff of 2002. Calls to organize a new strike -registered in the press at various moments between March and May 2004- failed due to low adhesion. A proposal to sabotage the tender by not submitting bids, advocated by Demetrio Marinakis and Armando Huerta, also received little support. Instead, most trade association leaders spent their time and energy preparing for changes they now understood as inevitable. While Chilean transport authorities courted international operators, trade associations went through a cathartic process to transform themselves into firms, raise capital, and prepare their bids. Such transformation was anything but painless. “We did not care if they retained their members as stockholders, or if they enlisted a partner that would control most of the stock”, recalls Etcheberry. “Implementing Transantiago was sufficiently complex and risky for us to also worry about how the micreros transitioned their organizations.”⁷⁰³

Official registries established that there were 7,279 buses serving the streets of Santiago at the time, operating under contracts awarded in the previous tender of 1998. A few hundred of these buses were older than 12 years, immediately due to exit the system for obsolescence. The remaining 6,818 buses were owned by 2,872 individuals.⁷⁰⁴ This bus fleet was approximately distributed approximately as follows⁷⁰⁵: 3,500 AGMPT buses (led by Manuel Navarrete and Demetrio Marinakis), 1,250 Federación Siglo XXI buses (led by Juan Pinto), 1,000 FGDTs buses (led by Jorge Gómez and Armando Huerta), 660 Federación Santiago buses (led by Orlando Panza) and 400 buses affiliated with a plethora of smaller and independent trade associations. The leaders of the larger groups prepared for the tendering process in similar fashion to the 90s. They created shell companies to abide with requirements established in the tendering bases, and attempted to organize their bids to minimize competition among themselves. In most cases, capital required to bid was met by transferring real estate owned by

702 (Dosque, Simón. Personal interview. 15 June, 2012). A similar point was made by Juan Pinto (Personal interview. 27 July, 2012).

703 This framing is a key difference to the approach chosen in Mexico City.

704 These figures are from MOPTT documents, shared by Isabel Guzmán.

705 These figures are from MOPTT documents, shared by Isabel Guzmán, and confirmed from interviews with operators.

the trade associations to these firms, and by imposing additional monthly contributions to individual members. No additional investment was necessary to bid for business units not requiring a fleet of new buses. In contrast, the tendering bases did require firms bidding for trunk units 2 and 4 to be better capitalized: They would need to be able to purchase new, superior standard vehicles, and given the expected competition for these units, they would need to strengthen their bids by committing larger amounts of money to the technical reserve fund. This does not mean that the trade associations were willing to give up on these units without a fight. To be competitive in trunks 2 and 4, the micrero leaders sought and obtained investment pledges from longstanding or aspiring suppliers to the gremio, such as Kaufmann (the local distributor of Mercedes), Copec, Shell, and Esso. “Volvo was the most audacious”, recalls Juan Pinto, “It was so anxious to take over Mercedes’ market, that its representatives met with most micrero leaders, encouraging them to bid and committing to front the money if necessary, as long as we bought their buses.”⁷⁰⁶

Two points are key to understand the transition taking place within the trade associations. First, most individual bus owners did not obtain stock in the companies created to bid. Rather than individuals, the typical case was that the trade association owned the stock. Second, individual bus owners retained ownership over their vehicles. To comply with the requirement of having centralized administration of the bus fleet, the new firms rented the old buses from their owners, and became the formal employer of drivers. This mechanism assuaged members’ fears that the corporatization process would affect their ability to benefit directly from their vehicle, or that they would lose their voice in the governance of the company. However, given the lack of accountability prevalent in the trade associations, this process also implied that control over the new firms remained in the hands of a few, longstanding leaders, and perhaps more importantly, that the permanence of individual owners in the business would be tied to the life of specific vehicles. The disadvantages of this outcome were probably first evident to the owners of the 461 buses models older than 1993, set to exit the system before the start of the transition period. Owners that were not close to leaders of their organizations were not offered the opportunity to replace these vehicles with newer models, a decision that instantly left those of them that did not already own another bus out of the system.

706 (Pinto, Juan. Personal interview. 27 July, 2012)

However, few of the remaining individual operators seemed to realize that this design placed them at significant risk. In fact, 1,938 buses were models 1993 and 1994 -and 689 of these were the property of single-bus owners.⁷⁰⁷ In the case of the AGMTP, “things happened pretty quickly”, recalls Cristián Marinakis. “We held assemblies in which people made speeches, we clapped, and everybody left thinking they owned the new firm. Nothing was documented in paper, although the initial capital of those firms came from contributions exacted from individual members. They would each pay Ch \$60,000 (US \$100) and later \$100,000 (US \$166) every month;⁷⁰⁸ this money was never recognized as a contribution from the individual member, but accounted on behalf of the trade association.”⁷⁰⁹ According to Héctor Moya, “Roughly a year before the tender, Manuel Navarrete instructed the leaders of the trade associations (affiliated to the AGMTP) to extract contributions from individual members, telling them that the money was needed to create the new firms. However, when the time came, they agreed that it would be the presidents of the trade associations that would be the real stockholders, and not the individual members. Short story: they betrayed the little guys.”⁷¹⁰ While there was probably some debate within each trade association, this transition process progressed smoothly. The 2002 blockade significantly weakened the leaders that previously opposed corporatization (“empresarización”) efforts, such as Demetrio Marinakis at the AGMTP and Armando Huerta at the FGDTs. Furthermore, what was proposed did not seem tremendously risky or different: Individual members assumed that by making financial contributions to the new firms they were acquiring control and ownership of the new company and purchasing the right to remain in the system after the implementation of Transantiago. Further, members felt protected since nobody questioned at that point their right to manage and extract direct profits from their buses.

The fact that the tendering bases contemplated a one-year transition period certainly helped minimize tension, as no major immediate changes were required outside of trunk units 2 and 4. At least during this period, cash would continue to be accepted onboard as fare payment, which meant that each bus owner retained direct control over its own revenues. Routes also remained without change during this time, meaning that bus owners did not need to worry about

707 These figures are from MOPTT documents, shared by Isabel Guzmán.

708 Conversion using the December 2003 exchange rate (US \$1=Ch \$602.90)

709 (Marinakis, Cristián. Personal interview. 20 June, 2012)

710 (Moya, Hector. Personal interview. 21 June, 2012)

relocating to new terminals, or about changing their day to day operations. While on paper it would be the firm controlling operations, in reality the transition period implied business as usual for existing operators. Perhaps most importantly, allowable fleet sizes were designed to mirror the number of buses needed to operate the old network of services -at least at the beginning-, which helped leaders postpone difficult discussions about whose buses would eventually need to be decommissioned. While it was abundantly clear that many buses would need to be decommissioned once the transition period ended, savvy micrero leaders explained to members (correctly, by the way) that SECTRA had grossly underestimated the fleet sizes required to offer the desired level of service. For this reason, they argued that the number of buses forced out of the system would in the end be much lower than expected, and that the owners of the older buses would have the chance to replace them with newer units.

In any case, participation in these firms seemed to be the only viable alternative for individual bus operators to remain in the market. As a former bus owner, who asked to remain unnamed explained: “We could not be sure if Manuel Navarrete was guiding us to jump from a cliff, if he was delivering our heads on a platter, or if he was actually protecting us. We were sheep, merely following.” Over the course of 2003 and 2004, the AGMTP created four firms: *Buses La Capital*, *Buses Gran Santiago*, *Buses Metropolitana* and *Buses Huelén*, all led by Manuel Navarrete. Similarly, Juan Pinto’s Federación Siglo XXI created *Comercial Nuevo Milenio*, *Transportes La Montaña* and *Transporte y Comercial Los Halcones de Tulahuén*. Jorge Gómez replaced Armando Huerta as the leading figure of the FGDTS, creating a company called *Servicio de Transporte de Personas*. Orlando Panza and his Federación Santiago chose to partner with Héctor Moya, who promised to help them raise sufficient capital to bid. The result of this alliance was the creation of a company called *Su Bus*.

Trade association leaders: From *gremialistas* to *empresarios*

The leaders of the strongest trade associations met frequently through this period. Their discussions had two objectives: First, to maintain a united front, if only to ensure that no local operator offered their buses to potential new entrants -a crucial measure to effectively encapsulate external competition to trunk units 2 and 4. Second, coordinating their bids to minimize competition and respect existing territorial boundaries as much as possible.⁷¹¹ Such

711 According to Jaime Sánchez, this agreement was promoted by the team of consultants advising Manuel Navarrete (Personal interview. 23 July, 2012)

mutual defense strategy seemed similar to their reaction to the tender processes of the 90s. Navarrete (AGMTP), Gómez (FGDTS) and Pinto (Siglo XXI) did come to a preliminary agreement to protect their mutual interests. According to Juan Pinto, “once we were threatened by international investors, I met with Navarrete and Gómez to decide what to do. Jorge had his routes and terminals in Peñaloén, so we decided he should retain that sector. My stronghold was in Maipú, and so that area would be reserved to my organization. We allocated the whole city in this way, making agreements about what areas should be controlled by whom.”⁷¹²

The full terms of this negotiation were not disclosed to the author. However, several sources confirmed that the the agreement implied that only firms created by the AGMTP could bid for trunk units 1 and 3 (initially requiring 1,082 and 711 buses)⁷¹³, as well as for feeder units 3, 5, 8 and 9 (requiring a total of 1,477 buses). Pinto’s Federación Siglo XXI would bid for trunk unit 5 (requiring 1,300 buses), and for feeder units 6 and 7 (requiring 898 buses). Jorge Gómez agreed to limit his participation to feeder units 1, 2 and 4 (requiring 793 buses).⁷¹⁴ Since trunks 2 and 4 were likely to attract external competitors, they were considered fair game to anybody able to raise the capital necessary to bid, although the participating trade association leaders agreed to give notice to the others before making a final decision. This agreement to coordinate bids - probably known and tolerated by authorities- actually worked in favor of the reform. First, it practically guaranteed that all service zones would be covered, a desirable outcome that was nowhere near guaranteed. And secondly, if this delicate balance was maintained, the three largest and most powerful bus operator organizations in Santiago would remain in the system, with most of their fleets at least initially included, *even if* trunks 2 and 4 were effectively awarded to foreign firms. As a result, the leaders controlling the new firms became invested in the success of the reform.

However, the cartel was no longer as united as it had been in the nineties, nor were their leaders acting as *gremialistas*. Orlando Panza, leader of the smaller Federación Santiago,

712 (Pinto, Juan. Personal interview. 27 July, 2012)

713 These figures obtained from the powerpoint presentation made by Isabel Guzmán to the congressional commission reviewing the implementation of Transantiago (Camara de Diputados 2007), and from the author’s interview with Jaime Sánchez (Personal interview. 23 July, 2012)

714 The tenth feeder unit was not deemed attractive by the gremio, and in fact was eventually cancelled after no bids were submitted for it.

announced he and his partners -he no longer referred to them as “members”- were preparing a bid with Héctor Moya, and that they would take their chances with an uncoordinated bid. This insubordination was minor, compared to what would come next. In mid 2004, Jorge Gómez approached Carlos Ríos, a colombian entrepreneur with stock in *Express del Futuro*, one of the firms operating buses in Bogota’s Transmilenio system.⁷¹⁵ *Express del Futuro*’s representatives had previously met with MOPTT authorities, and were seriously considering participation in Transantiago. A partnership with a local operator such as Gómez seemed almost a natural strategy for Express. After all, this company had originally included a few hundred colombian bus operators as stockholders, and thus had significant experience managing similar transitions.⁷¹⁶ In fact, executives from Express del Futuro believed that this expertise gave them an edge over likely european competitors. Gómez suggested a partnership to bid for either trunk 2 or 4. However, it soon became clear that a joint venture with Gomez’ FGDTs would only be beneficial to Express in trunks *requiring* used buses, since this was the main asset that Gómez brought to the table. Eventually *Express del Futuro*’s stockholders concluded that their company did not require partners to enter Chile, and decided to bid for both trunks 2 and 4 without local partners. However, Carlos Ríos -acting independently from his colombian partners- continued in conversations with Jorge Gómez, now exploring a separate bid for trunk 1, which supposedly was reserved exclusively to the AGMPT. While Gómez eventually withdrew from this venture - probably due to pressures within the gremio- Ríos came out of the discussions with Gómez convinced that winning a trunk “reserved” for local operators was indeed feasible.

Carlos Ríos realized that the leaders of the gremio were neither united, nor being entirely frank to individual members of their organization. Many individual chilean bus owners would inevitably exit the system, despite contributing funds and committing their vehicles to the firms created by the gremio. Once the new contracts were awarded, allowable fleet sizes would shrink rapidly, and a significant number of individual bus owners would be forced to exit, left without stock in the new firms and without the right to exploit their buses. This information had not been shared by all rank and file bus owners. Ríos realized that once this was known, some bus owners would be willing to break ranks and hear an alternative proposal. Once talks with Gómez broke off, Ríos recruited visible dissidents of the gremio -such as Jaime Sánchez, the local entrepreneur

715 Express del Futuro operated one of the three trunk units, as well as two of the four feeder bus business units of Bogota’s celebrated Transmilenio.

716 For more details on the history of firms that operate Transmilenio, see (Ardila 2004 p. 366-368).

who had previously won three contracts to operate the Metrobús, only to sell his company for lack of financing. On behalf of Ríos, Sánchez and other intermediaries enlisted lower ranking micrero leaders, trying to get their support. “I worked with the colombians from the beginning”, recalls Sánchez, “my job was finding the buses, securing land for terminals, everything.”⁷¹⁷

While it was not clear that Ríos would enlist the buses required to bid for trunk 1, the mere possibility injected significant tension to the process, previously unexpected. Interestingly, the market forces that for so long authorities had tried to inject into the system were now threaten to create unwanted instability. If the AGMTP lost trunk 1, the largest local bus operator organization in Chile would be practically left out of Transantiago. News of offers made to individual bus owners quickly reached Manuel Navarrete. Once he realized that a foreign firm was seriously considering a bid for a trunk “reserved” to the AGMPT, he sought assurances from the transportation minister. “I remember Navarrete complaining”, recalls Etcheberry, “but my commitment had only been that existing operators would find space to participate in Transantiago, including that corridor, not that the AGMTP would control that corridor. It is not the same thing. Navarrete misunderstood.”⁷¹⁸

Disheartened by Etcheberry’s response, Navarrete foresaw what would happen if Buses La Capital, the firm created by the AGMTP to bid for trunk 1, lost this critical contract. Even if they won trunk 3 (the smallest trunk unit tendered) and the four feeder-bus services informally earmarked for the AGMTP, his organization would not retain sufficient slots to initially accommodate all of the members. Furthermore, the contract for Trunk 3 had a duration of only two years, which implied that even after winning this contract, the long term permanence of the AGMTP in the system was no longer assured. Navarrete was fully aware that such dire outcome did not only imply losing significant market share, but was sure to spark a major internal revolt, rendering him powerless to control the newly created firms. The likely entrance of the colombians to trunk 1 led Navarrete to renegotiate his previous agreement with Juan Pinto. According to Pinto, “Manuel asked my permission to bid with Buses Metropolitana for trunk 5, as a hedge in case the offer presented by my Halcones de Tulahuén was disqualified.”⁷¹⁹ To get

717 (Sánchez, Jaime. Personal interview. 23 July, 2012)

718 (Etcheberry, Javier. Personal interview. 17 July, 2012)

719 (Pinto, Juan. Personal interview. 27 July, 2012)

Pinto's buy in, Navarrete offered him with stock in Buses Metropolitana.⁷²⁰ This was an attractive proposition since Metropolitana was also bidding for one feeder unit, and seemed harmless since Navarrete pledged that his bid would not improve the conditions offered by Halcones. However, once Pinto agreed, Navarrete intensely lobbied his contacts within the Chilean government, above and beyond the MOPTT, threatening with backing Demetrio Marinakis' call to fully boycott the tender process. If the government would not prevent the colombians from successfully competing in Trunk 1, Navarrete wanted Pinto to be disqualified in Trunk 5.

Regulatory reform in political context: Government as juggling

Negotiations with both international and local groups forced authorities to walk a tight line. On the one hand, the promoters of Transantiago needed to ensure that the tendering process attracted several high quality bids for trunks units 2 and 4, and *at least* one viable offer for the rest of the units tendered. On the other, they felt obligated to minimize conflict with incumbent operators, both to ensure their participation and to contain opposition to the project. According to Luis Willumsen, a Steer Davies consultant working for the AGMTP, "these negotiations became at the end about maintaining the reputation of the government. Public officials had talked so much about the fantastic results that would come out of the implementation of Transantiago, that they were forced to actually make it happen. And, to make Transantiago happen, they had to offer very favorable conditions to those considering a bid amidst high degree of uncertainty."⁷²¹

These favorable conditions did not only include the previously described adjustments to the tendering bases, but also last minute concessions to local groups, partly motivated by Manuel Navarrete's desperate lobbying efforts on behalf of the AGMPT. Such changes, formalized November 25, 2004 -only one month before bids were due- caused significant discomfort among firms interested in entering Santiago's public transit market for the first time. According to Jaime Sánchez, who was now working for Carlos Ríos, "the number of buses required to bid for trunks 1 and 5 suddenly increased from the original 1,200 to approximately 1,800, a change designed to make our entry to these units even more difficult".⁷²² Suddenly, the colombian needed to enlist 600 additional buses to bid. Other changes, included perhaps to appease local groups such as the

⁷²⁰ Pinto argues that the agreement was that he would own 50% of the stock of Buses Metropolitana. However, official documentation register that Pinto's participation was only 8.44%.

⁷²¹ (Willumsen, Luis. Personal interview. 20 June, 2012).

⁷²² (Sánchez, Jaime. Personal interview. 23 July, 2012)

one headed by Moya, were later summarized by Jean Luis Soulas, International Director of Connex, as “the exclusion of any qualitative assessment from the criteria formally used to adjudicate contracts”.⁷²³

Why was the government suddenly so worried about ensuring that Manuel Navarrete and the AGMPT, and not the colombians, retained trunk 1? Again, the political context of the country offers clues. The 2005 presidential elections were looming near, and despite Lagos’ popularity, polls placed the candidate from the right-leaning parties ahead. Intra-Concertación politics were running wild. In fact, on September 29, 2004, Lagos announced the resignation of both his defense minister, socialist Michelle Bachelet, and of his foreign relations minister, DC member Soledad Alvear, so they could campaign for the incoming primary. They were the two viable Concertación candidates for the presidential election set to take place in March 2005. Given that the AGMPT was the largest bus operator trade association in Santiago, its exclusion or inclusion from Transantiago represented the difference between going through the electoral year (primary, first round and potentially second round presidential elections) with renewed protests and perhaps with paralyzed services or with shiny new Transantiago buses running in the streets. “The government was worried about the permanence of incumbent operators”, recalls Juan Pinto. “Minister (of the Interior) Insulza was the point person in this, trying, as a good negotiator, to ensure that all parties affected retained something. And this is more or less what actually happened at the end.”⁷²⁴

As year 2004 came to a close, high ranking authorities from the Chilean government were finally certain of both containing conflict and attracting experienced operators to Transantiago. The international promotion efforts spearheaded by Minister Etcheberry and Under Minister Guillermo Díaz finally paid off, as five foreign bus operator groups -ALSA and AVANZA from Spain, Connex (now Veolia) from France, and Fanalca and Express del Futuro from Colombia- committed to participate. While still informal, these commitments were immediately disclosed to the media in an effort to build up the credibility of the reform. Chilean authorities also felt assured by the likely participation of Jose Yuraszeck, the pinochetista-turned-

⁷²³ El Mercurio, “Franceses molestos con Chile”, Jan 23, 2005.

⁷²⁴ (Pinto, Juan. Personal interview. 27 July, 2012)

wealthy-businessman that had previously purchased Red Bus from Jaime Sánchez,⁷²⁵ and who had since expressed an interest on competing for one or several of the business units of Transantiago. Yuraszeck's participation was encouraged, as it gave significant coverage to the project in Congress. In fact a source interviewed for this research -then a high ranking official at MOPTT- disclosed that feeder unit number one had been expressly "tailored" for Yuraszeck's Red Bus. As this source put it, "we wanted to make a gesture to the political right, since Mr. Yurazceck had close ties to the UDI (the right-leaning political party in opposition to the Concertación). Feeder one required the same number of buses operated by Red Bus for Metrobús. He hoped that this gesture would convey to them that the project was moving forward and that they would be included. This helped keep the peace with an important wing of the UDI." Héctor Moya -who played a curious role as a "new entrant" who had close ties to the trade associations-, was certain to participate as well. In addition to his partnership with Orlando Panza and the members of Federación Santiago -that only targeted one or two feeder units- Moya partnered with Korean investor Kim Chang Sun and created a second firm designed to bid for the highly desired trunk unit 2. Neither Moya nor Mr. Chang Sun had any experience whatsoever operating public transportation services, hence the previously mentioned critiques by Connex's Jean Luis Soulas.

On the other hand, the trade associations were unlikely to pull out at the last minute. After all, the tendering bases had been designed to facilitate the permanence of firms owned by incumbent operators, and authorities had been receptive to the concerns of the key trade association leaders, like Navarrete and Pinto. The stronger operator organizations had already invested significant resources in the preparation of their bids and in the creation of their new firms, and many of their leaders were convinced that the benefits of participation far outweighed the risks of opposing Transantiago. As the December 21st deadline to submit bids approached, even the smaller, independent bus operator groups in Santiago signaled to authorities their intention to participate in the tender, even if only competing for the feeder units. With little more than year to go before the end of the Lagos administration, Transantiago was finally happening.

⁷²⁵ The operation was purportedly for \$9 million dollars, with the deal closed sometime in december, 2002. *El Mostrador*, "El Zar se sube a las micros", January 24, 2003.

52 bids: A competitive tender process?

In the end, twenty-five different companies submitted a combined total of 52 bids, expressing interest for 14 of the 15 Transantiago bus operation contracts. The five *trunk* units tendered attracted 21 of the 52 bids, while the the 10 *feeder* units attracted the rest. The only business unit that failed to attract a bid was feeder unit number 10, which was so small that could be cancelled without creating problems to the system as a whole. Such market response, in an industry long dominated by a cartel, was heralded in the press as an “unexpected success”, and as a “demonstration of the decision of the government to move competition away from the streets and into the tendering process”.⁷²⁶ Such praises are certainly well deserved, but they mistakenly emphasize competition as the outcome of the tender, when it was rather enhancing state capacity to change the regulatory framework of service. In fact, on close analysis, the number of bids overstates how competitive this process really was.

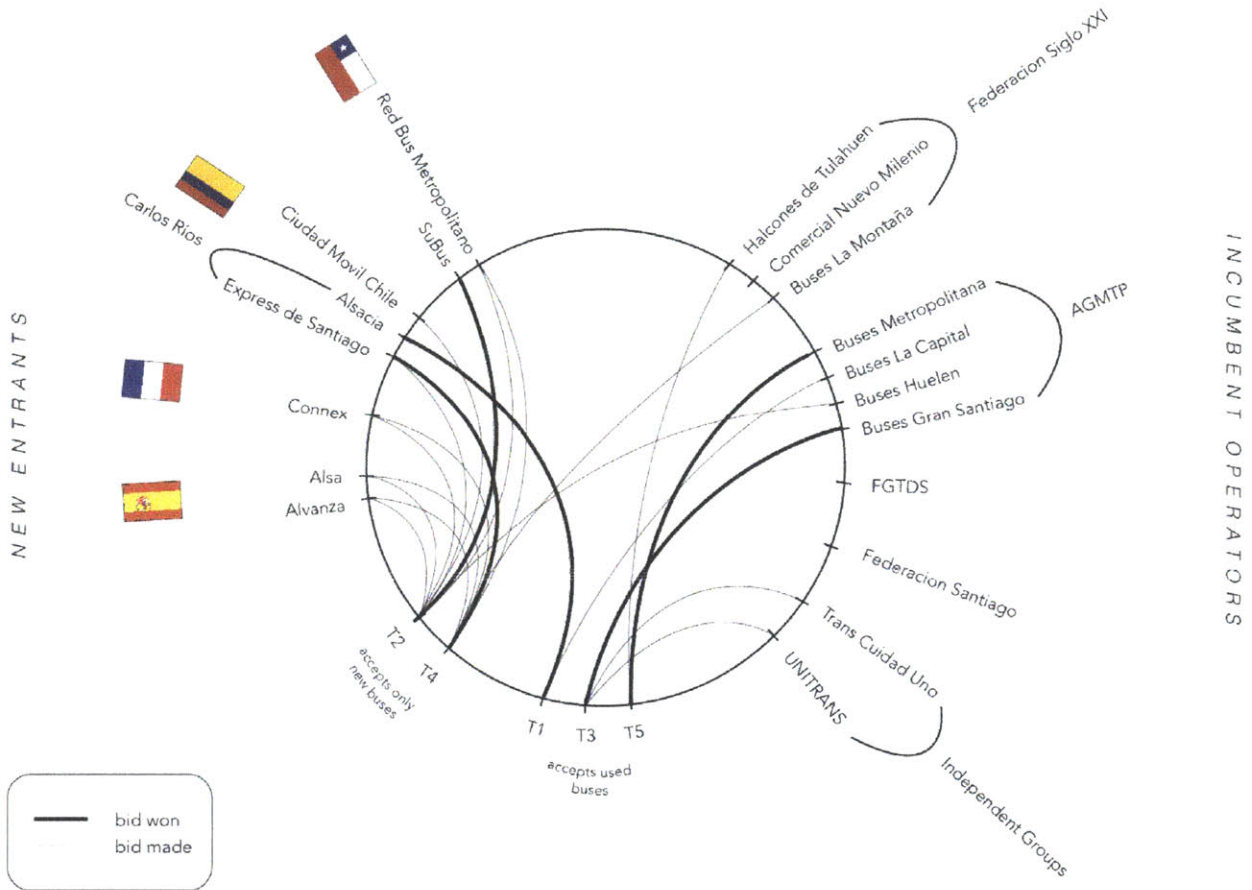
Ten of the twenty-five firms that submitted a bid were in fact controlled by the leaders of 3 local operator groups: the AGMTP, the Federación Siglo XXI and the FGDTS. As previously discussed, these three groups coordinated their bids with each other. Five additional participating firms had origins in smaller, independent trade associations, that lacked financial backing to be competitive outside of the the smaller feeder units.⁷²⁷ Furthermore, the firms with roots in the trade associations mostly stayed clear of trunk units 2 and 4. Out of thirty-two bids submitted by firms with roots in a trade association, only two attempted to retain Transantiago’s “crown jewels”: Navarrete’s AGMTP submitted a bid for trunk 2, while Pinto’s Federación Siglo XXI bid for trunk 4. The distribution of the thirty-two bids submitted by trade association groups, shown in figure 3.7, also suggests that the informal agreement between the leaders of the three strongest micrero organizations survived. While the MOPTT did receive more than one bid for every unit tendered, the firms created by the AGMTP, the Federación Siglo XXI and the FGDTS never competed against each other. The only exception of this was trunk 5, where the participation of both the AGMTP and Federación Siglo XXI was previously agreed and negotiated between Manuel Navarrete and Juan Pinto.

⁷²⁶ El Mercurio, “Inesperado éxito en licitación de Transantiago”, Dec 22, 2005.

⁷²⁷ These five firms were: TurMaipo Futuro, Líder, TransAraucarias, Unitrans and Transciudad Uno.

Figure 3.7 Bids received and winners of the tendering process to select Transantiago trunk unit operators

TRUNK UNIT TENDERS



As expected by the Chilean authorities, “true” competition mostly concentrated in “crown jewel” trunk units 2 and 4. These attracted eight and six bids respectively, with only one of the bids received for each of these units submitted by firms created by trade association groups. Comparatively, the MOPTT received two bids for trunk unit 1, three bids for trunk unit 3, and two bids for trunk unit 5. Only one out of these seven offerings made for trunk units that required a large number of used buses (e.g. “reserved” to trade association groups) came from a “new entrant”: *Alsacia*, the firm created by colombian investor Carlos Ríos. Notably, the french, spanish and colombian transport conglomerates -Connex, Alsa, Avanza, Fanalca and Express-, bid exclusively for “crown jewel” trunks 2 and 4. Neither of these conglomerates submitted a single bid for the rest of the trunk units nor for any of the feeder units offered. Politically connected local “new entrants” (Yuraszeck’s Red Bus and Moya’s SuBus) were an exception. In

addition to bidding for either trunks 2 or 4, they presented bids for some of the feeder units as well.

This distribution of bids demonstrated the feasibility of achieving the desired mix of existing operators and new entrants. As expected, “new entrants” competed fiercely for Transantiago’s crown jewels, while the strongest micrero organizations could count on retaining a significant share of the system. The only outstanding obstacle to a “peaceful” industry transition came from the fact that Carlos Ríos followed his original intuition and challenged the AGMTP with a bid for trunk 1. The appetite of the market threatened to disrupt a carefully tailored equilibrium. If Alsacia’s bid was successful, the number of existing bus operators immediately displaced by the implementation of Transantiago would be much larger than originally expected. Ríos’s move was as risky for him as it was problematic for authorities. As one advisor to Etcheberry explained: “Nobody expected Alsacia’s participation. At least for the transition period, his company would be forced to find and rent buses from existing operators, and the vehicles available would surely be of the worst quality. He would need to hire people for short term periods, and let them go soon after. Carlos Ríos was savvy as a fox, but he was certainly taking on a big problem.”⁷²⁸

Choosing private partners to improve bus services in Santiago

The tendering bases established a two-pronged decision mechanism to award Transantiago’s contracts. First, authorities would review the “technical offers” submitted by participants, including proof of legal constitution and financial backing, a statement of the firm’s business model, and a *broad* description of the bus fleet intended for service. Notably, no proof of having secured the required vehicles -either through purchase orders or signed leases- was required at this point. Only offers deemed “technically suitable” would carry on to the second phase of evaluation, a review of the “economic offers” presumably centered around the amount of money that operators were willing to charge the system as payment per passenger. The bases stipulated that this amount had to fall within a range. In theory, the “lower limit ensured that the offer was serious” and “the upper limit was such that system costs remained under control.”⁷²⁹ However, this range was in fact quite narrow -in some cases as narrow as 3 Chilean pesos-, so

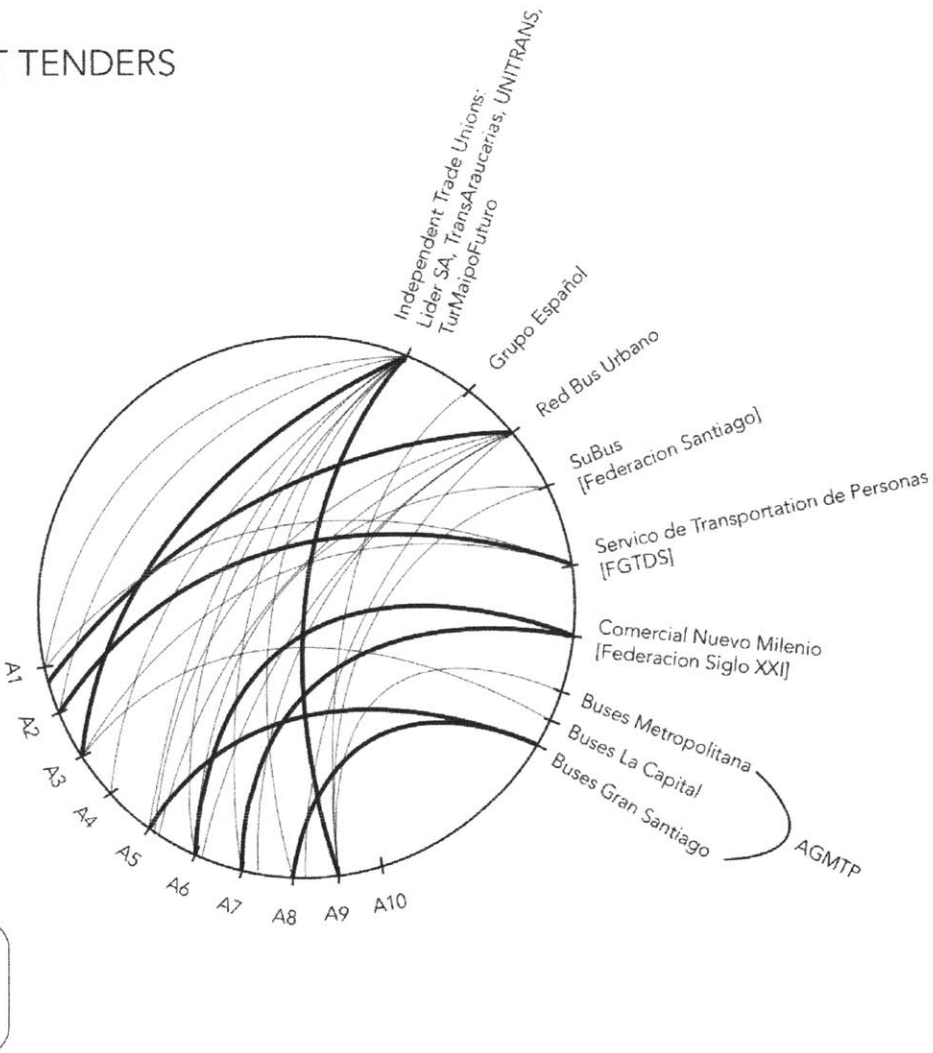
728 (Muñoz, Juan Carlos. Personal interview 20 July, 2012)

729 (Muñoz and Molina 2009 p. 310)

ties were extremely likely and therefore the importance of this variable marginal. In practice, the key deciding factors would be the amount of money committed as (1) a direct contribution to the system’s technical reserve and as (2) benefits for workers. This mechanism implied that the “technical offers” were evaluated in a simple “pass/fail” manner. Beyond completing a checklist of formal requirements, the tender was decided essentially as an auction. This strategy was deliberately chosen to avoid post-tender conflict, as final decisions would be based on a simple figure, leaving no room open to interpretation. According to Guillermo Díaz, “we feared that our decisions would be questioned as either favoring the entry of new players or enabling the

Figure 3.8 Bids received and winners of the tendering process to select Transantiago feeder unit operators

FEEDER UNIT TENDERS



permanence of the traditional operators. So, if you look at the decision rules, you'll see that there is a first stage, simply determining whether or not minimal requirements are satisfied, and then we move on to price. The system was designed so that immediately after data was entered to the system, tenderers would see who won on a screen."⁷³⁰

While this mechanism did convey a visage of transparency to the contract award process, it also had two critical consequences in *trunk 1*, the contest where Carlos Rios' Alsacia unexpectedly disputed a unit "reserved" to a firm created by trade associations. First, it lowered the barrier of entry significantly. Used vehicle-owners could wait and see if Alsacia won the contract, before deciding to lease their vehicles to this company. This was critical, since individual bus owners would certainly be more inclined to break rank with their organization leaders if Alsacia could guarantee it had already won the contract. Second, this mechanism gave an advantage to bids from players with better access to credit -usually the "new entrants," since they would be better able to commit larger amounts to the technical reserve fund. Using the technical reserve fund as a deciding factor, allowed authorities to dissuade trade associations from participating in the "crown jewel" units 2 and 4. However, this instrument worked both ways, and now gave an undesired advantage to Alsacia in trunk 1.

On December 30, 2004, MOPTT officials announced which firms survived the technical evaluation stage, and proceeded to open the remaining economic offers with the bidding parties present. The "Crown jewel" contracts were awarded first. The winner of Trunk 2 was Su Bus Chile -the firm organized by Héctor Moya with Mr. Kim. Their lack of experience in the sector was not taken into account, as their unprecedented commitment to contribute US \$60 million dollars to the technical reserve fund⁷³¹, and their promise to pay the highest salaries to their workers fit the government's decision criteria. Authorities awarded Trunk 4 to *Express de*

730 (Díaz, Guillermo. Personal interview. 4 August, 2012). Juan Carlos Muñoz (from MOPTT) and Diego Molina (from SECTRA) confirmed this point in a later journal article: "The rationale for this approach was the many political and technical risks posed by Transantiago, which involved a total redesign of the system for the entire city using procedures never before employed in Chile. Furthermore, the process had been heavily resisted by the incumbent operators who, although very experienced in running bus services, had little experience with formal techniques of business management. It was felt that they would simply not trust a method that made assignments via a "black box" (Muñoz and Molina 2009 p. 311).

731 The participation of the well known Hector Moya as president of Su Bus Chile had an additional, politically convenient, side effect. While at the time of the decision Mr. Kim owned 100% of the stock of Su Bus Chile, the press celebrated that "a chilean company" had won.

Santiago (50% owned by Express del Futuro and 50% owned by the Ríos Family). This colombian firm committed US \$50 million dollars to win. With these decisions, the european conglomerates Connex, Alsa and Avanza, were left out of Transantiago. Alberto Urquiza remembers how this outcome surprised them: “When we (Connex) learned that the colombians had offered US \$50 million, we thought they were crazy. The margin was ridiculous. We had offered US \$9 million versus their US \$50, and had hoped that our technical proposal would carry some weight. It didn’t. We simply could not believe it.”⁷³² Etcheberry also remembers the reaction of those on the losing side of the process. “The french were furious. They wanted us to give them points for their operational experience, but doing so would be tremendously complicated. After all, who had more experience than Santiago’s existing trade association groups? Navarrete and Marinakis wanted us to include *local* experience as a requirement as well, and so depending on how experience is framed I could be benefiting one group or the other. I could not do that.”⁷³³

With the highly contested trunks 2 and 4 awarded, attention shifted to trunk units that accepted used buses. As expected, the AGMTP won the contract to operate trunk 3. However, before opening the envelopes for trunk 5, the authorities informed Juan Pinto that the bid submitted on behalf of his Federación Siglo XXI had been disqualified at the “technical” stage, leaving the AGMTP as the only surviving group with a bid for this trunk. This decision was justified under a legal technicality: Pinto’s company, Halcones de Tulahuén, had not issued stock in the manner prescribed in the tender. When interviewed, Mr. Pinto shared his own interpretation of the decision: “I am convinced that we were eliminated in trunk 5 for a different reason. The authorities never imagined that the colombians would also bid for trunk 1, leaving the AGMTP with a very small share of the market. The ensuing conflict could certainly cause the city to explode in flames. Thus, the decision (to disqualify us) was similar to a game of pool. Trunk number 1 was reserved for the AGMTP, but when the colombians stepped in with millions of dollars, they pushed the AGMTP out and into trunk 5, affecting us. Authorities said, “let’s take Juan out”, and awarded trunk 5 to the AGMTP.”⁷³⁴ If in fact such calculations played a role in the decision, Mr. Pinto was certainly compensated later. After all, he was not completely displaced. Not only would his organization go on to win two of the largest feeder units, but given his

732 (Urquiza, Alberto. Personal interview. 11 July, 2012)

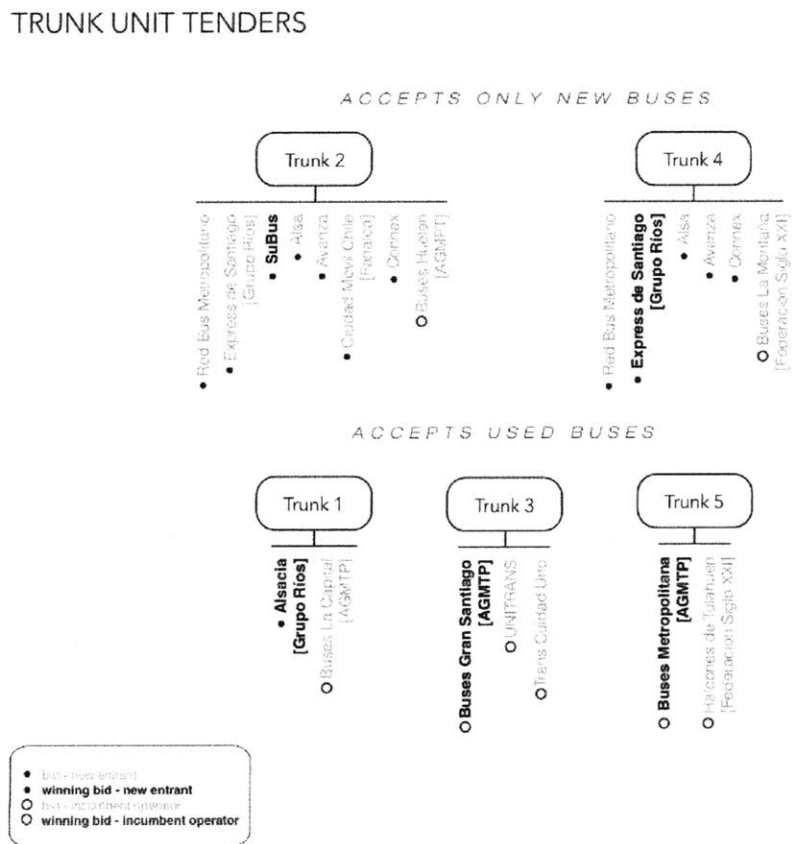
733 (Etcheberry, Javier. Personal interview. 17 July, 2012)

734 (Pinto, Juan. Personal interview. 27 July, 2012)

previous negotiation with Navarrete, he personally emerged from the Transantiago tender as a significant stockholder of Buses Metropolitana, the firm that did win trunk 5.

Awarding trunk 5 to the AGMTP certainly served as an useful escape valve, since Alsacia easily outbid incumbent operators in the competition for trunk 1. His offer to contribute \$18.4 million dollars⁷³⁵ to the technical reserve fund was several times larger than the offer submitted by the AGMTP.⁷³⁶ And, since Ríos was not required to demonstrate having the 1,800 used buses required to begin operations, there was no argument to deny him this contract. This of course did not mean that the trade associations were willing to graciously relinquish trunk 1 without a fight.

Figure 3.9 Summary of participants and winners of the tendering process to select Transantiago trunk unit operators



735 The offer was 615,010 *unidades de fomento* (UF)

736 The exact amount offered by the AGMTP's Buses La Capital was not disclosed to the author. However, the bid submitted on behalf of the AGMTP for trunk 5 -a business unit roughly of the same size- committed only US \$2.2 million to the technical reserve fund.

According to Guillermo Díaz, calls to war appeared the the minute the decision was announced:

“Navarrete walked towards Ríos, and spoke quite aggressively to him, despite being in our presence and surrounded by journalists. He basically warned Ríos that he would *never* get his hands on the gremio’s buses.”⁷³⁷

The MOPTT awarded feeder units days later, with results that helped ease some of the mounting tension (shown in figure 3.10). With the exception of feeder unit 1 -awarded to Yuraszcek’s Red Bus- most of the pending contracts were awarded to firms created by the strongest former micrero organizations: The FGDTS, the AGMTP and the Federación Siglo XXI each won 2 feeder contracts. Two firms owned by smaller trade associations -Unitrans and Transaraucarias- were awarded one feeder unit each. In fact, the only large trade association organization that lost despite submitting a bid was Orlando Panza’s Federación Santiago, a result probably related with his reluctance to coordinate bids with the gremio.⁷³⁸

By accident or design, firms with roots in the trade associations retained most of the business units of Transantiago, with their relative size and power apparently acknowledged by the chilean authorities. Nonetheless, a race between the colombians and the AGMTP to enlist used buses to their official fleets had certainly begun. After all Alsacia -the firm created by Carlos Ríos- risked losing its contract if unable to secure the required number of used buses by August 26, 2005. Manuel Navarrete minced no words when speaking about this possibility in an interview: “I have the buses, and logically will not make them available to them.”⁷³⁹

Fighting over old buses, waiting for new buses

With Transantiago’s bus operating contracts signed, the reforms long promised by President Lagos and described in the PTUS seemed more feasible than ever. A public statement by Sonia Tschorne, recently appointed by Lagos as minister of housing, sums up the administration’s message to the Chilean people: “Transantiago is equity. With this system people will get safety, dignity and quality for a similar or even lower fare than they pay today.”⁷⁴⁰

737 (Díaz, Guillermo. Personal interview. 4 August, 2012)

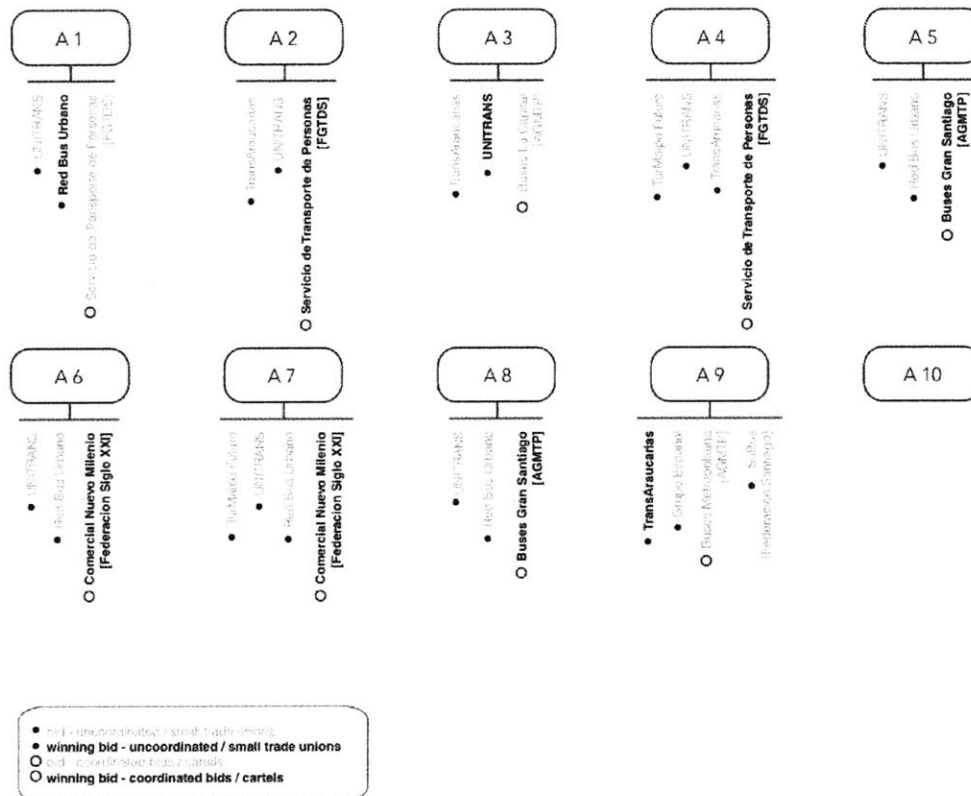
738 Orlando Panza and some of his partners did retain stock in the firm created by Hector Moya to bid for trunk 2. However, their participation was marginal, less than 5% in total.

739 El Mercurio, “Transantiago se queda en manos de chilenos”, January 7, 2005.

740 (Rivera 2008 p. 26)

Figure 3.10 Summary of participants and winners of the tendering process to select Transantiago feeder unit operators

FEEDER UNIT TENDERS



According to the contract terms, new operators would take over the system on August 26, 2005, beginning the one-year transition period. Starting on this date the firms holding contracts to operate trunks 2 and 4 would introduce new buses to the streets of Santiago, gradually taking over the existing routes in their assigned territories. The buses previously serving those routes - presumably enlisted as part of the fleets of another Transantiago operator- would be reassigned to a route elsewhere in the city, or decommissioned. By August 27, 2006, authorities expected the new Transantiago operators to be fully in control of their areas, operating with either a completed fleet of new buses (in trunks 2 and 4), or with a significantly reduced number of used buses (in the rest of the system). Such transition assumed almost flawless execution and choreographed collaboration from all parties involved, with authorities freed to focus on pending elements of the project, such as (1) selecting the financial administrator for Transantiago (in charge of collecting

fares and distributing revenues among operators), (2) establishing a user information and fleet control system, and (3) building infrastructure (such as stations and dedicated corridors). Instead, what ensued was a very conflictive period, characterized by bureaucratic turmoil, low intensity war between new and incumbent operators, and widespread confusion on the part of individual bus owners and drivers.

With the tendering process closed, Minister Javier Etcheberry resigned. His exit was caused by a political crisis developing at the same time as the Transantiago contracting decisions, and related to the Concertación's unstable internal politics. On November 18, 2004 a bridge collapsed over the Loncomillas River in the south of the country, resulting in four vehicles damaged and passengers injured. The congressman from that district publicly blamed MOPTT, accused Etcheberry of receiving payoffs from multinational construction companies, and stated that "the Concertación can't build bridges that fall." This congressman was Pablo Lorenzini, a DC member *also* serving as president of the House of Representatives. Members of both the PS and the PPD in the House defended MOPTT, while a faction of DC congressmen broadened their critiques of the Lagos administration. The leaders of both parties worked hard to reduce the tension, and to maintain the Concertación united. The president of the DC asked Lorenzini to resign from his post as president of the Congress⁷⁴¹, and Minister of the Interior Insulza invited Etcheberry to leave his post as minister.⁷⁴² While politically instrumental, this resignation could not have come at a worse time for Transantiago. President Lagos' administration was entering its last stretch, and new Minister Jaime Estévez (PS)⁷⁴³ was not privy to the long and complicated negotiation process that had allowed the tendering process to progress successfully. In fact, the new minister surprisingly sacked most of Etcheberry's advisory team, leaving the MOPTT ill equipped to keep the ball rolling. With so many pieces moving and with little time to spare, a renewed effort to resist the bus reform process took place.

Nowhere was this more evident than in trunk 1. With their contract on hand, envoys from Alsacia approached lower ranking leaders of the trade associations, hoping to negotiate a deal to lease or purchase their vehicles, or their peaceful withdrawal from areas allocated to this

741 El Mercurio, "El Gobierno no persona dichos de Lorenzini," January 5, 2005.

742 (Etcheberry, Javier. Personal interview. 17 July, 2012)

743 Jaime Estévez is an economist, exiled during the military regime, and for a time lived in Mexico where he worked as advisor to President Luis Echeverría. He joined the PPD and became a congressman in 1989, before switching parties to the PS. He remained a congressman until Lagos appointed him Chair of Banco Estado, a position held until arriving at MOPTT.

company. Alsacia found significant resistance. On the one hand, most of the lower level trade association leaders controlling routes within trunk 1 saw little reason to negotiate. While it was mathematically impossible for all of their vehicles to be included as part of the other operators' fleets, they staunchly believed that their permanence in the system was assured. After all, many had contributed financially to their trade association, paying dues supposedly used to capitalize firms used to bid, and the AGMTP had indeed won trunks 3 and 5. On the other hand, these lower ranking leaders had been instructed by their superiors not to yield control over "their" routes, as the trade association organizations still hoped to reclaim them. Such scenario was indeed possible, as the rules stipulated that recently awarded contracts could be cancelled if the new companies failed to assemble the required fleet of used buses. Edgar Macallister, one of the managers for Alsacia during this period, recalls the difficulties faced. "The contract would say that a particular route now belonged to us. So, we approached the leader of the organization serving such route, informing him that by the end of August he could no longer operate it. Usually he did not believe us. He would check in with higher ranking micrero leaders, and come back convinced that we were mistaken, resolved not to allow us into his route."⁷⁴⁴ Attempts to reach out to bus owners directly was difficult also. Jaime Sánchez recalls, "I would be at their terminals at sunrise, trying to engage and convince them that their exit from the system was inevitable. I told them that they could have a better outcome, a more dignified and profitable exit, by joining us in Alsacia rather than Navarrete... however they were evidently pressured, threatened."⁷⁴⁵

With Alsacia's ability to assemble the required fleet of 1,800 used buses increasingly in question, a second problem landed on Minister Estévez' desk. Su Bus Chile, the company that won trunk 2, came close to backing out from its commitment to deliver the required new buses. In addition to 550 D9 articulated buses from Volvo, Su Bus Chile had included in its bid 110 D7 natural gas-fueled buses bought from Daewoo, a Korean company. This was a critical element of the deal for Mr. Kim, as he planned to become Daewoo's representative in Latin America, using Transantiago as springboard to countries like Peru and Bolivia. However, the Chilean authorities decided that relying on natural gas as fuel source would threaten the stability of the fares, and asked Su Bus Chile to switch to oil-fueled vehicles. This requirement led Mr. Kim to pull out of

744 (Macallister, Edgar. Personal interview. 23 July, 2012)

745 (Sánchez, Jaime. Personal interview. 23 July, 2012)

the project soon after the contracts had been awarded, leaving Héctor Moya with a Transantiago contract but insufficient financial backing.

Helping “new entrants” survive

Neither Alsacia nor Su Bus Chile were able to solve their problems by the stipulated deadline of February 14, 2005, and were fined by the MOPTT. In public, the Chilean authorities took a hard line against both operators, with the press even documenting high level meetings between Manuel Navarrete and Minister of the Interior José Manuel Insulza, supposedly exploring the possibility of canceling the contracts for trunks 1 and 2, and re-awarding them to the AGMTP.⁷⁴⁶ Guillermo Díaz, who stayed on as Under Minister of Transportation, declared to the press, “we understand they (Alsacia and SuBus) face a market difficulty, but (the government) will not take charge solving it.”⁷⁴⁷ However, the Chilean government did play an active role to prevent the premature demise of its new private partners. The alternatives, either re-tendering or allowing trade associations to take over these services, were not at all palatable.

“The government did not want Su Bus to fail, and told me in every tone possible that they wanted my company to remain”, recalls Héctor Moya. “I had been negotiating a sale with Carlos Ríos, and had even agreed a price, but I realized that such sale troubled authorities, presumably due to the resulting market concentration.”⁷⁴⁸ In fact, in March Héctor Moya successfully sold 45% of Su Bus stock to Fanalca, a Colombian consortium that had previously submitted an unsuccessful bid for that trunk unit. The rest of the stock was distributed among Andres de Carcer, Volvo’s distributor in Chile, and a few local investors, including Héctor Moya. A marginal percentage (less than 5%) was retained by 42 of the original 600 members of Orlando Panza’s Federación Santiago. This was not the market sorting itself out. MOPTT authorities helped Moya find suitable investors. “We actively sought out a suitable partner for that concession contract”, recalls Guillermo Díaz, “if a forensic analysis was possible for that deal, you would find my fingerprints”.⁷⁴⁹ The inclusion of Fanalca satisfied the banks, clearing the remaining obstacles for Su Bus Chile to finance its promised fleet of new buses, of course sold by Volvo.

746 La Tercera, Insulza se reúne con líder micrero para buscar salida a crisis de Transantiago”, March 31, 2005

747 La Tercera, “Peligra inicio de Plan Transantiago por graves problemas de operadores”. March 7, 2005

748 (Moya, Hector. Personal interview. 21 June, 2012)

749 (Díaz, Guillermo. Personal interview. 4 August, 2012)

Similarly, authorities played an important role helping Alsacia enlist the required number of used buses. To end the confusion about whose buses were authorized to remain in the new system, Guillermo Díaz published all vehicle lists submitted by operators ahead of the deadlines. As he put it, “I made this decision since used buses not included in any list were effectively freed up. Navarrete attempted to delay sharing the list of his fleets to maintain support, but we did not allow this to go on.”⁷⁵⁰ In addition, MOPTT authorized the “loan” of new buses purchased by Express -the winner of trunk 4- to Alsacia, reducing its urgent need to strike a deal with incumbent operators. According to the agreed contracts Alsacia was obligated to begin operations of trunk 1 with 1,800 buses, and to reduce this number to only 587 by the end of the transition period. Meanwhile, Express had committed to introduce approximately 200 new buses to trunk 4 every four months, until reaching a fleet of 606 new buses by the end of the transition period. With authorization from the Chilean authorities, the colombians decided that they would front load the purchase of all of the new vehicles they would need to retain by the end of the transition period *in both* trunk units. They purchased 1,193 new Volvo buses (the 606 needed by Express for trunk 4, and the 587 needed by Alsacia for trunk 1), introducing all of them to Santiago on day one of the transition period. Their strategy was to operate most of these vehicles on behalf of Alsacia in trunk 1, only moving them to Express and trunk 4 as required by the schedule.

“The government authorized us to shift buses from one trunk unit to the other, reducing our used bus deficit to roughly 700 vehicles... (the micrero organizations) believed we actually had to enlist 1,800 used buses to our fleet, while in fact we needed many less,” recalls Edgar Macallister.⁷⁵¹ Most of the remaining deficit of used buses was closed in May, after striking a deal with Orlando Panza *incidentally* brokered by Héctor Moya. Most of the buses owned by members of Panza’s Federación Santiago were essentially redundant, as their bid for a feeder unit prepared by this organization in conjunction with Moya failed, and since Su Bus Chile did not require (nor want) any used buses to operate trunk 4. Orlando Panza’s organization agreed to operate 540 used buses on behalf of Alsacia during the transition period, essentially killing any remaining hope harbored within the *gremio* that the colombians would be forced out of trunk 1 of Transantiago. The explanation offered by Orlando Panza to his former peers is quite telling. “I

⁷⁵⁰ (Díaz, Guillermo. Personal interview. 4 August, 2012)

⁷⁵¹ (Macallister, Edgar. Personal interview. 23 July, 2012)

met with Manuel Navarrete, who was my friend and with whom I had spent time in jail, and reminded him that I was now a businessman.”⁷⁵²

Partly to give Alsacia, Express and Subus more time to assemble their required fleets, Minister Estévez announced the postponement of the start of the transition period, from August 27 to October 22. This decision certainly widened the rift with the leaders of the micrero organizations, who hoped those contracts would be cancelled. Navarrete, Huerta and Gómez, publicly threatened authorities with “walking out” from the project. While they would not go as far as canceling their participation in Transantiago, the micrero leaders did employ every strategy available to derail implementation or at least to reduce its support among the public. During the months before the formal start of the transition period, the micrero leaders challenged the contracts awarded to Alsacia in court, lobbied congressmen -particularly from the right leaning parties RN and UDI, *and* from the DC-, and even reduced the number of buses running in the streets during peak hours to create public discomfort.⁷⁵³ While some buses were due to exit the system due to obsolescence, the micrero organizations deliberately took out many more than immediately required, blaming resulting delays and on-board congestion on the “poor planning” conducted at the MOPTT. Demetrio Marinakis, previously ostracized, successfully organized an assembly that drew 600 trade association members and drivers, demanding subsidies to compensate owners for vehicles made redundant, and to pay severances to redundant drivers and trade association workers. Notably, participating in this assembly were Senator Adolfo Zaldívar, president of the DC, as well as congressmen Carlos Olivares (DC), Patricio Hales (PPD), Carmen Ibáñez (RN) and Iván Moreira (UDI). Zaldívar’s speech was not only a declaration of war against the project, but a chance used to take a jab at Lagos: “Somebody needs to take responsibility for the consequences (of implementing Transantiago). These consequences should not be paid for by users, nor workers, nor operators: They have to be paid by those that irresponsibly have managed this transition in a way that has us at the brink of a severe crisis in Transantiago, as well as in other arenas of the national economy”.⁷⁵⁴

While authorities sparred with bus operators, other components of the project progressed slowly. In April, 2005, the transportation ministry awarded a consortium of four banks (Banco Estado, Banco de Chile, BCI and Santander Santiago) and two technology suppliers (Sonda and

752 (Panza, Orlando. Personal interview. 19 July, 2012)

753 El Mercurio, “Transportistas arriesgan cobro de boletas si dejan Transantiago”, June 7, 2005.

754 El Mercurio, “Adolfo Zaldívar sigue desafiando a Lagos,” July 16, 2005.

CMR Fallabella) a 12-year contract to operate as Transantiago's financial administrator (AFT). The AFT would be charged with implementing a single integrated fare payment mechanism using a magnetic fare card, a network of card recharging points, and a clearing system for making revenue payments to the bus operators.⁷⁵⁵ The technological and logistical challenge faced by the AFT was immense. A second competitive tender took place to select the operator of Transantiago's information system (SIAUT). The SIAUT would be charged with implementing the user and fleet management information technology (GPS, on-board computers, passenger counters, voice communication systems connecting buses to a base station, etc.) In this case, no suitable bidders responded by the deadline, forcing the transportation ministry to declare this tender deserted, and to allocate some of these responsibilities to the AFT.

Helping solve the problems faced by new entrants, while at the same time identifying, deactivating, and reacting to pressures from trade associations certainly distracted officials from the *technical* aspects of the implementation of Transantiago, such as overseeing progress on the AFT and the SIAUT. Etcheberry had inserted a transition period into Transantiago's implementation plan not only to satisfy the political agenda of Lagos and the Concertación, but also to phase-in the entry and exit of buses, to test the new fare collection and fleet control systems, and to build infrastructure. According to Etcheberry, however, "the schedule was not kept. All important topics suffered postponements."⁷⁵⁶

755 (Muñoz and de Grange 2010)

756 (Etcheberry, Javier. Personal interview. 17 July, 2012)



Figure 3.11 Anti-Transantiago campaign.
Sign reads: The government will leave more than 40,000
Chileans jobless with Transantiago.

Source: *La Segunda*, September 7, 2005.

Keeping micreros happy: A mitigation plan (not implemented)

The elections to replace Lagos were scheduled for December 11, 2005, and a new administration would be sworn in on March 11, 2006. Despite risking problems in other components of the plan, the president made clear that he wanted the new buses running before the election, and most of the older vehicles out of the system before the new administration began. Lagos did not want to end his period without tangible, conspicuous proof that the PTUS was not only about expensive tolled highways used mostly by auto owners, and subway construction projects that would only impact a small share of trips, but about improving the level of transport service across the city, especially for the poorest. Furthermore, Lagos wanted to deactivate the critics of his administration, both in and out of the Concertación. Estévez' mandate was to ensure that these wishes were fulfilled, but these objective were endangered by renewed conflict with trade associations. Authorities were well aware that the leaders of these organizations could drag their feet or mobilize individual vehicle-owners and drivers against the project, causing critical delays. In addition, participation by existing operators had already been established as necessary for the success of the project. If they were to walk out of the project months before the elections, Transantiago would be at risk, and Lagos would have little to show

for his administration's efforts. Once more, Chilean authorities faced a political imperative to lower the tension with the transport trade associations.

Perhaps for this reason, Minister Estévez sought to balance the hard line embodied by Guillermo Díaz, who at the time was running operatives in the streets to document the service boycott by incumbent operators. While Díaz would continue to play a mayor role in the project as Under Secretary of Transportation, Estévez recruited Jaime Pizarro as advisor and Isabel Guzmán as Coordinator of Transantiago. Both Pizarro and Guzmán had previously worked under Estévez at Banco Estado, and had no experience whatsoever in the transportation sector. However, they were not appointed to run the emerging system, but *to ensure that the transition period progressed smoothly*. “Minister Estévez invited me to his team with a very clear objective,” recalls Mrs Guzmán, “he wanted me to design a proposal to mitigate the social impact of the implementation of Transantiago on the disappearing transport micro-enterprises”.⁷⁵⁷ The previous experience of Guzmán and Pizarro running the small enterprise program at Banco Estado, gave them knowledge necessary to address at least this dimension of Transantiago’s challenges. Their task, framed by Guzmán, was “lowering the level of tension between traditional operators and new operators.”⁷⁵⁸ Guzmán reached out to the micrero leaders, and succeeded in bringing them back to the negotiation table. She identified several of their concerns, and explored ways the Chilean government could address them. The proposal put together by Guzmán and Pizarro included three elements, costing an estimated US \$56 million to the Chilean government.⁷⁵⁹ Their proposal included:

A “specialized economic reconversion plan”, to aid the insertion of displaced drivers, administrative workers and bus owners into other economic activity. This plan comprised of state-financed loans and training programs.

Development of a market for decommissioned buses. While the Chilean government did not offer to buy old buses or to directly compensate its owners -like Correa had done in the 90s- it did offer help to sell the vehicles. According to the plan, the Chilean government would

757 (Guzmán, Isabel. Personal interview. 26 July, 2012)

758 Ibid.

759 This figure and information based on documentation shared by Isabel Guzmán with the author.

coordinate the export of displaced buses to Peru and Paraguay, and/or their relocation to secondary Chilean cities like Antofagasta and Temuco.

Compensation for costs associated with the transition. Among the most sensible items discussed was government subsidies to bus owners to cover social security back payments and severance packages owed to the approximately 12,500 bus drivers. While an organization of drivers had emerged and attempted to articulate claims⁷⁶⁰, this element of the plan was less a consideration to them than to the vehicle-owners and to the firms created by trade associations. The Chilean law stipulated that these workers could not be hired by the new firms, until their former employers fully paid their obligations, and bus owners claimed having no money to pay.

While there were voices within the gremio that demanded even more support,⁷⁶¹ such peace offering did not go unnoticed. During the course of these negotiations, the AGMTP withdrew its legal action against the contract awarded to Trunk 1, and many micrero leaders became more cooperative.⁷⁶² The tone certainly changed. Manuel Navarrete, for example, declared publicly that they were committed “to working closely with the minister in ensuring that the transition to Transantiago causes minimal problems”.⁷⁶³ For Estévez, this was the return of the “route of collaboration.” However instrumental, this mitigation plan never moved past the planning stage. On the one hand, it required a significant budgetary commitment from the Chilean Government, and the Finance Ministry made clear that no additional funding was available. On the other, Estévez found significant opposition within his Ministry. Officials that had experienced the longer history of the negotiations that led to Transantiago, and who believed that the trade associations had already gotten much out of previous rounds, frowned on the “softer” approach advocated by Estévez. “This was a conflict, an evolving conflict”, explains Guillermo Díaz, “we could not afford to show weakness. Furthermore, remember who we were

760 This organization was the Consejo de Defensa de Trabajadores de Transporte (CODETT). It organized a few assemblies and attempted to stage protests against Transantiago, but was never considered an important actor by authorities.

761 For example, Armando Huerta reasoned: “I had buses models 2002, which I bought with the expectation that they would remain in service until 2012 . However, the government forced them out and left me without a job. At the very least, I deserve to be compensated”.

762 Of course, it also helped that Guillermo Díaz successfully documented and publicly exposed micrero organizations withholding service.

763 La Segunda, “El Gobierno reubicará micros en regiones of fuera de Chile”, September 8, 2005.

dealing with. Any money allocated for small bus owners would end up capitalized by their leaders.”⁷⁶⁴

The interest of bus operators on Guzman’s plan waned as they realized she had little power, despite constant public endorsements by Estévez. According to Mr. Juan Pinto, “she was like the mother that embraced us and consoled us, but gave us little real solutions. She would listen to us with great concern, but those talks never translated into anything tangible.”⁷⁶⁵ Guzmán resigned December 2005. However, by that date the new buses were arriving in Santiago and new operators were taking over their awarded areas. Regardless of what would happen next, Lagos could be credited with launching Transantiago, and this would probably influence the election.

“Todo Cambia”: The Transition Period begins

New buses began arriving to Santiago in July and August 2005. Their trek from Volvo’s manufacturing facility in Curitiba, Brazil into Argentina and crossing the Andes into Chile, was closely followed by the Chilean press. The public saw images of the green and white articulated buses leaving the factory, crossing the snowy mountaintops, and finally making a triumphant entry to Santiago (figure 3.12). Government ads saturated the airwaves showing the new vehicles. Quite tellingly, the music and lyrics chosen for these ads were based on a famous song by Mercedes Sosa, titled “Todo Cambia”, “Everything Changes.”⁷⁶⁶

On October 21, 2005, Lagos inaugurated Transantiago’s transition period making a proud statement: “This is the start of the greatest process of public transportation modernization ever realized in Chile.”⁷⁶⁷ Starting that day, 1,181 new buses added by Alsacia, Express and Su Bus Chile paraded through the streets of Santiago. On November 29, Lagos also inaugurated the Autopista Vespucio Sur, a 23 kilometer tolled urban highway, and pledged to finish the 29

764 (Díaz, Guillermo. Personal interview. 4 August, 2012)

765 (Pinto, Juan. Personal interview. 27 July, 2012)

766 This ad is available in youtube: <http://www.youtube.com/watch?v=9wpiHN9axt4>

767 (Rivera 2008 p. 27)

Figure 3.12 Imported Transantiago buses cross the Andes



"The new face of transport— These machines, along with other 12-meter long units, will be tasked with transporting santiaguinos starting October 22, when the first stage of Plan Transantiago begins."

Source: El Mercurio.

kilometer Autopista Vesupucio Norte by the end of the term. One day later, on November 30, Lagos put in operation the first 18.6 kilometers of subway line 4, as well as further extensions to lines 2 and 5. He promised that subway construction would continue for the next few months, and that by the end of his term the subway network of Santiago would reach 78.1 kilometers, doubling the size it had when he was sworn in. This blitz of events were certainly timed to maximize political impact: The presidential campaigns in Chile were starting. After years of debate and discussion about public transportation reform, Chileans widely understood Transantiago as a signature project of the Concertación. The comfort of the new buses, the speed of cars on the highways, and the added reach of the subway could only help the candidate from the governing coalition.⁷⁶⁸

Everything seemed to be going well for Lagos. His preferred successor clinched the presidential candidacy for the Concertación since May. The DC split up into two groups, partly over differences regarding what attitude to take regarding his administration's policies. Soledad Alvear, former Minister of Foreign Relations and leader of Lagos' supporters in the DC, narrowly defeated Senator Adolfo Zaldívar and his group of government critics, becoming the

⁷⁶⁸ The number of buses added is taken from the minute of the 35st Meeting of the Ministerial Committee overseeing Transantiago, dated October 24, 2005.

standard bearer for the christian democrats. The process divided the DC, and Michelle Bachelet, favorite of the PS and PDD, became the Concertación's candidate. She would go on to face a divided opposition in the presidential election held December 11, since the right leaning UDI and RN ran separate candidates. Bachelet won a landslide victory: 45.9% for the Concertación vs 25.4% for RN's Sebastián Piñera and 23.23% for UDI's Joaquín Lavín (23.23%). Nonetheless, the Concertación failed to get 50% of the vote and so on January 11th, 2006, Bachelet would face a united opposition.

While politically well-timed, the start of operation of Transantiago's new buses was not devoid from problems. The contracts specified that during the transition period operators would maintain the same circuitous and convoluted routes that existed in Santiago. These routes had been designed for much smaller vehicles, and covered under-maintained streets that certainly took a toll on Volvo's articulated and low-floored buses. In fact, there were several points in the city where the operation of the new buses was physically impossible, and last minute adjustments to existing routes had to be urgently implemented.⁷⁶⁹ Moreover, recently hired drivers had had little time to accustom themselves to the new vehicles, impacting their performance. It did not help that the Lagos administration decided to leave the construction of the infrastructure originally considered in the PTUS to his successor, claiming budget constraints. As previously mentioned, the PTUS had considered 284 kilometers of segregated busways, running along 10 main avenues. Of these, 23 kilometers of busways were in construction (Avenida Pajaritos and Avenida Grecia), and a partially segregated lane was implemented on La Alameda, but the rest of the busway projects were cancelled or postponed. Similarly, only 12 of the 35 transfer stations were built, and these lacked a pre-paid zone to speed up transfers.⁷⁷⁰ Such was the apparent flaw of the "highway concession model" applied to bus services: The private sector could pay for buses, perhaps even for some infrastructure, such as the Pajaritos busways and the only intermodal transfer station finally built, but not for much

⁷⁶⁹ One event summarized the type of problems facing the new entrants: One of the new buses got stuck when crossing under the emblematic Alameda, using an underpass (Bandera-San Diego). The bus was 12 inches too tall to fit.

⁷⁷⁰ (Morande and Doña 2007; Muñoz and de Grange 2010). Without these implements, most of the performance potential of the new vehicles went to waste. For example, without pre-paid boarding stations, it made no sense to have buses with multiple doors. All passengers would still be forced to board through the front door, where the driver could ensure that they actually paid their fares.

more. The new administration would have to decide how (and if) to finance the rest of the stops, signage, exclusive corridors, stations, supposedly required by the end of the transition period.

But most importantly, the operators running new buses found staunch competition from incumbent operators that refused to relinquish their routes. The transition period was designed in such way that the operation of used buses remained mostly unchanged. Property and control over these vehicles continued to be dispersed, and centralized operations was still not required. 731 used buses were scheduled to exit the system in January (phase IB of the transition period). However, existing operators were in no hurry to comply, and for obvious reasons authorities were not too keen on enforcing this requirement before the January 11th runoff election. As a result, the first months of the transition period were characterized by a significant oversupply of buses: In addition to buses unaccounted in formal tallies, 6,818 used buses and 1,211 new buses operated simultaneously.

While users appreciated increased frequencies, the oversupply of buses caused significant congestion and financial loss to operators. The colombians in particular were livid, claiming that their revenues were 20% lower than projected. Carlos Ríos sued the trade associations in court, and demanded that authorities take action protecting his exclusive rights over trunk 1. In an interview, dated only three days before the presidential election, Ríos asserted: “We understand that Transantiago is in a maturing process. We would like the speed and intensity of response from the government to be faster and deeper. We want them to supervise the streets with more efficiency, and that fines imposed become truly dissuasive. If the retiring of the old buses does not happen, oversupply of service will become a ticking bomb.”⁷⁷¹ Before long, new and old buses were racing on the streets, engaging in all-too-known curbside competition for passengers. An editorial published at *El Mercurio* sums up what was happening: “(New bus’) conductors have adopted several of traits of their yellow-bus colleagues, stepping on the gas and keeping cash for themselves. If these practices persist, the advantages promised by Transantiago could be gone before full implementation is complete in October 2006.”⁷⁷² Perhaps “todo cambia” wasn’t the right song for the ads.

MOPTT authorities only reacted after Bachelet defeated Piñera (53.50% vs 46.50%) in the January 11th election. 551 used buses, 180 less than anticipated, were forced to retire on

⁷⁷¹ *El Mercurio*, “Sobreoferta de buses es una bomba de tiempo”, January 8, 2006.

⁷⁷² *El Mercurio*, “Transantiago en Riesgo”, January 3, 2006.

January 20. On that date, 300 new buses were introduced to the fleets of new operators.⁷⁷³ Part of the reason for the slow progress retiring used buses was that many of the affected owners only realized at this point that they were being driven out of the system, not only by government planners and foreign firms, but also by their own leaders. In theory, vehicles closest to obsolescence would be decommissioned first. However, the operating firms could freely decide which vehicles to allow into their fleets, and a significant amount of discretion was employed. The owners of buses who were closest to their organization leadership managed to keep their older vehicles running, and replaced them for new ones closer to the end of the transition period. In contrast, owners of newer buses who lacked such political connections within their organizations -and who had long believed they would remain in the system- were booted out.

In addition, many of the used buses eligible to continue service had to be relocated to areas controlled by the firm willing to include them in their fleet. This was the case of buses previously working within trunk 1, unexpectedly lost to the colombians. Accommodating the buses displaced from trunk 1 to other areas was highly traumatic. Bus owners did not want to move out until receiving sufficient assurance that they had a new spot waiting for them. In addition, drivers resisted relocation as it often forced them to accept long commutes from their homes across the city. For these reasons, many among the affected were committed to stay on their traditional routes as long as possible. Forcing them out would prove difficult, since the absence of a centralized fleet control system made MOPTT monitoring difficult, and since on-board cash collection guaranteed their financial independence. According to a report prepared by Alsacia's management, "during the first phases of Plan Transantiago, the firm suffered from diverse illicit activities of traditional operators, such as the cloning and invasion of our routes."⁷⁷⁴ This company documented 140 "pirate" vehicles operating on trunk 1 routes without a permit. Systemwide estimates placed the number of pirate buses at roughly 400.

On the last day of the Lagos Administration, several newspapers published a letter addressed to Minister Estévez on behalf of Alsacia, Express and Su Bus Chile. The letter, signed by Edgar Macallister, denounced the minister's latitude dealing with incumbent operators: "Transantiago faces a profound crisis. The recent financial statements of the three concessionary

⁷⁷³ La Nacion, "Con 302 nuevos buses partió nueva etapa del Transantiago", January 21, 2006.

⁷⁷⁴(Inversiones Alsacia 2005 p. 12)

firms that have invested in the modernization of the public transportation system, demonstrate that we've had to absorb significant loss, caused principally by the omissions, negligence and faults of your Ministry."⁷⁷⁵ Estévez also faced strong criticism within the Concertación. Many held him responsible for wasting valuable time allotted in the "transition period." According to Juan Carlos Muñoz, "he left a ticking time bomb. When he left office, everything was delayed, and nobody was prepared to manage the "big bang" implied in the full implementation stage."⁷⁷⁶ These critiques may be well deserved. However, we must also acknowledge that minister Estévez successfully managed to keep conflict associated with the transition at a manageable level. Incumbent operators no longer threatened to "walk out" of Transantiago, and the substitution of older buses was gradually taking place.

⁷⁷⁵ El Mercurio, "Estévez deja Transantiago en crisis", March 11, 2006.

⁷⁷⁶ (Muñoz, Juan Carlos. Personal interview 20 July, 2012)

Part IV. Transantiago's teething pains

Bachelet hops onto a moving bus

The complexities and tight schedule of Transantiago's implementation plan confronted President Bachelet immediately after taking office in March, 2006. In theory, the transition period would end October 22, 2006, giving her administration only a few months before the new, optimized route grid, the new fare collection mechanism, the centralized information system, the exit of excess used buses, and the completion of new infrastructure had to be completed. In the eyes of the public, Lagos had already delivered, with the new buses serving as proof. However, the financial and regulatory bases that would sustain Transantiago moving forward were far from complete, and threatened to destroy the new system's credibility and public support. To guarantee full attention to the task, the president divided the MOPTT once again into two separate ministries. To head the Ministry of Transport and Telecommunications, she appointed Sergio Espejo (DC) - a 38 year old lawyer with a public policy degree from Harvard. As new Under Minister of Transport Bachelet appointed Danilo Núñez (PS), who briefly served as Coordinator of Transantiago, and could guarantee some continuity from the Lagos administration. The incoming team faced the burden of implementing a plan with wheels already turning, facing tight deadlines and major hurdles at every stage.

First, the construction of required infrastructure was cancelled or delayed. Part of the reason was that in the end, the urban highway and subway expansion projects under Lagos had not been entirely privately financed with the promise of future tolls and fares. Forced to make a choice, the previous administration had chosen to prioritize publicly funding these projects, leaving Transantiago shortchanged. Bus infrastructure expectations had certainly tempered since the original PTUS, but the problem was that models used to estimate Transantiago's bus fleet still considered that at minimum, a 25 km network of exclusive busways, 70 kilometers of repaved streets, 35 transfer stations, 2 large multimodal stations and 5,000 bus stops would be ready by the end of the one year transition period.⁷⁷⁷ While some of these were already in the process of being built, officials at the Ministry of Public Works acknowledged that "they could not possibly be ready by October 22, 2006."⁷⁷⁸ Missing these critical elements, average bus speeds in trunk units could not realistically reach the speeds of 20-22 kms/hr estimated by SECTRA, in turn

777 (MOPTT 2004)

778 El Mercurio, "Operadores piden al Gobierno aplazar pagos, May 5, 2006.

making the number of buses agreed in the signed contracts insufficient to achieve the desired level of service. This was profoundly consequential, as the models estimated that for every 10% drop in the average speed, the fleet would need to increase by 10% to maintain capacity constant.⁷⁷⁹ Who would pay for the additional fleet? If nothing was done, Transantiago would be ill-positioned to deliver on its many promises.⁷⁸⁰

Second, the system's financial administrator (AFT) was also lagging on its commitments. The contract awarded to the consortium of banks and technology suppliers to run the AFT required it to purchase the fare collection system used by Metro -the Metrovía,- and to adapt it to serve all of Transantiago. According to the agreed schedule, the AFT should be ready to begin the installation of fare validation equipment on every bus by June, 2006.⁷⁸¹ However, not only was the system not ready, but the AFT and the bus operators had not formally agreed on the terms that would govern their relationship, such as the lease price for fare validation equipment and related maintenance obligations.⁷⁸² An external audit on the AFT, presented to Espejo in April, suggested that it was unrealistic to expect full implementation of the new fare collection system before June 2007, one year late.⁷⁸³

Third, the transportation ministry was yet to find a suitable contractor to install and operate Transantiago's information system (SIAUT). As previously mentioned, the tendering process to award this contract had been declared deserted under Minister Estévez. In theory, the SIAUT would be in charge of Transantiago's fleet management system, supplying regulators with critical information to ensure quality service. Organizing a new tender, awarding the contract, and ensuring timely implementation of this information system seemed quite a challenge considering only few months remained before the end of the transition period.

These challenges framed the conflict posed by new and old bus operators, who continued battling for passengers in the streets of Santiago. Alsacia, Express and Su Bus Chile greeted the new minister demanding firmness clearing out old buses from their areas. At the same time, trade

779 I thank Juan Carlos Muñoz for raising this point.

780 The decision to postpone construction of critical bus infrastructure was later severely critiqued. Years later, the Minister of Finance under Lagos was asked about the justification of this decision in an interview. His response was "rampant ignorance."

781 The sources of income of the AFT were a commission (1.95%) for managing and distributing revenues, and the leasing of validation equipment on board buses.

782 (Camara de Diputados 2007 p. 547)

783 La Tercera, "El Informe de Fundación Chile que obligó a postergar el Plan Transantiago," May 15, 2006

associations continued to lobby authorities and congressmen, asking for postponements and financial compensation to mitigate their loss. On March 30, weeks after taking office, the policy of the new government became clear. Minister Espejo issued a statement, confirming the Administration's commitment to the previously agreed bus retirement schedule. While initially refusing to detail the number of buses required to leave the streets in order to make way for the new suppliers, Espejo stressed that "whatever needs to happen at this stage of the plan, including the retirement of buses, will happen." Similarly, he clarified that "we are not contemplating any type of subsidies for anyone at this point."⁷⁸⁴

After intense negotiations with the trade association leaders, the MTT narrowed a list of the 817 used buses required to exit on April 14. This action kept with the schedule of the implementation plan, marking the beginning of stage 1C (see previous table). But because many of the individually affected bus owners were only then notified that their vehicles were included in this list, authorities met significant resistance. To monitor and enforce compliance, the Transport Ministry deployed 150 inspectors throughout the city,⁷⁸⁵ and warned operators that surveillance of the streets would be "firm and permanent." In a way, the leaders of the transport trade associations -now fully in their roles as *empresarios* rather than *gremialistas*- relied on the state to boot their former peers out. The reaction of several affected bus owners was predictable. As one of them declared in an interview, "we were told only two days in advance that my route was out. I was not allowed time to see if I could insert my bus in a different route, or to find work for my drivers. I have no idea what comes next, and I still need to pay for my bus." Another one declared, "we feel deceived. We were told that since we owned newer models, we would be relocated and incorporated to Transantiago, and now we don't know what to do. The worst part is that we have new vehicles and they are useless."⁷⁸⁶ The owners and drivers of the 220 newest buses declared redundant organized a protest on April 18, later dispersed by the police.⁷⁸⁷ "The selection of buses to be retired was conducted at random," cried one of the protest organizers, "they took out 2004 models to make room for 1994 models."⁷⁸⁸ However, there was

784 El Mercurio, "Transportes admite que deberán retirarse micros amarillas," March 30, 2006.

785 La Nacion, "Fuerte fiscalizacion por retiro de micros," April 15, 2006.

786 La Nacion, "Choferes piden reinserción en nuevos recorridos en vez de finiquitos," April 18, 2006.

787 La Segunda, "Dueños y choferes de micros amarillas protestan en la Alameda contra el Transantiago," April 19, 2006.

788 La Tercera, "Nueva Etapa del Transantiago debuta con protestas y atrasos para usuarios," April 18, 2006

no randomness involved. Trade association leaders were choosing who to keep and who to evict from their new firms. Notably, however, the protest was directed at MTT officials, perceived as making the final decision.

Figure 3.13 Owners and drivers of “yellow buses” protest against Transantiago



Source: La Segunda, April 19, 2006

Amidst the protests and confusion, quality of service suffered. Despite the fact that on April 15th Alsacia, Express and Su Bus Chile added a final group of 250 new buses to their fleets, the retirement of older buses caused service shortages in several areas of the city. Public support for Transantiago began to slip, as the majority of santiaguinos ignored that critical pieces of the plan -the fare collection system, the new route network and most infrastructure- were still pending. Opposition parties represented in Congress raised the tone of their critique, with the UDI and RN heading the charge calling Transantiago, “a mackerel sold as salmon”⁷⁸⁹, and “one of the most inexplicable whims of the Lagos Administration, sadly inherited and continued by the current one.”⁷⁹⁰ Members of Espejo’s team began to worry, as the implementation plan still considered the exit of 2,503 additional used buses to achieve the desired, optimized fleet size of 4,494 buses. In addition to significant delay and increasing questions surrounding other elements of the plan, officials felt they were walking a very thin line enforcing this schedule. On the one hand, protests from displaced operators and affected users had grown at each of the previous bus retirement stages. They could easily get out of hand if handled without care. On the other, getting

789 Ultimas Noticias, “Transantiago: Plan estrella de Lagos catalogado de jurel tipo salmon,” May 4, 2006.

790 La Tercera, “Denuncian que Plan Transantiago no cumple con lo prometido” April 26, 2006

these buses out of the streets could prove to be a mistake. The resulting optimized fleet might be insufficient to effectively serve the city.

All of these problems were significant on their own, but combined represented a dangerous ticking bomb for the Concertación. Knowledgeable individuals, such as Germán Correa, began to voice concerns publicly. In an editorial, Mr. Correa called authorities to “establish realistic timetables, preventing further disillusion among the public and increased social and economic costs to those affected.”⁷⁹¹ For a moment, it seemed that the fate of Transantiago under Bachelet might be no different than under Lagos. Just as the problems of reforming the buses seemed to be at their worst, the subway company finished the construction of line 4-A, a 7.7 kilometer extension to the system running on a route that the PTUS had previously considered for a segregated busway. Amidst growing doubts about the MTT’s capacity to solve the many details plaguing Transantiago’s transition period, President Bachelet decided to postpone the launch by four months. Instead of launching a fully implemented Transantiago on October 22, a new date was set for February 10, 2007.⁷⁹²

From finger-pointing in public to privately acknowledging blame

Minister Espejo announced President Bachelet’s extend the transition period during a meeting with members of the Transportation Commission of the Chilean House of Representatives. At this meeting, held May 2, 2006, Espejo explained the postponement was based on three principal reasons: First, that that his Ministry found that “significant obligations of private operators of the system would not be ready, such as implementing the fare payment mechanism, the fleet management system, establishing terminals, and training and hiring an important number of drivers.” Second, that “the public has not received sufficient information to participate in a reform of this magnitude.” And finally, that “Transantiago had to offer an answer for workers in risk of losing their jobs as a consequence of this reform.”⁷⁹³ In a later radio address, an increasingly frustrated Espejo minced no words blaming private operators for the

⁷⁹¹ La Tercera, “Desafios del Transantiago”, April 23, 2006.

⁷⁹² Scheduling the launch in February made a lot of sense, since it coincides with the Chilean school vacation. As such, it is the month of lowest passenger demand in the year. This would give authorities a full three weeks to address any unforeseen problems before commuting patterns returned to normalcy in March.

⁷⁹³ La Nación, “Postergan fase final del Transantiago,” May 3, 2006.

delay, “it is them who should be offering explanations to the authorities for not keeping their commitments.”⁷⁹⁴

All private operators involved in the emerging system reacted vigorously. The manager of the AFT, Andres Navarro, declared publicly that his firm would be ready to operate the new system on October 22, as previously agreed.⁷⁹⁵ Similarly, Alsacia, Express and Su Bus Chile circulated statements claiming that their fleets were complete, that their terminals were fully operational, that they had trained the required drivers, and that any delay unilaterally decreed by the authorities placed them at risk of defaulting on their loans.⁷⁹⁶ Even trade association leaders like Manuel Navarrete questioned the decision, despite his companies (Buses Metropolitana and Buses Gran Santiago) still relied on drivers formally employed by individual bus owners, operated terminals failing specifications, and resisted signing their contracts with the AFT.⁷⁹⁷ As he stated, “the tendering bases establish October 21 as the start date, and this ought to be respected. If this won’t happen, a negotiation with the government is appropriate to determine how they will compensate us for the delay”.⁷⁹⁸

Private operators certainly deserved part of the blame.⁷⁹⁹ However, beyond the rhetorical facade shown to the public, new authorities acknowledged that the government shared much responsibility. Administrative failure certainly diminishes state capacity. Not only was the promised infrastructure far from ready, but there was a growing consensus that the Lagos Administration had grossly underestimated the number of buses required to serve the city, for both political and financial reasons. Blame admission was so evident, that the amended contracts formalizing the postponement -signed July 2006- included terms highly favorable to operators. Instead of punishing private operators with fines, the MTT financially compensated them for the postponement and accepted delayed payment of contributions owed to the system’s technical

794 Ultimas Noticias, “Ministro: Operadores deberán dar explicaciones por retraso de Transantiago,” May 3, 2006,

795 El Mercurio, “Principal acusado replica que cumplirá a tiempo,” May 4, 2006

796 La Segunda, “¿Quién debe pagar el atraso del Transantiago?,” May 3, 2006.

797 For example the firm created by the AGMPT to run trunk 5, Buses Metropolitana, did not sign its contract with the AFT until June 26, 2006. This delay was partly caused by Navarrete refusing to accept liability over fare validators installed before the end of the transition period, a powerful indication that the managers of this company felt they could not control drivers, who were still employed by individual bus owners.

798 El Mercurio, “Transantiago aplazado por incumplimientos”, May 3, 2006.

799 In fact, months later and after intense media scrutiny, Andres Navarro publicly acknowledged that Minister Espejo had been right all along, and that the AFT was not ready to start operations in October.

reserve fund, which we must recall, had been *the* critical variable to select winning bids. In the case of Alsacia, for example, compensation for the postponement was set a 221,208 UF, equivalent to 36% of its committed contribution to the reserve fund. Buses Metropolitana, one of the firms controlled by the AGMTP, was compensated with 36,166 UF, equivalent to 50% of its committed contribution.⁸⁰⁰ Every bus operator was awarded compensation. Citing Germán Correa as source, Briones suggests that the total amount awarded to operators as compensation for the delayed launch was equivalent to US \$30 million dollars.⁸⁰¹

The four-month delay certainly gave the government some leeway to address both technical shortcomings and rising opposition to the project. For example, Minister Espejo announced the creation of a “Unit of Labor Reinsertion” within his Ministry to help displaced workers navigate the transition. Instead of heeding to the request from bus owners for subsidies to pay drivers’ severance packages and pending social security contributions, Espejo offered to train and represent redundant drivers. Espejo explained publicly, “we are looking for support mechanisms to reinsert this people to the labor market. We will be very strict with their former employers to ensure that their severance packages are fully paid. If one of them does not deliver, we will take the case to court.” While not necessarily successful, the announcement had the clear intention of signaling to Chilean workers that the government was on their side.

As part of the re-negotiation associated with the postponement, operators with roots in the trade associations committed contractually to providing the MTT with “the list of vehicles that will be included as part of their fleets in the full implementation stage, detailing them individually and including their respective license plates.”⁸⁰² The fact that Minister Espejo lacked this information -months after former Under Minister Díaz had first required it- suggests that the leaders of trade associations continued to negotiate with individual members about whose buses would finally be included. And perhaps more revealing of the internal tension that persisted within the trade associations, trade association leaders conditioned this clause to postponing the

800 These figures were reported by these firms in official reports submitted to the *Superintendencia de Valores y Seguros de Chile*.

801 (Briones 2009 p. 77)

802 (MTT 2006 p. 7)

pending exit of buses model 1994 until December 31, 2006, giving the potentially affected bus owners more time to adjust to not being included.⁸⁰³

Such last minute softening caused uneasiness among those in the political right that had seen Transantiago with sympathy. We should recall that the project was not framed publicly as mechanism for the state to enhance its capacity to govern the system, but rather to attract private investment in a way similar to the highway concessions. The delays and frequent contract revisions, as well as the considerations given to former trade associations, pointed to a project poorly planned and executed, and to a government unable or unwilling to enforce contractual terms. These critiques and hesitations partially explain why, in September 2006, the only new entrant that had won a feeder unit of Transantiago decided to walk away from the system, even before the transition period ended. Jose Yuraszeck and his partners decided to sell Red Bus to the french company Veolia, which after losing its bid for a trunk unit finally gained entry to Santiago's bus market. While Minister Espejo claimed that the sale of Red Bus to a well known french company was testament of Transantiago's proven market viability, the low price agreed indicates a different story.⁸⁰⁴ In a later interview, Yuraszeck disclosed some of the reasons leading to his unexpected exit only months before Transantiago reached full implementation. "We lost most of our investment... We had thought that we were entering a serious project, and realized we were not... Contracts were not respected, yellow buses imposed their terms on the government, and twisted the original spirit of the reform."⁸⁰⁵

Questions remained, however, about what to do with "excess" buses after the launch date. The implementation plan established that approximately 2,500 used buses still needed to be decommissioned to reach the desired fleet size. 1,400 of these buses would leave by the end of the year, since they were model 1994. However, a surplus of 1,100 buses would still remain. Should these buses be forced out by the end of the transition period, as previously agreed? Navarrete and Pinto certainly lobbied authorities to cancel any further decommissioning of used buses, arguing that it was increasingly clear that they would be needed to efficiently serve the

803 (Buses Metropolitana 2007 p. 92)

804 Sources privy to the deal told the author that Yuraszeck sold his company for approximately US \$1 million, after paying US \$9 million to acquire it from Jaime Sánchez. This is, of course, unconfirmed.

805 La Tercera, "Yuraszeck acusa que el Transantiago está desfinanciado con la tarifa actual," March 3, 2007.

public.⁸⁰⁶ According to Juan Pinto, “we told authorities, in every language possible, that they had underestimated the required fleet. Our analyses showed that we could serve our routes with the allotted buses, but only by making 100 passengers ride on the roofs! I showed our data to the minister, but he would not believe us!”⁸⁰⁷ Perhaps to settle this question, Minister Espejo ordered a belated round of new studies. The tendering bases had been originally based on a model developed in 2003 by Fernández y de Cea, a prestigious consultancy hired by SECTRA.⁸⁰⁸ In later testimony to Congress, Joaquín de Cea explained that the estimates produced by his firm in 2003 yielded a required fleet of 5,160 buses, which increased to 5,600 after considering a reserve fleet. However, this number was adjusted later by officials designing the bases, as part of a deliberate effort to produce more attractive conditions for bidders, and thus to minimize impact on the resulting fares.⁸⁰⁹ This time around, the consultants were invited back to assess what would happen if the fully implemented system was launched with the 4,494 buses that resulted from the tender.

There was certainly new information available to update the models: Authorities now knew the number and type of new buses effectively offered by new entrants, had a more realistic assessment of the infrastructure that would be available by the time of the launch and were more inclined to accept more conservative assumptions about likely travel speeds. Since the original studies were conducted, authorities had adjusted the desired route network, adding roughly 200 changes in response to suggestions submitted by local authorities and operators. Furthermore, the city had grown and changed, and consultants now had access to more recent travel demand estimates. The preliminary results of this study, shared with the minister in the month of August, were sobering. Average wait times, originally estimated at 4-5 minutes, would actually be 10-12 minutes. Average capacity utilization would be over 90% throughout the bus network. The

806 To be sure, these leaders were fighting over bus slots, not over the long term permanence of the members of their organizations. Leaders knew that any used bus allowed in their fleets would eventually be replaced by a new bus owned directly by their firms. In fact, Buses Metropolitana (trunk 5) signed a contract with Volvo on August 8, 2006, to purchase 500 new buses. These buses -scheduled to be delivered throughout late 2007 and 2008- would gradually replace used buses owned by individual members of the AGMTP.

807 (Pinto, Juan. Personal interview. 27 July, 2012)

808 (Camara de Diputados 2007)

809 A source working at the MOPTT under Etcheberry confirmed that this was, in fact, deliberate. Part of the rationale was that the fleet size could always be increased if insufficient. In contrast, asking private operators to shrink contractually-agreed fleets would be more difficult. This point is also made in (Muñoz and de Grange 2010).

consultants concluded that attempting to operate Transantiago with only 4,494 buses would “produce an unacceptable flow solution, which we will call non feasible or operationally unviable, given the very high wait times that result from an insufficient fleet... the social cost associated with this scenario is unacceptable, undoubtedly leaving users significantly worse off compared to the current situation.”⁸¹⁰

Espejo presented this study to President Bachelet and shared it with several ministers, and the administration scrambled to decide what to do. Upon reviewing potential impact, the president of the subway company sent a letter (dated November 29th) to the inter-ministerial commission overseeing Transantiago, warning that optimizing the bus fleet to the point established in the contracts would “collapse the metro.”⁸¹¹ A group of distinguished academics also met with Espejo in December to warn him about the impending disaster, and to suggest alternatives. Participants in this meeting recall much concern in the minister's close circle of advisors about the readiness of both the AFT and the bus operators to move forward with the launch. Nonetheless, Espejo resisted another postponement, partly because it put the government at risk of protracted and expensive legal battles with bus operators seeking damages. Primed by metro authorities, *Fernández y de Cea* evaluated mitigation alternatives to keep the launch date. They made several suggestions, including the addition of “clone routes” -bus routes duplicating existing metro lines-, and “express” routes -running limited-stop buses. Some of these measures could certainly help, but the underlying conclusion was unavoidable: It was necessary to increase the number of buses authorized to operate Transantiago.

Ready, set, contract renegotiation, go!

On January 3rd, 2007, transportation authorities announced that 1,400 buses model 1994 had “started to exit the system.”⁸¹² On this occasion, however, there was a conspicuous absence of protests. Later that month, *Fernández y de Cea* presented their final report to Minister Espejo. It estimated that Transantiago required a total of 5,900 buses: 5,600 operating in the streets, and 300 more available as reserve.⁸¹³ With only weeks before the February 10th deadline, authorities

810 Fernández y de Cea, “Análisis de Escenarios de Diseño para Transantiago. Orden de trabajo 1, informe 2”, cited in Briones (2009 p. 77), and discussed in Quijada et al (2007).

811 Letter also cited in (Briones 2009 p. 77)

812 El Mercurio, “Transantiago retira 1,400 buses antiguos”, January 3, 2007.

813 This number was offered by Mr. Enrique Fernández (from Fernández y de Cea) during a later testimony to Congress (Camara de Diputados 2007 p. 90)

acknowledged they needed 1,405 buses in addition to the 4,494 required in the current contracts. The problem was not only logistical, but also legal and financial. Who would supply and operate the new buses? How would the system pay for them? Who would equip these buses with the required fare validating devices? And, what did the adjustment mean given existing contracts?

The minister reached out to bus operators, informing they urgently needed to increase the size of their bus fleets. As expected, Alsacia, Express and Subus Chile resisted the change, as any additional investment significantly altered their cost calculations. With their contracts on hand, these operators seemed to have all the leverage they needed. Some of them pointed out that the additional buses were only required because authorities had not kept their end of the bargain. “A lot of things had been promised that were not ready,” recalls Edgar Macallister, “they needed the extra buses to correct the lack of infrastructure.”⁸¹⁴ In response, the transportation minister insisted that the missing network of exclusive corridors and transfer stations would be in place by mid 2007, and that the need for additional buses was simply a temporary contingency. Negotiations about the “extra” buses continued until the last possible minute. In fact, revised contracts -“designed with the central objective of increasing the number of buses that would deliver service”⁸¹⁵- were signed on February 9th, 2007, only one day before the formal launch. The agreed amendments included a formula to estimate the additional number of buses required from each operator. This formula increased the total number of buses required in the system from 4,494 to 5,622. Resistance was such, that not only did the new figure fail to include the 300 “reserve” buses recommended by Fernández y de Cea, but the contracts carefully noted that extra buses “would be incorporated in a transitory manner.” In fact, the language used in the contract clauses suggests that *any* bus could complement existing fleets: “Requisites about bus ownership, terminals, average vehicle age and emissions, will only be verified and enforced when and if the Ministry establishes their permanent incorporation to the fleet.”⁸¹⁶

In other words, the state backtracked on its regulatory posturing and faced reality: The extra buses would need to come from the fleets of trade associations, supposedly in the course of being optimized. New entrants were given no incentive to purchase new vehicles to comply with

814 (Macallister, Edgar. Personal interview. 23 July, 2012)

815 Minister Espejo, in his later testimony to Congress (Camara de Diputados 2007 p. 552)

816 (MTT 2007 p. 4-5)

the new requirement. According to Minister Espejo, “given the characteristics of the market, (operators) could not have have new buses by February 10th. Asking them to produce them would have been impossible, reckless, and was not what we needed to do.”⁸¹⁷ Once again, a strategy to contain financial costs, facilitate implementability and mitigate displacement led to rules that nudged new entrants into leasing used buses from the local market. Nobody seemed to remember the fact that enlisting used buses to the fleets of operators serving trunks 2 and 4 had been expressly forbidden in the tendering bases. Héctor Moya describes the scenario faced by Su Bus Chile in trunk 2: “The government called me sometime in november-december 2006 to tell me they needed more buses. They created a very complex situation because we had our trained drivers and new buses ready to go, with high quality terminals. How was I supposed to cram in three hundred additional used buses, with drivers I had never met before? It was a tragedy. I could control my buses, but the additional ones were incontrollable.”⁸¹⁸ To be sure, the best vehicles were no longer available. The micrero organizations had long cherry picked the best buses for their own fleets, leaving behind units highly prone to mechanical failure, or owned by problematic operators. Furthermore, finding and enlisting the required buses would prove to be a complex, time consuming, endeavor. For this reason, authorities informally authorized operators incorporate the “extra” buses *gradually*. Relying on a longstanding regulation that allowed bus operators to run smaller fleets during holiday periods, the MTT allowed operators to begin operations in February with only 70% of their supposedly available bus fleet, with the rest not required until March.⁸¹⁹ Authorities expected that the lagged entry of the extra buses would produce no problems, as indeed the launch was scheduled to take place amidst a Chilean holiday period, when passenger demand is at its lowest.

Alsacia and Express eventually closed their bus deficit, mostly by renewing and extending lease contracts previously signed with members of Orlando Panza’s organization. “We filled those slots with the people that had accompanied us from the beginning,” recalls Macallister.⁸²⁰ Su Bus Chile used an intermediary to surreptitiously negotiate vehicle leases with

817 (Camara de Diputados 2007 p. 557)

818 (Moya, Hector. Personal interview. 21 June, 2012)

819 This agreement is not contained in the contracts. However, it was mentioned during Minister Espejo’s testimony in Congress (Camara de Diputados 2007).

820 (Macallister, Edgar. Personal interview. 23 July, 2012)

disaffected members of the AGMPT.⁸²¹ Neither of these companies attempted to directly operate the used vehicles. Instead, they simply agreed to pay bus owners a fixed monthly sum to run vehicles on their behalf. While new entrants struggled, representatives of firms with roots in the trade associations celebrated. The expansion of the authorized fleet significantly defused internal pressure threatening their leaders. The previous months had been brutal for individual bus owners, with significant in-fighting taking place to determine whose buses would be forced out at each stage, and whose buses would work for the full term of the concession contracts. “Members were ready to put their buses away. It was easy to call them back, inviting them to join our fleets. In fact, almost all of the buses originally affiliated with my organization found accommodation in Transantiago,” recalls Juan Pinto.⁸²²

However, enlisting the vehicles was only part of the problem. The AFT had not considered the additional validators now required, nor the time it would take to install them. And, in addition to the missing validation equipment, MTT planners now estimated that the implementation of the GPS system in all buses would not be complete until August 2007. Faced with this problem, authorities inserted language to the revised contracts authorizing operators to run “buses not totally equipped”⁸²³ for the first three months after the launch. Once again, the government was forced to soften regulations to facilitate implementation. Even so, this was easier said than done because not knowing how many passengers used the unequipped buses, nor how many buses were on the streets and how many kilometers they served, authorities had no capacity to know how much to pay operators. To address this complication -and probably to sway operators into accepting the last minute contractual amendments- Minister Espejo agreed to modify the compensation scheme for operators. Readers may recall that the tendering bases established that compensation to operators would be calculated by multiplying a previously agreed price per passenger (PPT) by the proportion of a referential demand actually observed. The revised contracts now established that (1) the PPT would be increased to account for the extra buses, and (2) that for the period spanning February 10 to May 5, the compensation formula would consider 100% of the referential demand.

821 Curiously, a firm called Transpalito owned by former under minister Guillermo Díaz served as this intermediary. While there was nothing illegal in his participation, his involvement would later trigger a media scandal.

822 (Pinto, Juan. Personal interview. 27 July, 2012)

823 (MTT 2007 p. 6)

In essence this implied that operators took on no additional financial risk for covering the recently found bus deficit.⁸²⁴ In fact, for the first months following the much heralded launch, all bus operators in Santiago would be paid *whether or not* they put out their buses, and *regardless* of their service performance. Some operators took this as a valuable gesture from authorities, aimed at building a trusting partnership that should be reciprocated. Many others, however, simply identified an enormous opportunity to milk the nascent system.⁸²⁵

10-F

“But when the new system came into force on February 10th, the result was chaos.”

The Economist, February 15, 2007.

In the weeks prior to the February 10th launch date, santiaguinos were bombarded with television ads featuring national soccer superstar Ivan “Bam-Bam” Zambrano. In these ads, Zamorano boarded Transantiago buses and walked through stations while saying, “we will be there for you, you won’t be alone. We will work as a team to introduce you to Transantiago: The new routes, their new chromatics, the new payment system, and many other changes that together will improve our trips.” In one of the ads Zamorano explained that feeder bus units would only run within a specific geographical area of the city, identifiable by color. He calmly explained that to travel across different areas, users would need to transfer to a trunk route, with buses painted green and white. In another ad, he showed the public how to read the color-coded system maps and how to use “Bip”, the new fare card supplied by the AFT.⁸²⁶ The MTT distributed millions of flyers detailing this information in the streets. It printed two million maps, and mailed a “Transantiago Informative Guide” to thousands of homes. A toll free number and an informational website were established to manage questions. Fare cards were available at subway stations since January, and approximately 800 buses had begun piloting them.⁸²⁷ MTT also recruited and trained a team of 700 “monitors” and 400 public officials to give information

824 In fact, a report submitted by Alsacia to its stockholders described that the amendments to the contract signed February 9th “established a mechanism to regulate the increase of the fleet during the beginning of the regime stage, *including* its associated payment” (Inversiones Alsacia 2008, emphasis added).

825 One of the interviewed bus operators described a meeting in which several leaders of firms holding a Transantiago contract discussed the impact of the changes to the compensation scheme. Both of these points of view were represented, with one participant saying “good. At last we are going to win.”

826 Several of Zamorano’s ads are still online. Interested readers could try the following links: <http://www.youtube.com/watch?v=U9Msxt6rpuo> and <http://www.youtube.com/watch?v=XCuMZKFy0NI>

827 El Mercurio, “800 buses aceptarán desde el 1 de enero tarjetas Bip y Multivía,” December 26, 2006.

to the public and to report contingencies after the launch, conducting two drills to identify potential problems.⁸²⁸ Indeed, the Chilean government spent significant resources to improve the public’s experience during “10-F,” the code name given to Transantiago’s launch date.⁸²⁹

Figure 3.14 Material distributed by the MTT in anticipation of Transantiago’s launch.



Minister Espejo even seemed convinced that the glaring execution problems he had encountered upon taking office had finally been bridged, and that the last minute conditions negotiated with bus operators, “were adequate to minimize the impact on the public of the transition from one system to another.” In his own testimony to Congress, Espejo declared he

828 In later testimony to Congress, Danilo Núñez explained that an inter-ministerial commission worked around the clock for several weeks prior to the launch. The team included local authorities, police, metro and personnel from several national ministries. In addition to coordinating the communication campaign, this group conducted a thorough review of “problem spots”, and generated a detailed action plan to mitigate potential traffic and safety risks (Camara de Diputados 2007).

829 To be sure, all of this effort was very top-down. Few resources were spent actually contacting users to understand their concerns and answer their questions.

was convinced that “authorities could speedily solve any difficulties encountered.”⁸³⁰ Reality would prove him wrong.

On the morning of 10-F, millions of Santiaguinos woke up to find a completely new route network and a new fare payment system. Accustomed to hailing their old bus in the corner of their houses, they discovered that now they needed to walk several blocks to find a suitable stop. The route map was complex, despite its intuitive color scheme, and it took some time for people to figure it out. After years of only exceptionally taking more than one bus to reach their final destinations, they found that with Transantiago most trips *required* one or two transfers.⁸³¹ They no longer had to pay an additional fare for taking a second bus, but the transfer experience was a nightmare. The infrequent buses and the long queues greeting passengers at the transfer points negated any gains in travel time promised by the new trunk routes.⁸³²



Figure 3.15 New route map, with the warning: “Plan your trip”

830 (Camara de Diputados 2007 p. 556)

831 Prior to Transantiago only 7% of public transit trips in Santiago required a transfer (bus-bus or bus-metro) (Gomez Lobo 2012). After implementation of the new system, half of the trips required one transfer, and 7% of the trips required two transfers (Muñoz and de Grange 2010 p. 389).

832 Stated in technical terms: “The need to transfer aggravates the variance or volatility of the total travel time, defined as the sum of the separate in-vehicle and at-stop times for each stage of a trip since the passenger must wait more than once. These waiting times have been very volatile due to the lack of a headway control system.” (Muñoz and de Grange 2010 p. 380)

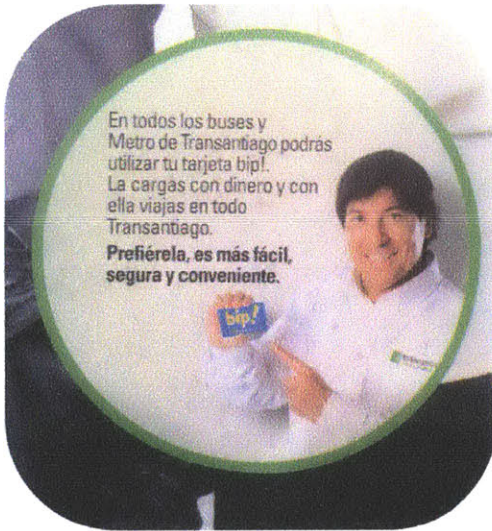


Figure 3.16 Iván Zamorano promoting the new payment system

"In every bus and Metro of Transantiago you'll be able to use your bip! card. You top it off with money and travel with it in all of Transantiago

Use it, it is easier, safer and convenient"

The fare card was also a big source of problems and confusion. Despite claims that the AFT had successfully activated 5 million *bip!* cards,⁸³³ many passengers showed up without one, and initially could not board. Secondly, there were many buses in which the validators did not work properly -it was estimated that 55% of them charged the wrong fare⁸³⁴- or even lacked validator all together. And finally, there were few places available to charge the card. The AFT had done a miserable job installing the charging network. As the phone banks became clogged with complaints, authorities decided to stop charging fares to users and ordered operators to offer free service until February 15th.⁸³⁵

Many of these problems were initially attributed to "teething pains." In fact, the tone in the media remained initially positive, as suggested by the frame selected by the editors of *El Mercurio* to illustrate their front page on the day following the launch, shown in figure 3.17. However, the situation only worsened. One of the bus operator companies reported months later to its shareholders: "The first weeks were chaotic. The public, disconcerted, strongly rejected the

833 Minister Espejo made this point in later testimony to Congress (Camara de Diputados 2007 p. 555).

834 (Muñoz and de Grange 2010 p. 380)

835 According to Gómez Lobo (2007 p. 9), the cost of this decision was offset by fines imposed on the AFT. However, it also contributed to a culture of fare evasion, as passengers felt entitled to withhold payment until the service improved to the level promised.

system. There were mobs at bus stops and at the metro, insufficient routes, areas without bus coverage, lack of buses, absence of control. Problems multiplied.”⁸³⁶ On Monday, February 12, thousands of workers waiting for a bus to get to work accumulated at stops. Unable to reach their destinations, increasing numbers of passengers flocked to the subway. On February 20th, still

Figure 3.17 Santiago, on the Sunday after the launch of the new system



Caption: “La Alameda, east to west, before and after Transantiago - The new transport plan begins to show its positive side, with clearer and less noisy avenues and streets. You can see this in these two photographs. The picture on the left was taken some time ago, and the one on the right was taken yesterday from the same spot in La Alameda. The difference is notorious”.

Source: *El Mercurio*, February 11, 2007

during the holiday period, the subway registered the highest ridership in its history.⁸³⁷ As more and more santiaguinos returned to their normal routine, the system all but collapsed. Buses did not meet the offered frequencies, people agglomerated at stops, travel times went through the roof, taxi fares increased and even more people resorted to the Metro. Authorities were forced to open the Metro one hour earlier, and to implement crowd control measures at stations. At its worst point, 31 stations had to be closed down for several minutes during the daily peak hour

836 (Su Bus Chile 2007)

837 La Tercera, “Metro rompe record historico de pasajeros”, February 21, 2007. We must note however, that this outcome was somewhat expected. People tend to take the fastest route to their destination, and after the integration of buses and metro in Santiago the fastest route to most destinations included at least one trip-leg by metro. However, the confusion surrounding the launch certainly concentrated more people in the stations than anticipated by Metro authorities.

rush.⁸³⁸ Protests against the new system emerged across several neighborhoods, some of them featuring the blockade of major streets.⁸³⁹ An account that made its way to the pages of *The Economist* clearly conveys the feeling of despair overwhelming many commuters: “On one evening, stranded passengers commandeered two buses going in a different direction to take them home.”⁸⁴⁰

Adding to the disillusion, many of the buses running on the streets were none other than the old “micros amarillas” newly painted. Of course, none of these old buses had been shown in Zamorano’s ads, and thus dismissed as a fraud by the public. One newspaper dubbed these vehicles “enchulados” (“pimped up”) -taking a cue from an American television show called “pimp my ride”. The name stuck and its use in a derogatory sense became widespread.

Even the cherished “Bam Bam” Zamorano became target of the public’s wrath. Frustrated by being harassed in the street by disgruntled Transantiago users, he offered a press conference to clarify that he was *not* the Minister of Transportation.⁸⁴¹ All of this may appear as a rather typical story of a predictably tough transition to a new transportation system, but the capacity of the state to implement its policies was also at play. After several years negotiating this transition, the government presumably had more professional counterparts, more enforceable regulations, and more institutional capacity to deliver on its promise of better service. The time to use those instruments had arrived. But before we discuss how the Bachelet administration leveraged this capacity, we must first take a step back, and analyze what happened during that launch date, not from the perspective of the rightfully disgruntled users, but from the point of view of regulators, and bus operators.

838 This point was raised by Minister Cortázar during his testimony to Congress (Camara de Diputados 2007 p. 578).

839 *El Mercurio*, “Transantiago debe estar afinado en Marzo”, February 21, 2007.

840 (Transport heaven and hell: First commandeer your bus 2007)

841 “I am not the Minister of Transportation. I would love to take on the task, to solve the many things that need solving.” *El Mercurio*, “Zamorano: Hay personas que tienen una responsabilidad mayor, yo no soy el ministro”, February 16, 2007.

Figure 3.18 Transantiago, on the Monday after launch



In the caption: "During yesterday morning, a mob waiting for buses that would take them to work, overflowed beyond the sidewalks and was forced to agglomerate in the street, forcing police to -with difficulty- reestablish order"
Source: El Mercurio, February 12, 2007

Boycott or incompetence?

Exact data was unavailable given the failure of the AFT to install GPS systems on all buses, but authorities knew that there was an insufficient number of buses in the streets. "One thing was certain: supply was insufficient to cover demand. Bus stops were overcrowded, passengers fought their way into available buses, waiting and travel times increased and there was a large degree of dissatisfaction with the new system."⁸⁴² Had SECTRA's models been wrong, or were operators withholding available buses? Perhaps both? Part of the initial deficit is explained by the rule that allowed operators to utilize a reduced number of vehicles during the holiday period. This rule, established since the 1998 contracts, allowed operators to lower the frequency of their buses to 40% of the maximum frequencies established in the contracts. This helped contain costs, and balance the supply of buses with the lower passenger demand during summers.⁸⁴³ However, a reduced fleet had already been considered in the operational plans submitted to the MTT, and the lack of service observed in the streets was much worse than

842 (Gomez Lobo and Briones 2013 p. 21)

843 (Paredes, Sanchez, and Sanhueza 2001)

anticipated. Furthermore, the holiday ended, and the number of buses did not increase significantly as a result. What was happening?

The lack of buses during the months immediately following the February launch is likely explained by the difficulty faced by bus operators negotiating leases with potentially displaced vehicle-owners. Paradoxically, a reform that had been partly based on the premise of eliminating excess supply of buses to improve service, had come full circle to needing to reinsert those buses into the system to deliver on its promise. The explanation for this is available as a footnote,⁸⁴⁴ but suffice to say here that these buses had become a highly valued commodity in this market. Given the mandated last minute increase to the required size of bus fleets, roughly every bus from the previous system with a vehicle age of 12 years or less could find accommodation in the new system. So, rather than protesting their eviction, their owners were taking their time choosing whose fleet to join. According to Carlos Román (both a member of the AGMTP and an administrator in Buses Metropolitana), “the buses that seemed destined to exit the system -those whose owners hadn’t been able to add to an operator’s fleet- began to reappear. The operators began to approach them, trying even to buy their old vehicles, but even those were scarce.”⁸⁴⁵ Surely these owners were trying to get the best deal possible.

However, registering a vehicle is not the same to putting it in operation. While the above may explain the delay *registering* buses, there seemed to be something else in play. In fact, data from the buses that did have GPS installed -tracked since March- reveal an interesting pattern. The number of buses *actually* operating remained practically static at 4,600 vehicles between

844 According to the MTT, on February 10th, 2007, operators had only registered 4,849 buses into their fleets. This number increased slowly in the coming months: 5,049 in March; 5,303 in April. In fact, a fleet larger than contractually required (of 5,622 buses) would not be registered at the MTT until May. New entrants had incorporated a total of 1,733 *new* buses to their fleets during the transition period. Since no *new* buses were added to the fleet in the months following Transantiago’s launch, we can assume that out of the 4,489 buses registered by the February launch, 2,756 (61%) were used buses from the old system (“*enchulados*”). We know the transition began in 2006 with 6,659 used buses from the “old system” (Comite de Ministros para el Transporte Urbano de Santiago 2005). Furthermore, after accounting for the 2,756 used buses registered on the day of the launch and for the approximate number of buses retired due to obsolescence in the various stages of the transition period (551 in March 2006, 817 in April/06 and 1400 in January/07), we can estimate that on February 2007 only 1,135 eligible used buses were still available in the market. In other words, used buses became a sought after commodity in a market of operators desperately needing to fill up 1,133 used bus slots to deliver the 5,622 buses required by the Ministry.

845 (Román, Carlos. Personal interview. 6 July, 2012)

Table 3.2 New and used buses in Transantiago's registered fleets (Oct 2005-Sep 2007)

	Stage	Date	Used Buses	Difference	New Buses	Difference	Total Fleet
Transition Period	IA	Oct-05	6,659	0	1181	1181	7,840
	IB	Jan-06	6,108	-551	1483	302	7,591
	IC	Apr-06	5,291	-817	1733	250	7,024
	II	Aug-06	5,291	0	1733	0	7,024
Full implementation		Jan-07	3,891	-1,400	1733	0	5,624
		Feb-07	2,756	-1,135	1733	0	4,489
		Mar-07	3,316	560	1733	0	5,049
		Apr-07	3,570	254	1733	0	5,303
		May-07	3,734	164	1733	0	5,467
		Jun-07	3,981	247	1733	0	5,714
		Jul-07	4,067	86	1733	0	5,800
		Aug-07	4,147	80	1733	0	5,880
		Sep-07	4,214	67	1733	0	5,947

Source: Author, based on minutes from the Comité de Ministros para el Transporte Urbano de Santiago

March and August 2007, *despite* a much larger number of buses had effectively been registered.⁸⁴⁶ How could this be possible, if the AFT was constantly equipping more buses with GPS? There were two possibly concurring explanations: Bus operators did *not want* to run them, to maximize profits (sabotage?) or they *could not* put them in the streets, given the implicit managerial challenge (incompetence?). On the one hand, operators surely responded to the incentives included in the contracts. Given that the latest amendments established that operators would be paid practically the same amount regardless of performance -at least during the first three months of service-, several of them probably sabotaged their own operations, withholding buses or shortening their routes to reduce costs.⁸⁴⁷ On the other, it is also likely that were unable to efficiently manage their large fleets of buses. We must remember that while the contracts had been awarded in 2005, the transition from a trade association to a firm was only *really* completed at this stage. Since being a savvy leader of a trade association with hundreds of members does not necessarily provide the skills needed to manage a fleet of more than 1,000 buses, it is quite likely that at least some operators failed miserably at putting their buses on the street.

⁸⁴⁶ This point also taken from Silvio Albarrán's presentation. A detailed graph showing this is added at a later section.

⁸⁴⁷ In fact, Transport Ministry sources interviewed for this project recall filming buses coming out of terminals, and returning after circling around a few blocks.

Minister Espejo attributed the bus deficit to power politics. “There was a fundamental breach of the contracts”, he testified in Congress, “I am referring directly to the bus operators that kept their buses off the streets.”⁸⁴⁸ Danilo Núñez came to a similar conclusion. “When we saw the streets at 8 am, we felt that the numbers did not match, that we had been deceived, because that buses that were supposed to be in the street were not there.” A large team of officials from the MTT was deployed to terminals and major streets to physically document compliance. “On the 10, 12, 14 and 15th of February, we could see that the buses existed at the terminals, but not all of them were going out”,⁸⁴⁹ concluded Núñez. Operators apparently gamed attempts to document the sabotage. A high ranking official at SECTRA recalls: “Our team went to the streets to observe what was happening. We checked the terminals, and buses indeed started coming out at the required frequency. However, these buses would turn back after five blocks, instead of completing their route... it did not matter to them if service was good or bad. They did not earn money for good service.”⁸⁵⁰

With this evidence, the MTT fined seven of the ten bus operator companies in the days following 10-F. The worst performing were, by far, Buses Metropolitana and Buses Gran Santiago, controlled by Manuel Navarrete and the AGMTP. After announcing the fines, Minister Espejo warned that “firms that fail to deliver the pre-agreed services, will face every contractual and legal consequence available.”⁸⁵¹ However in reality the threats from the MTT carried little practical weight. The contracts clearly stated that if fines imposed on an operator surpassed a relatively low threshold (6,000 UF in one year), the contract would be automatically cancelled. Such outcome was probably as damaging to the authorities as it was to operators. In the event of a cancelled contract, who would take over service? Any re-tendering process would take a long time to implement, and neither the Chilean law nor the current contracts allowed the government to directly take over the routes of a failing operator. Operators knew and exploited this. “Navarrete is an intelligent guy, and he realized that he would be paid anyway,” explained Guillermo Díaz⁸⁵². “This was a fantastic period for the AGMTP and its firms. They got

848 (Camara de Diputados 2007 p. 558)

849 (Ibid. p. 569-571)

850 (Name withheld. Personal interview with Matías Fernández, 7 April 2012).

851 El Mercurio, “Ministerio de Transporte aplica nuevas multas contra operadores del Transantiago”, March 3, 2007.

852 (Díaz, Guillermo. Personal interview. 4 August, 2012)

tremendous profit for the services they actually delivered,” recalls Simón Dosque.⁸⁵³ As it will become clear later, the sabotage hypothesis indeed partly explains the lack of buses running on the streets. However, at least for the first weeks, poor management was also in play.

In addition to the new routes, the new color scheme and the new fare collection mechanism, a more profound change took place with the launch of Transantiago on February 10th: The business model of the trade associations became impractical. While the trade associations had formally transitioned into the firms now holding contracts, the reality was that during the transition period bus owners continued to manage their own business, hire their own drivers, maintain their own buses and control their own revenues. Once the system was fully implemented, however, firm “managers” were finally required to manage. The most important change was that with the implementation of the new fare collection system, revenues now flowed *down* from the AFT to the firm, and then to drivers as salaries and to bus owners for rent of their vehicles. Previously, money flowed *up* from the passengers to the drivers, who then delivered daily revenues to the bus owners, and who in turn paid member dues to the trade associations. With this change, the previously unbreakable link between a bus owner and his vehicle was finally severed. With control over the checkbook, managers could make and enforce (presumably) more efficient decisions.

While this outcome had long been awaited by the planners at the MTT, it created significant operational problems. “All of those *huevones* that used to be trade association leaders became managers overnight,” explained Cristián Marinakis. “And the skill set needed to be successful in one role is incompatible with the skill set required to be successful in the other”.⁸⁵⁴ Edgar Macallister seems to confirm this: “They had spent so much of their time negotiating who could stay and who had to go, than when the time came to start they were not full prepared.”⁸⁵⁵ To be sure, many of these leaders had never directly managed a large fleet of buses, nor dealt with a large number of employees. When interviewed the day after the launch, Manuel Navarrete illustrated one of the many transitional challenges faced within his organization: “We had operative problems. Workers were accustomed to have their terminals close to their homes, and

853 (Dosque, Simón. Personal interview. 15 June, 2012)

854 (Marinakis, Cristián. Personal interview. 20 June, 2012)

855 (Macallister, Edgar. Personal interview. 23 July, 2012)

now they need to commute to start the day. This is why not all of our buses went out.”⁸⁵⁶ Drivers complained that they could no longer take the buses home, and due to their new commutes reported late to work. Unsurprisingly, the transition from fragmented to consolidated managerial responsibility came accompanied with a new labor relations dynamic. In fact, in the days following the launch of Transantiago, several bus operators faced strikes from bus drivers, a tremendously rare occurrence under the trade associations.⁸⁵⁷ Furthermore, maintaining a fleet of old used buses was no easy task, particularly with centralized management and maintenance. After years of ownership, a bus owner developed detailed knowledge about a particular vehicle. Once the transition occurred much of this knowledge was lost. Carlos Román, explained why this was important: “In the old system you would own a bus model X, and be ready with model X spare parts. You knew what worked and what didn’t. It was simple. Now we had a hundred different models, and couldn’t possibly stock sufficient spares. These buses had experienced so many modifications over the years, that any repair was a great expedition for our mechanics. The time to repair vehicles was long, and the percentage of buses out for repairs was huge.”⁸⁵⁸

Completing the transition from *gremialista* to *empresario*: Why some trade associations unions thrived as firms and not others

Buses Metropolitana and Buses Gran Santiago, the two firms with roots in the AGMPT negotiated leases with the owners of the vehicles. Vehicle-Owners accepted to relinquish control over their buses, in exchange for a fixed monthly payment. The lease price was established using the bus owner’s monthly profit as reference, and so many felt satisfied. This strategy made a lot of political sense. With this action, Manuel Navarrete was able to push many of the members of the AGMTP away from the management of the firm. With no reason to interact among themselves, threatening coalitions of bus owners could no longer plot against him. However, de-linking bus owners from their bus, and giving them a fixed amount was a profoundly flawed management decision. After all, these bus owners had long learned to “game the system”. Germán Correa recalls talking with Navarrete amidst the launch crisis. He came out convinced that the sabotage hypothesis could only partially explain the outcome. “When I was minister (in

856 El Mercurio, “Navarrete niega boicot y responsabiliza a choferes por fallas en debut de Transantiago”, February 11, 2007.

857 El Mercurio, “Transantiago: Choferes deponen paro tras acuerdo con Manuel Navarrete”, February 21, 2007.

858 (Román, Carlos. Personal interview. 6 July, 2012)

the 90s) and ordered technical revisions, owners would “pimp up” their buses before the test: Change the motor, put on new tires, do a quick paint job etc. They would add and remove pieces at their convenience. *Now they were doing the same to Navarrete.* If they owned two buses, they would take the best parts to pimp up one vehicle and rent it elsewhere, and rent the useless one to Navarrete.”⁸⁵⁹ Simón Dosque concurs: “You must understand that when a bus owner is told that he will lose control over his bus, he stops caring about properly maintaining it. If he can replace its good tires for older ones he’ll do it. I don’t think Navarrete sabotaged the system. What he did was make a bad administrative decision.”⁸⁶⁰

Not all of the firms with roots in the trade associations replicated Navarrete’s flawed lease model. In fact, Juan Pinto was adamant about not severing the linkage between bus owners and vehicles. His firm -Comercial Nuevo Milenio, in charge of two feeder services- implemented a hybrid model, in which bus owners would be paid only if their vehicles worked. The firm would run the central administration, hire the drivers, provide infrastructure and pay for insurance, but the bus owner would still be responsible of maintaining his unit. Instead of a fixed rent, Pinto paid bus owners using a formula based on two variables: Age of the vehicle -to compensate them for their previous investment-, and number of kilometers served -creating an incentive for owners to take good care of their vehicles. As Pinto explained: “I placed my bet on the bus owners. The bus owners had fixed their own vehicles for their whole life. They had driven them, and fixed them. They *knew* the buses, knew their tricks, and could keep them running for less money. Navarrete bet on himself. He took away the buses from their owners, created a large service depot, and named another trade association leader to run it... This difference is the key to my success and their failure. Navarrete paid Ch \$700,000 pesos (US \$1,339 dollars) regardless of what happened. Others paid Ch \$500,000 (US \$956). Instead, we paid a variable figure. A bus owner could get Ch \$1 million (US \$1,912) -sometimes Ch \$750,000, sometimes Ch \$500,000. With us, earnings are tied to how much the bus actually operates.”⁸⁶¹

859 (Correa, Germán Personal interview. 13 June, 2012, emphasis added)

860 (Dosque, Simón. Personal interview. 15 June, 2012). Perhaps Navarrete himself came to this realization. Acting as General Manager of Buses Gran Santiago, Navarrete placed on March 12, 2007, an order to purchase 162 *used* buses from Inversiones Metalpar. Curiously, Navarrete resigned as General Manager of Buses Gran Santiago only 15 days after such a large purchase, fueling critiques that he had obtained a personal commission on the sale.

861 (Pinto, Juan. Personal interview. 27 July, 2012). Conversion to US \$ added by author, using the August 2007 exchange rates (US \$1=Ch \$522.92).

Both Navarrete and Pinto knew that in the long run, their firms would purchase new vehicles, making the need to lease vehicles from their former peers unnecessary. They had no qualms about this, as they were no longer *gremialistas*, but *empresarios*. However, there are good businessmen and bad, and only Pinto realized that to survive and thrive he needed to implement a business model that took advantage of the best features of the “old system.” In any case, deliberately or not, the worst performing operators of Transantiago took advantage of the favorable conditions inserted in the contracts. The stable flow of revenues guaranteed during the first months of operation served as a temporary buffer, hiding the managerial incompetence of some of their leaders. The limited and spotty operation of the technological platform installed by the AFT left authorities with little capacity to monitor service. However, this could not go on forever. Not only was the system as a whole losing money, but Transantiago had become a major political crisis for the Bachelet administration.

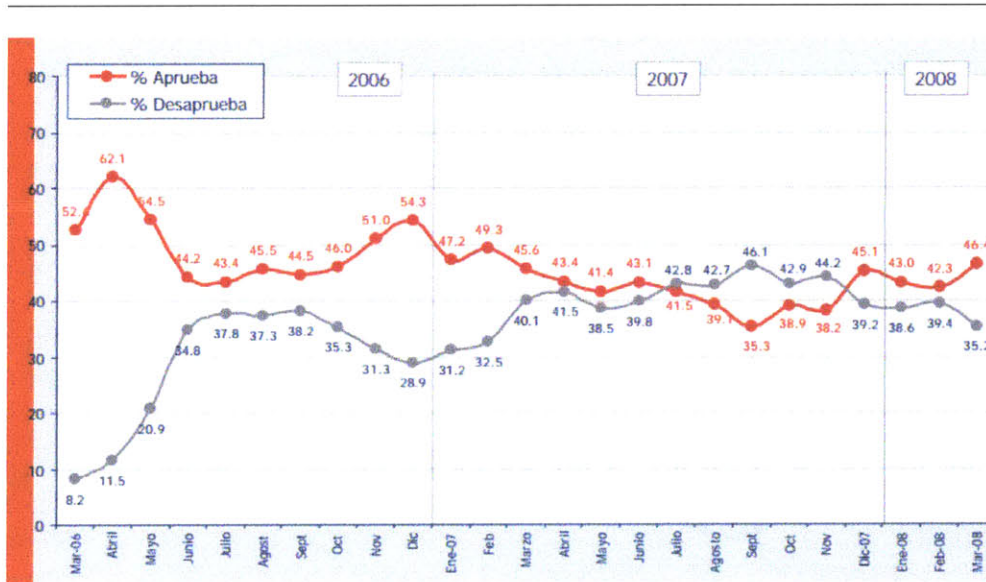
Part V. State capacity: Reestablishing discipline under constraints

"Given the storm we faced, the period from March to August felt like a century"
 - René Cortázar

A system in crisis

President Bachelet saw her popularity plummet following the dreadful implementation of Transantiago. As shown in the graph below, between December 2006 and March 2007, her approval ratings fell almost 10 percentage points, and this downward trend would continue for most of 2007.⁸⁶² The problems associated with Transantiago's implementation were undoubtedly

Figure 3.19 Tracking poll question: Regardless of your party affiliation, do you approve or disapprove of President Bachelet?



Source: (Adimark-GfK 2010)

to blame. Not only was rejection to the Bachelet administration overwhelmingly concentrated in the metropolitan area of Santiago, but only 15.3% Chileans nationwide approved her team's handling of Transantiago.⁸⁶³ Espejo had been chosen to lead the MTT for his combination of

⁸⁶² (Adimark-GfK 2010)

⁸⁶³ (Adimark-GfK 2008)

management skills and partisan credentials. His task was to keep the implementation plan on track and to retain political support for the project, especially within the Concertación. He failed on both accounts, and unsurprisingly, the president sacked him on March 27, 2007.

To be sure, Espejo had to deal with inertias triggered before his time, and tried to make the best out of the situation. He was sufficiently pragmatic not to enforce contractual terms that would only lead to a continuous string of delays or to the failure of the system. To maintain the implementation schedule he extended deadlines, postponed bus retirement schedules, lowered fleet standards, and re-negotiated contracts in ways that benefited operators significantly. In fact, the short term objective of launching the system on 10-F was only achieved because he was flexible. However the regulatory concessions afforded to the private operators soon came back to haunt the minister. By allowing the AFT to postpone installation of GPS equipment, he relinquished his ability to monitor the system effectively. By allowing bus operators to include older vehicles in their fleets, he negatively affected their performance. By agreeing to pay operators a guaranteed amount, he eliminated their incentives to put the buses out. As the negative consequences of these decisions accumulated, his position as minister became unsustainable.

Furthermore, Transantiago became a political bombshell. Beyond the expected critiques from the political right, it was precisely at the DC, Espejo's party, where questions were most poignant. DC Senators Adolfo and Andrés Zaldívar found the proof they were looking for to extend to Bachelet critiques they had long directed at Lagos. They were not mincing words. According to Andrés Zaldívar, "Transantiago is this country's worst experience implementing public policies and dealing with the private sector. It was a decision ill taken, ill structured, ill organized and ill calculated, and represents the worst of mistakes, not only in the government of Michelle Bachelet, but of all Concertación governments."⁸⁶⁴ It may seem overstated to call a public transit system the worst policy ever experienced in Chile, particularly considering this country's troubled history, but such was in fact the negative disposition of thousands, perhaps millions of Chileans toward Transantiago. Bachelet needed somebody else to step in and reestablish discipline and credibility.

⁸⁶⁴ El Mercurio, "Andrés Zaldívar: El Transantiago es el peor error de todos los gobiernos de la Concertación," May 9, 2007.

To replace Espejo, President Bachelet appointed René Cortázar (DC), an economist with a PhD from MIT who had previously served as labor minister under President Aylwin. Minister Cortázar faced what seemed an impossible task. He needed to rapidly improve the level of service experienced by the public on the streets, while at the same time stopping what was rapidly becoming an unsustainable financial deficit in the system. Both objectives -seemingly at odds with each other- needed to be achieved in a conspicuous manner, and in a very short period of time. Cortázar tasked a group of 12 distinguished academics with elaborating a diagnosis and an action plan,⁸⁶⁵ and soon became convinced that the system would not survive for long without on the one hand making significant changes to the rules of the game and on the other, enhancing the ability of the state to pay for the level of service it wanted. As an irony, what shocked Cortázar the most was not that there were few buses in the streets, but that there were so many, given the prevailing incentives.⁸⁶⁶ Cortázar committed to “normalize” Transantiago by December, and announced publicly he would resign if unable to deliver.

Cortázar met with the stockholders of the AFT and warned them that their concession would be revoked if they failed to deliver a usable, workable, GPS system that allowed him to closely monitor service. They committed to a new schedule: The GPS system would be in place by May 2007. In the interim, Cortázar would attempt to change the operator’s contracts, and get them to agree on a compensation mechanism that tied their revenues to performance. Cortázar also decided that many more buses were needed to deliver the expected level of service. Arguments about the theoretical feasibility of providing good service with an optimized fleet did not apply with thousands of santiaguinos close to rioting. Given the demonstrated performance of operators and the missing infrastructure, users would not perceive notorious improvements unless bus operators behaved a little more like the old trade associations, flooding their routes with vehicles. For this reason, Cortázar set out to increase the required fleet from the previously agreed 5,622 buses to 6,400 by the end of the 2007.⁸⁶⁷ However this brought him back to the need to change the contracts, since operators would not make this investment in new buses willingly.

⁸⁶⁵ This report is (Coeymans J.E et al. 2008). For a summary of its contents, see (Muñoz and de Grange 2010).

⁸⁶⁶ Several sources recalled hearing this phrase from Cortázar.

⁸⁶⁷ It is unclear to the author how Cortázar came to this number, but the figure was used constantly as a target during this period.

Changing the rules was just as urgent as finding more money. Fare revenues were already insufficient to cover the cost of operations and the deficit was growing -US \$14 million in March, US \$30 million in April.⁸⁶⁸ Further, the purchase and operation of the additional buses was expected to impact the system's finances. Transantiago's financial deficit was such that a fare increase or a paralysis of service was unavoidable by early May. Given the political context that surrounded the project, either outcome would practically kill Transantiago, and perhaps even the ability of the Concertación to win future elections. According to Cortázar, "we were not willing to raise the fares, as doing so implied a gigantic social and political risk. The option of raising the fares was a bomb sure to explode."⁸⁶⁹ In fact, Cortázar fully discarded this alternative, announcing publicly that fares would remain frozen at Ch \$380 (US \$0.73) until the quality of system improved. The only alternative left to fund operations and pay for the new buses was to publicly subsidize Transantiago. However, obtaining congressional approval for such subsidy promised to be a protracted political battle, and Cortázar had no time to spare. Even if able to get the required votes, his team estimated the process would take three months, at minimum.

A subsidy law that paid bills *and* empowered regulators

Operators reacted to rumors of a likely contract renegotiation with disbelief. They had already agreed to several changes, and were still struggling to add the previously required buses to their fleets. Since the remaining stock of used vehicles in Santiago was barely sufficient to cover the previous fleet expansion, any additional buses implied a significant investment in new vehicles. In an interview televised on April 11th, Jorge Beyá, a former trade association leader managing Buses Gran Santiago, summarized a widespread opinion among operators: "How can we be expected to sign a new contract knowing that the changes affect us negatively? I won't sign it. I don't think any of the other nine operators will either."⁸⁷⁰ For several weeks, Cortázar tried to sensitize operators, telling them that the alternative of not changing the contracts was the public commandeering their buses or setting them on fire. Such was the frustration of the public on the ground. However, bus operators knew that the government had publicly taken ownership of Transantiago, and that it could not allow the system to fail. To convince operators to renegotiate the contracts, Cortázar had to raise the stakes. To force them back to the table, the

868 (Mardones 2008)

869 (Cortázar, René. Personal Interview. 21 July, 2012)

870 El Mercurio, "Empresas de Navarrete amenazan con no firmar nuevos contratos de Transantiago," April 11, 2007

MTT promoted new legislation easing the practical difficulties of canceling contracts. If approved, Minister Cortázar would be empowered to appoint a third party as “provisional administrator” of a cancelled contract, until a new tender was properly organized. Lacking this mechanism, former Minister Espejo had been cornered into tolerating bad performance.

The fight in Congress over the subsidy was just as complex. While the Concertación had a majority in both the House of Representatives and in the Senate, the vote could be lost due to insurgent DC members like Senator Adolfo Zaldívar. Furthermore, all it would take for the opposition parties UDI and RN to seal the fate of Transantiago would be to filibuster the bill for a few months and corner the government into increasing fares. To hedge against this later option, the MTT was forced into walking on very thin ice. As Cortázar explained, “we had to creatively explore new formulas, and discovered that we could incur in debt. The most viable option was the Metro, which had easy access to the financial system. Metro could postpone one of their outstanding payments, and float us the money needed to operate while Congress approved the subsidy.”⁸⁷¹ Predictably, the Metro resisted. As you have read, tension between Metro and MTT authorities had a long history, but this time it was too costly for the government to split the difference. The president of the Metro resigned, revealingly over “differences with the Board regarding matters of transcendental importance for the company.”⁸⁷² To be sure the Metro had no legal powers to act as a bank, making this financial operation borderline illegal. However, Cortázar made the case that authorizing this “loan” was fact in Metro’s own interest: “what was plan b? Collapsing the system? I had no more money available. Payments to bus operators would stop, operators would retire their vehicles, Metro would be inundated by passengers, and the system would be finished.”⁸⁷³ On May 9, the board of the subway company approved the terms of a new contract with the AFT and the transportation ministry: Metro would postpone for 90-days the reception of US \$80 million owed to this company from its share of the fare collected by Transantiago. This decision, widely critiqued when ventilated in the media, provided Transantiago with oxygen to survive until the subsidy law was approved by Congress.⁸⁷⁴

871 (Ibid.)

872 El Mercurio Online, May 4, 2007.

873 (Cortázar, René. Personal Interview. 21 July, 2012)

874 For a critical look at the complexities of this loan -and of its potential illegality- please refer to (Buchheister and Soto 2010 p. 156-159).

Getting the necessary votes to secure the subsidy was nonetheless difficult. Not only was the opposition united against it, but high ranking figures from the Concertación voiced doubts. In fact, former President Frei Ruiz-Tagle, then serving as president of the Senate, even publicly floated a plan to cancel all the existing bus operator contracts, and to instead “temporarily nationalize” the system.⁸⁷⁵ The political climate that surrounded the decision can be summarized by a single fact: President Bachelet felt compelled to use the first couple of minutes of her first “state of the country” speech -on May 21, 2007- to address the flaws of Transantiago. Facing not only members of Congress, but also a nationwide audience watching on TV, Bachelet began by apologizing: “Our capital had a dangerous and polluting public transit system. It required profound changes and the decision was made to face this challenge. However things were badly done. This reform has been a bad and frustrating experience for the vast majority of santiaguinos, especially for the poorest. You have all the right to be angry and anguished. I understand your indignation and impotence. There were failures in the system’s design and in its implementation. There was a massive failure to deliver from actors that had to guarantee the system’s operation. Adequate tools to supervise and enforce service were lacking.” In her speech, Bachelet called Congress to approve both the “provisional administrator” figure and the subsidy law promoted by Cortázar. “We need Congress to support us, since we need resources to make the changes that need to take place, to fix the things that went wrong in the launching stage.”⁸⁷⁶

In June, Congress authorized a US \$290 million “stabilization fund” for Transantiago, enough to cover the system’s estimated deficit until December 2007.⁸⁷⁷ In the lower Chamber the project received 63 votes in favor, 48 abstentions and 3 votes against. At the Senate, it received 20 votes in favor and 18 against, including the vote of DC Senator Adolfo Zaldívar.⁸⁷⁸ Albeit barely, the Concertación stood united behind the government. Such outcome was only possible after adding to the bill a “mirror fund” that allocated at least an equivalent amount of money to investments outside of Santiago’s Metropolitan Region -which eventually brought the total cost of the bill to US \$605 million-, and after the government agreed to the creation of a

⁸⁷⁵ El Mercurio, “Frei insiste en necesidad de estatizar el Transantiago,” September 8, 2007.

⁸⁷⁶ (Bachelet 2007)

⁸⁷⁷ (Ley 20.206 Chile)

⁸⁷⁸ In addition to Zaldívar, Senators from the UDI and RN voted against the subsidy.

Congressional Commission⁸⁷⁹ to investigate the problems surrounding the planning and implementation of Transantiago.⁸⁸⁰ This stabilization fund provided only temporary relief, but the key point is that its usefulness to the minister was not only financial. Cortázar used it as leverage to negotiate longer lasting contractual changes with bus operators. In fact, Article 4 of the Law established that the subsidy money would *only* be available *after* a contract regeneration process was completed to the satisfaction of the Minister of Transportation. Cortázar recalls how this was a game changing move: “The law did not specify which changes were needed, only that amended contracts *needed* to be signed. I met with operators and told them the decision was simple. We needed new contracts and they could not access the subsidy money without them. Without the subsidy money, their revenues would fall by half.”⁸⁸¹

Inducing cooperation from private counterparts

The changes to the contracts sought by the MTT had the purpose of increasing the size of Transantiago’s bus fleet, while simultaneously forcing operators to improve their performance. We must recall that the contract negotiated by Minister Espejo one day before the system’s launch on February 10th, 2007 established that the extra buses added to the fleet (increasing the required fleet from 4,494 to 5,622 buses), “would be incorporated in a *transitory* manner.” Five months later, the new clauses advocated by Cortázar proposed to not only *permanently* incorporate these buses, but to require operators to supply an additional fleet (from 5,622 to the targeted 6,400 buses). Cortázar presented operators with two options to comply: Purchasing the new buses, or adding used buses (e.g. buses that did not meet the “requisites about bus ownership, terminals, average age of vehicles and emissions” established in the tendering bases). “In consideration of the larger investment required⁸⁸²”, operators contributing new buses would become eligible for *either* a contract extension, or an adjustment to the price paid per passenger (PPT). The minister also offered to postpone scheduled contributions to the technical reserve fund for up to 12 months. These incentives were designed to enable operators to finance the new units in favorable conditions. In contrast, operators choosing to rely on used buses would *not* be eligible for any of the prior inducements. In fact, meeting the fleet increment requirements with

879 The author used this Commission’s final report as a source for this research (Camara de Diputados 2007). For a detailed analysis of the testimonies presented to this Commission see (Quijada et al. 2007).

880 (Mardones 2008)

881 (Cortázar, René. Personal Interview. 21 July, 2012)

882 Quoted sentences in this section are taken from the renegotiated contracts.

used buses came with a serious disadvantage. They would be allowed to run only as an “auxiliary fleet” in routes showing “transitory operation problems”, and would therefore not be considered for adjustments to the PPT. In other words, operators would not be able to finance this “auxiliary fleet” by charging a more expensive payment for each passenger using their buses.

The second proposed amendment had to do with the compensation formula. We must recall that contracts signed on February 2007 practically eliminated incentives for bus operators to run their buses. As a result of the delay implementing fare validators and GPS technology on the buses, the AFT could not monitor how many passengers boarded each bus, nor how many buses were in the streets, and therefore had no way of determining how much to pay bus operators. To salvage this situation, the MTT practically fixed payment for the first months of operation at 100% of the estimated passenger demand in each contract area. As we have seen, operators exploited this, deliberately or not. By August, however, the AFT had finally installed GPS in most buses, and while the system still could not report the exact locations of each bus, it could report the number of buses from each company running at any given time. To exploit this data, the new contract now proposed by Minister Cortázar introduced an index (the ICPH: *índice de cumplimiento de plazas-hora*) that compared the number of buses actually running with the number of buses required in the operator’s approved operational program. Cortázar proposed incorporating this index -a percentage- to the bus company’s compensation formula: The amount owed to operators would be the product of this percentage by the theoretical revenue. While far from perfect,⁸⁸³ this compliance indicator made tremendous difference: If an operator ran only half of its buses, it would only earn half of its expected revenues.⁸⁸⁴

Minister Cortázar was significantly well placed to secure agreement on the new contracts. Despite the unfavorable terms proposed by the MTT, these companies could not survive financially without access to the subsidized share of their revenues. Further, operators realized that without the contractual changes Congress would not authorize another subsidy, putting all of their investment at risk. And finally, no operator was willing to have an adversarial confrontation with the authorities at such critical time. Money and rules converged as mutually reinforcing instruments for the governance of public transit in Santiago. Operators not only had to come to

883 For example, the technology did not allow authorities to disaggregate the performance of operators at a route level.

884 For a detailed description of how this index is estimated, and about the technical challenges it posed, please refer to (Beltrán, Gschwender, and Palma 2013).

the negotiating table, but faced powerful incentives to remain at this table, and cooperate with Cortázar, who held the key to their long term survival.

To be sure, protracted negotiations took place. However, 10 of the 14 bus operators signed the contracts in August, and the last of the four holdouts signed in November, after securing financing for the new buses required.⁸⁸⁵ Cortázar publicly promised to deliver a fleet of 6,400 buses by December 2007. This implied adding 778 buses to the fleet required at the time of the launch. The new contracts, most of them signed in August, included commitments to deliver 411 new buses by December 31st, distributed as shown in table 3.3.⁸⁸⁶ The contracts suggest that Buses Metropolitana (trunk 5) and Buses Gran Santiago (trunk 3) -firms controlled by the AGMPT and Manuel Navarrete- did not commit any new buses. However, this is probably due to the fact that the first of these firms had already placed a purchase order for 500 new buses, 300 of which were scheduled to be delivered before the end of the year.⁸⁸⁷ If we consider these buses in our calculations, Cortázar was on track to achieving his target. Nonetheless, the new buses would take time to be manufactured and delivered, and Cortázar urgently needed to demonstrate progress. For this reason, he authorized inter-urban buses to enter the city and run local services. This infringed upon the exclusivity afforded by the contracts to Transantiago's operators, but apparently none of them challenged the decision.⁸⁸⁸ During the following months 300 to 350 inter urban buses complemented Transantiago's services and relieved some of the pressure.

However, the most notable feature of the new contracts would not be the additional buses, but the application of the ICPH. According to an aide of Minister Cortázar who asked to withhold his name, "most of the firms run by former micrero leaders signed their death sentence with this contract. It is not that they didn't want to perform well, but they simply couldn't. They lacked the organizational structure and the management system required to meet the new

885 The operator resisting the most was Su Bus Chile (trunk 2). The additional investment required for new buses forced this company to refinance its prior debt, and the banks conditioned their backing to colombian Fanalca becoming the majority shareholder. Hector Moya tried to avoid this, and was a militant opponent to Cortázar's contracts. However, after a month and a half of not receiving the subsidized portion of the revenues, Moya capitulated and signed.

886 Numbers reported as mentioned in the contracts.

887 Buses Metropolitana originally negotiated this purchase from Volvo. However, in November 2006 this order was cancelled and a new one placed at Daimler Chrysler (Mercedes Benz buses).

888 This was partly due to the fact that these inter urban buses were only authorized to offer limited stop "super express" services running on the city's urban highway network. Neither were they allowed to carry standing passengers.

standards.” This perspective was shared by Carlos Román, who lived through this period working for Buses Metropolitana: “the new index generated some break-downs, and it was very difficult to stabilize the administration of such a large company with people lacking sufficient experience.”⁸⁸⁹ Want it or not, all bus companies in the system had a sudden urgency to address their management shortcomings, to put their buses back into operation, to discipline their drivers... to improve their performance, just like the government wanted. GPS data suggests that since the February launch, the number of buses actually in the streets had remained practically static at 4,600. The graph below shows the dramatic improvement after transport authorities applied the ICPH, starting in August 2007. Literally the next day, the system detected 200 additional buses circulating in the streets, and this number would increase consistently in the coming months, until reaching a peak of 5,816 buses in December.

Such powerful response had its roots on the financial penalty imposed on underperforming operators. Unfortunately, not all the operators had the managerial capacity to adjust successfully. As you can see in figure 3.21, taken from the work of (Beltrán, Gschwender, and Palma 2013), the pain inflicted by the new contracts on the worst performing operators was very significant. The lowest ICPH registered by an operator in August 2007 was 70%, and this number would not vary significantly until almost a year later. This means that for a prolonged period of time, the worst performing operators of Transantiago (Buses Metropolitana and Buses Gran Santiago, the firms corresponding to the trade associations affiliated to the AGMPT) lost 30

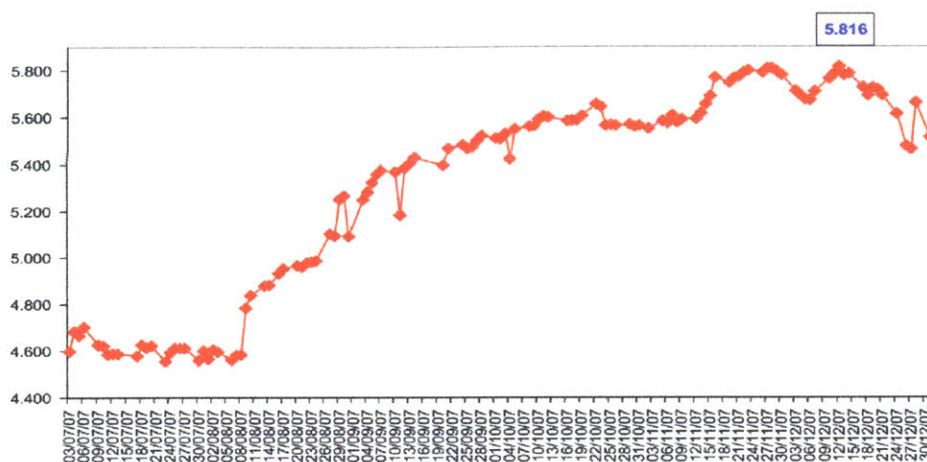
Buses added to Transantiago’s bus fleet as a result of contract renegotiation, August 2007

	Bus operator company	Number of buses added to the fleet
Trunk 1	Alsacia	25
Trunk 2	Su Bus Chile	96
Trunk 3	Gran Santiago	0
Trunk 4	Express	85
Trunk 5	Buses Metropolitana	0
	Total	206
Feeder 1	Red Bus Urbano	25
Feeder 2	STP	20
Feeder 3	Unitrans	30
Feeder 4	STP	25
Feeder 5	Buses Gran Santiago	25
Feeder 6	Comercial Nvo. Milenio	15
Feeder 7	Comercial Nvo. Milenio	20
Feeder 8	Buses Gran Santiago	25
Feeder 9	Transaraucarias	20
	Total	205
	System Total	411

Source: Bus operator contracts, Coordinación Transantiago

889 (Román, Carlos. Personal interview. 6 July, 2012)

Figure 3.20 Number of Transantiago buses circulating in the streets (2007)



Source: Coordinación Transantiago

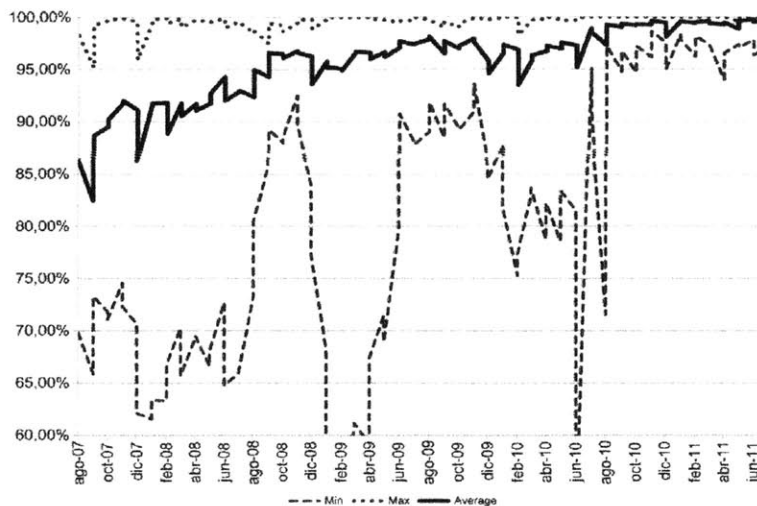
to 35% of their monthly revenues for not being able to put its buses on the street. In fact, the sharp decrease in the minimum ICPH registered in the graph during the first months of 2009 is explained by major problems at Buses Gran Santiago -a company that in this period registered an ICPH of less than 45%. This performance eventually led to the cancellation of its contract.⁸⁹⁰

A lot of the undeserved windfall revenues accumulated by Navarrete’s firms during the first months of operation evaporated during this period. Both Buses Metropolitana and Buses Gran Santiago had tremendous fixed costs, as they had been governed in similar fashion than the AGMTP. A former high-ranking administrator of Buses Metropolitana described the scene at the time in this company. “Salaries were paid using checks payable to the bearer. There must have been 400 drivers registered that didn’t really exist. There was a lot of money never paid to bus owners for their vehicle leases. They would show up expecting to collect their Ch \$600,000 (US \$1,150), and leave with only Ch \$300,000 (US \$575). There was little in the form of serious accounting.”

To be sure, not only firms with roots in the trade associations suffered with the applications of Cortázar’s indicators. After all, every operator’s fleet had grown considerably, and all of them had enlisted older and more unreliable vehicles. For example, Héctor Moya

890 (Beltrán, Gschwender, and Palma 2013)

Figure 3.21 Evolution of the average ICPH registered by Transantiago bus operators.



Source: Beltrán, Gschwender, and Palma 2013, based on data from Coordinación Transantiago.

recalls the impact on Su Bus Chile. “Cortázar expected those buses to have the same performance than our new vehicles. He said, ‘contracts are contracts!’. I replied, ‘But mister minister, enlisting them was a favor to you! How do you expect buses run by drivers we have trained for two years to compare well with drivers that are not really my employees, that don’t listen to me, that do what they want?’ He shut me off by saying that we got paid to enlist them, that there was no favor there. And so it was, we were severely punished for operating very bad buses.”⁸⁹¹ However, Moya had no alternative but to budge and accelerate as much as possible the substitution of the buses that harmed his company’s performance, which probably explains why Su Bus Chile was the operator that committed to adding the most new vehicles (96) after signing Cortázar’s new contract.

To everyone’s surprise, one of the *best* performing operators was Comercial Nuevo Milenio, the firm created by Juan Pinto’s Federación Siglo XXI. Cortázar recalls, “we had some firms that were essentially a group of bus operators that had never before worked together and that hoped to make everything work out, and we had Juan Pinto, who is in fact a good businessman. His track record was even better than for example the colombian firms,

891 (Moya, Hector. Personal interview. 21 June, 2012)

outperforming them in all of the indicators we tracked.”⁸⁹² However, it was more than that. Over a period of decades, perhaps beginning with the tendering processes of the nineties, Pinto and his partners embraced “empresarización,” not as a threat but as a challenge. For a long time, their exploration had been cautious, and only adopted half heartedly. However, when Pinto and his partners created a shell company to bid for a route contract in 1992 and 1994, when they agreed to have a company and not individuals own 10% of the buses in 1998, when they seriously explored bidding for a Metrobús contract in 2002, when they parted ways with the AGMPT and refrained from participating in the strike of August 2002, when they bid and won two Transantiago feeder contracts in 2005, and when they figured out how to manage a fleet of used buses owned by former partners and still turn a profit, they were gradually becoming the type of private partners that a minister like Cortázar desperately needed. Indeed, one of the most important outcomes of this round of contractual adjustments, is that it finally enabled the authority to clearly distinguish who among the former trade association leaders that remained as participants in Transantiago had successfully transitioned away from a culture of *gremialistas* seeking to extract rents, to a culture of *empresarios* interested in providing efficient services to the public.

Undeniable, albeit still insufficient progress

To be sure, the 5,816 buses detected by the GPS system in December 2007 were not the 6,400 promised by Cortázar,⁸⁹³ but the gap was probably smaller than apparent. Some buses still operated without a functioning GPS system and went unaccounted, and the figure does not take into consideration 350 inter-urban buses added while the new buses arrived. For the first time in several months, someone seemed to be taking charge of the crisis, and users perceived the services of Transantiago as finally improving. Cortázar had proof to back up the perception, He had hired the Catholic University of Chile to monitor waiting times at 44 critical stops. In June, this study estimated 21% of passengers waited more than 10 minutes for their bus and that 4.4% waited more than 20 minutes. By September, only 11% waited more than 10 minutes and 2.1% waited more than 20 minutes.⁸⁹⁴

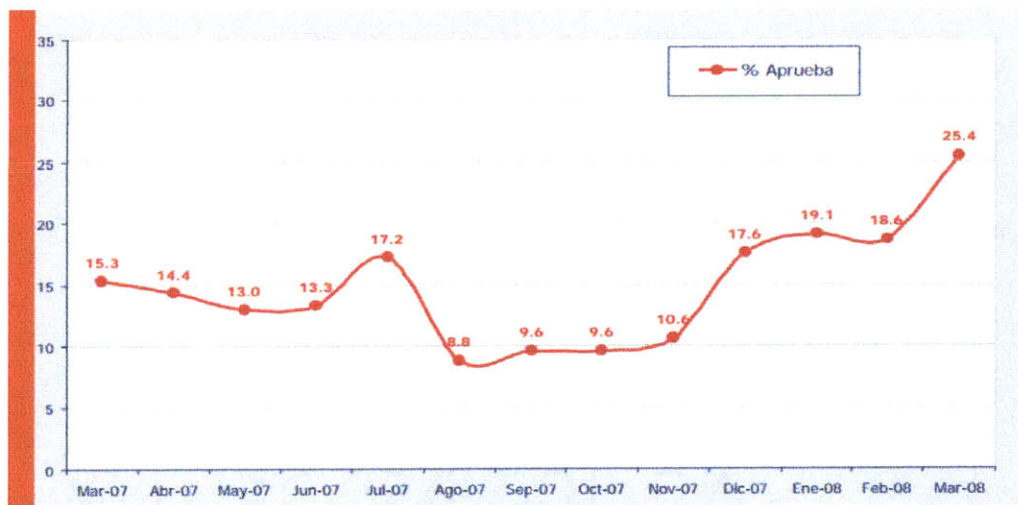
892 (Cortázar, René. Personal Interview. 21 July, 2012)

893 A possible explanation is that several operators, such as Express, failed to deliver their buses by the agreed December 31 deadline. However, these buses had effectively been purchased and would be added to the fleet in 2008.

894 (Camara de Diputados 2007 p. 584-585)

Of course, these results were not only due to the additional number of buses running in the streets. The Bachelet administration had finally made a point of delivering infrastructure, despite the significant financial constraints faced by the system. In 2007, the number of roofed stops throughout the city increased from 3,013 to 8,626. Eighty special stops where passengers could pay before boarding buses -“zonas pagas”- were built throughout the city. A network of 126 kilometers of bus priority lanes and public transport exclusive streets (“pista solo bus” and “vias exclusivas”) was either in advanced planning or in construction stages.⁸⁹⁵ While public opinion remained decidedly critical about Transantiago, the crisis seemed to be reaching a turning point, and polls began registering positive feedback.

Figure 3.22 Tracking poll: Do you approve or disapprove of the way Michelle Bachelet and her team are handling Transantiago?



Source: (Adimark-GfK 2008)

While encouraging, polling numbers also demonstrated that the vast majority of the population still disapproved of Transantiago. To be sure, the system was still far from doing well. For all its worth, the ICPH had limited usefulness. It registered number of buses on the street as a proxy of quality of service. However, it is quite possible to deliver dismal service with a large

⁸⁹⁵ These figures were presented by Cortázar at (Comite de Ministros para el Transporte Urbano de Santiago 2007)

fleet of of badly managed vehicles. What people really demanded was frequent, predictable and reliable service in the specific routes of their daily commute. For this reason, planners working under Cortázar began working on a new set of indicators that would allow them to monitor operator's performance at a fine-grained level. This demanded enhancing the technological platform provided by the AFT, and would require -again- protracted negotiations with operators to get them to accept any new performance measures.

The public also resented walking long distances to stops and having to transfer before reaching the final destination of their trips. Both of these features were part of the trunk and feeder rationale that had predetermined the design of the new route grid, and would not be as straightforward to address as the bus deficit. To be sure, the MTT added 50 new routes, and increased the number of kilometers in Transantiago's route network (from 6,502 kms in February to 7,907 kms in September), but the public demanded more accessibility. The problem was that any modifications to the routes had to be negotiated with operators, who often stood to lose financially from the decision. As we may recall, their contracts granted them a degree of exclusivity. Furthermore, desired changes often required an operator to "invade" with its buses the area awarded to a different operator, or extending the route of a feeder bus into a major destination, such as downtown, decreasing the appeal of trunk lines. The challenge was to strike a balance that on the one hand enhanced the supply of services experienced by the public, but on the other avoided falling back to the era of deregulation, when buses competing for passengers congested streets and put people at risk, while also making operation marginally profitable. Cortázar sought to address this problem by creating a compensation mechanism that would ensure that every operator received its fair share.

Neither of these efforts to establish new performance standards and to soften the rigidity of the route network would make headway until late 2008, but a virtuous cycle seemed to be emerging. The subsidized share of the fare gave the MTT bargaining power to change the rules so that it could forcefully implement changes that addressed the public's concerns. Then, the incipient results brought by of these changes provided a legitimate argument vis a vis Congress to maintain this source of leverage, and vis a vis the operators to accept further changes to the rules. Similarly, operators realized that their long term survival depended on the long term survival of Transantiago. As such, they had an incentive to cooperate with Cortázar finding demonstrable evidence of service improvements that would then allow him to get an extension to the subsidy from Congress. All of these "tweaks" required time to yield results, and time was

running out. Members of Congress remained outspoken and critical of the system. As the month of December loomed near, former President Frei Ruiz-Tagle insisted on his “temporary nationalization” idea, and the members of the UDI and RN filled the airwaves critiquing the Concertación’s management of Transantiago, with some of them even clamoring for a return of the “micros amarillos.” It would take a very small number of Concertación votes switching sides to make a new subsidy bill fail. This preoccupied Cortázar significantly, as he knew that once operators adjusted to the renegotiated contracts -adding more buses and putting them in the street- the monthly financial deficit run by Transantiago (already at approximately US \$40 million every month) would inevitably grow. There was not way around a basic fact: Improving the standards of service required more money. Since the Bachelet Administration was committed not to increase fares, a contentious, politically charged, national debate about the desirability of permanently subsidizing public transportation in Santiago loomed near.

Transantiago, standing at a cliff

President Bachelet’s budget proposal for fiscal year 2008 included US \$145 million to subsidize Transantiago until the month of April. Cortázar defended this line item in Congress, arguing that progress was already taking place, and that the system needed more time for the full benefits of the contract renegotiation to become evident. As he explained to congressmen, “we are asking for resources only to gain the time required to, during the month of April, present you with another bill that allows long term analysis of the structure and financing of the system.”⁸⁹⁶ In what was a public slap-on-the-face, the lower Chamber awarded only US \$2 dollars to help fund the system. The government lowered its expectations, and submitted an amended proposal in the Senate, now asking for only US \$90 million, but this bill was defeated as well. “It was a jibe; a message for Cortázar to get rid of the shitty system he had on the streets”, recalls a former aide to the minister. Members from the *Alianza por Chile* -the coalition formed by the UDI and the RN- were of course expected to vote this way. Municipal elections were scheduled for October 2008, and the presidential elections would take place in 2009. The Alianza clearly stood to reap tremendous political benefits if Transantiago ended up a failure, or better yet, if the Bachelet administration had to increase fares only months before santiaguinos went to the polls. However, the Concertación also lost the votes of Senators Fernando Flores and Adolfo Zaldívar

896 Legislative record of Law 20.232, pg. 714.

and from five members of the House, all from the DC.⁸⁹⁷ Senator Zaldívar -the long-standing ally of the trade association leaders- made the position of this insurgent group clear: “(Transantiago) won’t be fixed with more money, nor with better management. The design of Transantiago went against the essence of a transport system, even against our own culture. It needs major surgery. We need to return to the old routes.”⁸⁹⁸ He was picking up on talking points long used by the *gremialistas* of the trade association system: With all its flaws, the yellow buses met “the essence” of transportation, i.e. getting people where they needed to go, even if it did so while ignoring costs imposed on society, such as congestion, pollution and safety externalities.

To make matters worse, on December 13, 2007 the Congressional Commission investigating Transantiago -created as part of the deal to get approval for the first stabilization fund- voted a critical report.⁸⁹⁹ While the Commission exculpated President Bachelet from direct responsibility, it accused President Lagos of unnecessarily accelerating the implementation of Transantiago before all wrinkles were ironed to reap political benefits. Lagos found no alternative but to issue a public statement dated December 19th, “recognizing, with pain”, that the system caused “harm, annoyances and suffering to many people, particularly the poorest, to whom I offer my sincerest apologies.”⁹⁰⁰ Former Ministers Etcheberry, Estévez and Espejo, the bus operators, the AFT, as well as two dozen officials involved in the planning and implementation of the various stages of Transantiago were also publicly reprimanded for their participation. Perhaps as political payback, on December 27th the leadership of the DC accused Senator Zaldívar of “constituting a pact with the Alianza” to harm the Concertación and its government, and expelled him as member of the party.⁹⁰¹ A few days later, five of the twenty one Members of the House affiliated to the DC quit in solidarity.⁹⁰² Combined with the previous

897 (Mardones 2008)

898 Legislative record of Law 20.232, pg. 796-7

899 (Camara de Diputados 2007)

900 Lagos’ legacy was profoundly affected by Transantiago. In his autobiography published 2012, he wrote that “my first regret is that we were unable to do more” to improve the public transportation system of Santiago. As he put it, his administration tried to “make it more humane for those who rely on public transportation for their daily survival... but along the way, the program stalled.” (Lagos Escobar 2012 p. 243). The audio recording of the apology is available from: http://www.cooperativa.cl/ricardo-lagos-pidio-disculpas-a-los-mas-afectados-por-transantiago/prontus_notas/2007-12-19/183012.html.

901 El Mercurio, “Tras 40 años de militancia, Zaldívar es expulsado de la DC,” December 27, 2007.

902 The congressmen that quit were Alejandra Sepúlveda, Jaime Mulet, Carlos Olivares, Pedro Araya and Eduardo Díaz. In their 5 page statement, they denounced “the blind support” offered by the leaders of the DC to “corrupt and politically corrosive actions” like Transantiago.

resignation of congressman Esteban Valenzuela over the “culture of corruption” prevalent the PPD, this event had the tremendous political implication of depriving the Concertación from a majority of the votes in the House of Representatives.⁹⁰³

Amidst this turmoil, Minister René Cortázar offered his resignation to President Bachelet, arguing that the system was still far from acceptable. Bachelet refused to let go Cortázar, and instead commended him publicly for his efforts. He returned to the MTT decided to continue the work carried out during 2007: Tightening official control over bus operators, while at the same time finding ways to finance the system without resorting to fare increases. Just like months earlier, the MTT had no alternative but to explore “creative” financial mechanisms to resolve the short term financial shortfall. To go around Congress, the AFT negotiated a US \$160 million dollar loan with the state owned Banco Estado. While the debtor was formally a private company, the Chilean Economic Development Agency (CORFO) underwrote the loan, making the decision questionable at best. If the AFT failed to pay back, the state would be liable for funds that Congress had previously denied. “We were certainly at the limit, making all possible operations to ensure the system did not collapse, within the law of course”, emphasizes Cortázar.⁹⁰⁴ This does not mean that the Bachelet Administration gave up hope about obtaining a formal subsidy for Transantiago from Congress. In fact, the Bachelet Administration sent a new budget proposal to Congress on May 6th, 2008, offering a sensible argument for a permanent subsidy.⁹⁰⁵

At the time, all basic-education students attending publicly subsidized schools used the public transit system for free, and higher level students with family income under a predetermined threshold, were eligible to travel at 50 to 66% of the cost of regular fares.⁹⁰⁶ This system had been in place for a long time, but the government had never compensated bus operators for the discounted fares.⁹⁰⁷ In practice, this meant that all of the users of the system -

903 The House of Representatives (Cámara de Diputados) in Chile has 120 seats. The 2005 elections yield 65 members for the Concertación (21 DC, 20 PPD, 15 PS, 9 other), 54 for the Alianza por Chile (33 UDI, 19 RN, 2 other) and 1 independent.

904 (Cortázar, René. Personal Interview. 21 July, 2012)

905 For the full text of the bill see (Cámara de Diputados de Chile 2008)

906 (Libertad y Desarrollo 2008)

907 The system actually benefited trade association leaders. As previously mentioned, they sold the carnet required for students to obtain this discount, creating a source of revenues for their organizations (or for themselves).

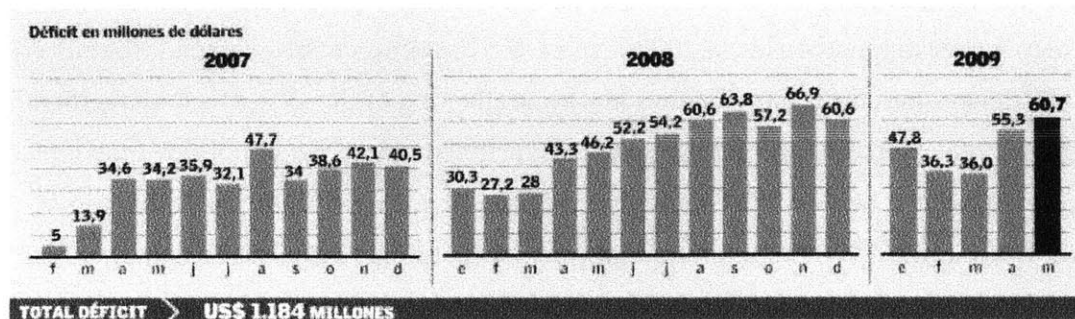
even the poorest- ended up cross subsidizing the discounted fares for students. To end this inequity, President Bachelet argued that Congress should allocate a permanent subsidy to compensate Chilean public transit operators for revenues lost as a consequence of a public policy that benefited students. Of course, Transantiago bus operators included. The bill proposed the creation of a US \$420 million fund, renewable every year, for this purpose. Half of this amount was for Santiago, and half for the regions. The bill also allocated a “transitory” subsidy of US \$135 million for Transantiago during each of the years 2009, 2010 and 2011. To make this bill palatable for congressmen representing districts outside of the metropolitan region, a “mirror” fund for the same amount was included to fund transportation infrastructure and to finance cash-for-clunkers (“*chatarización*”) bus retirement programs across Chilean cities. According to Cortázar, this was the “definite solution” he had promised to permanently solve the financing deficit of Transantiago. Predictably, the project became engulfed in protracted debates in Congress, and a definite vote on the matter would not come until months later.

Clearly, the “definite solution” to Transantiago’s deficit was not within immediate reach. While Congress debated, Transantiago seemed stuck in a negative spiral. Frustrated users abandoned Transantiago for other modes, and many others felt entitled to evade fares, which resulted in lower revenues than projected.⁹⁰⁸ There were Senators -like Pablo Longueira (UDI)- who publicly defended the “right” to withhold payment for bad service.⁹⁰⁹ To attract passengers back into the system (or to convince them to pay), it seemed necessary to run more buses more frequently over longer routes. However, all of these measures implied more costs, which were not recouped because unsatisfied passengers either refrained from using the system or evaded fares. To make matters worse, the US \$160 million loan obtained from Banco Estado would be fully spent by April 2008. Once more, Transantiago stood at a fiscal cliff.

908 In fact, passenger crowding inside buses was such that it was often physically impossible to pay.

909 I thank Juan Carlos Muñoz for suggesting this point.

Figure 3.23 Monthly operational deficit of Transantiago (\$US, millions)



Source: El Mercurio

Anticipating yet another congressional rebuff, Minister Cortázar and Finance Minister Andrés Velasco traveled to Washington, DC on March 19th, to meet with high ranking officials of the Inter American Development Bank (IADB). During his one day trip, Cortázar petitioned for a US \$400 million loan to fund operations of the system over 2008, making the case that approval would “inject resources to the system during a transition period in which measures are being taken that will allow long-term operational sustainability and financial equilibrium.”⁹¹⁰ For the IADB it was certainly unusual to loan money for a project with a negative cash flow, and Transantiago had already been operating on a deficit for over a year.⁹¹¹ Nonetheless, bank officials reviewing the case offered a sympathetic assessment, and approved this loan on April 28th.⁹¹² To be sure, the Bachelet administration was under no illusion that it was possible (or desirable) to operate Transantiago without a permanent public subsidy. The financial projections presented by the MTT to the IADB as part of the loan petition estimated that Transantiago’s yearly deficit could be cut only to approximately half the 2008 level. In fact, the base financial projection prepared by the MTT assumed that at the very least the yearly subsidy would remain at US \$185 million, and this considering gradually increasing fares, reducing fare evasion, re-

910 This text is from the letter addressed by Rene Cortázar to IADB President Luis Alberto Moreno, dated June 8, 2007. Letter available at: <http://www.dtpm.gob.cl/descargas/BID/9.pdf>

911 (Rubin 2010 p. 27)

912 According to the loan’s *Environmental and Social Management Report* prepared by IADB officials as part of the approval process, “the Government of Chile has clearly identified the issues and is in the process of implementing a comprehensive plan to improve the System’s operating and financial performance” (Inter-American Development Bank 2008 p. 3).

attracting passengers lost to other modes, and lowering payments to bus operators through future re-tendering.

The loan approved by the IADB allocated US \$390 million to the AFT, “to fund a portion of the System’s operating expenses in 2008”, and US \$10 million to be executed directly by the Ministry of Transportation for the “institutional strengthening of the system’s management”.⁹¹³ It is unclear why the IADB approved this loan. High ringed international politics may have played a role. However, news of the suddenly available financing couldn’t have arrived at a better time: During mid 2008 the international price of diesel increased significantly, which combined with a fare still frozen at Ch \$380 (US \$0.81) triggered a notorious increase in the system’s monthly deficit. In fact, Transantiago was in such bad financial shape, that it couldn’t afford to wait until the IADB completed its own bureaucratic protocol to clear the first disbursement of funds. The IADB loan would not be formally signed until June 8th, and Cortázar

Figure 3.24 Base case projections submitted by the Ministry of Transportation the to the IADB (\$US, million)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating Revenues	871	1017	1114	1182	1215	1241	1262	1283	1305	1328	1354	1384	1414	1445	1476	1509	1542
Operating Expenses																	
Operators	889	906	897	898	910	892	914	938	962	977	960	989	1019	1050	1082	1115	1150
Metro	352	360	362	365	372	379	385	392	399	406	414	423	433	442	452	462	473
AFT	109	134	143	145	147	150	153	155	158	161	164	167	171	175	178	182	186
SIAUT	5	5	5	5	5	6	6	6	6	6	6	6	6	6	7	7	7
Total	1355	1405	1407	1414	1435	1426	1458	1490	1524	1549	1544	1586	1629	1674	1720	1767	1816
Net Operating Cash Flow	-483	-389	-293	-231	-220	-185	-196	-207	-219	-222	-190	-203	-216	-229	-243	-258	-274

Source: IADB-Chile loan agreement (Inter-American Development Bank 2008 p. 126)

needed the money immediately. For this reason, planners at both the finance and transportation ministries crafted a mechanism similar to the one previously implemented with the Metro. On May 28th, the AFT issued bus operators 60-day promissory notes (pagarés) instead of paying them with money. Bus operators were instructed to use these promissory notes to purchase diesel

913 IABD, “Chile-Transantiago (CHL-L1052) Environmental and Social Management Report (ESMR)”. April, 2008.

from the national petroleum company -ENAP-. Once the IADB became available, the AFT would repay the total amount owed to ENAP.⁹¹⁴

Cortázar reflects on the use of these “creative” mechanisms: “Those were very dramatic moments, meaning that we were always standing at a cliff. If any measure failed, the mechanism with the Metro, the deal with CORFO, the IADB loan, the strategy with ENAP... if any of them didn’t work, the system was finished, the city was paralyzed. The common dramatic element throughout all that time was that the alternative we faced was falling to the precipice.”⁹¹⁵ While certainly not a comfortable position, this permanent brinkmanship may have protected and enhanced the leverage available to the MTT in its negotiations with private bus operators. Cortázar hoped to use the lifeline afforded by the IADB to test and adjust a set of tighter control measures on bus operators, to expand the network of bus priority lanes in the system, and to negotiate another round of adjustments to the contracts. Some of these efforts were already in progress, but the political battle associated with Transantiago’s finances certainly contributed to aligning the goals of bus operators with the goals of government authorities, making the whole process paradoxically cooperative.

On June 26th, a group of 13 Senators from the *Alianza por Chile* -roughly one quarter of the full Senate- challenged the constitutionality of the IADB loan in court. The Senators argued that the Bachelet administration overstepped its powers, taking a loan ultimately underwritten by the state without proper congressional approval. After a divided vote announced on September 2th, the court sided with the Alianza Senators and ruled the loan unconstitutional.⁹¹⁶ On September 11, Congress reacted by approving the creation of yet another Investigative Commission, this time “to analyze, study and investigate presumed irregularities occurring in the soliciting, processing and concretion of the loan bestowed on Transantiago by the IADB, at the request of the Government of Chile.”⁹¹⁷ This result put the Concertación in a terrible bind.

914 This mechanism was confirmed by the General Manager of the AFT during later testimony to Congress (Camara de Diputados 2009 p. 45). The total amount covered in the promisory notes was Ch \$9,619 million pesos (US \$20.5 million dollars).

915 (Cortázar, René. Personal Interview. 21 July, 2012)

916 In fact, the formal sentence of the Constitutional Court is dated on September 30th, 2008. However, the potential effect of the decision was so calamitous, that President Bachelet requested the Magistrates to anticipate the direction of their decision, which they did on September 2.

917 (Camara de Diputados 2009 p. 1)

Transantiago had already spent US \$288 million from the IADB loan, and according to the MTT's own assessment, the system had funding only "for 20 additional days."⁹¹⁸ But to further complicate matters, municipal elections were scheduled to take place on October 26, raising the stakes of any decision. Rather than paralyzing service or increasing fares, the Bachelet administration pulled the last trick from its sleeve: Declaring Transantiago a "public calamity." But before describing what this meant precisely, we must first analyze how bus operators in Santiago adjusted in 2008 to the oversight afforded to Minister Cortázar by the new contracts.

The end of the *gremio*

The unrelenting application of discounts since August 2007 to the revenue stream of underperforming bus operators proved brutal. The four Transantiago contracts operated by the two companies created by the AGMPT⁹¹⁹ had significant difficulties adjusting. We have previously acknowledged that the dismal performance of these firms may have been originally caused by some of its leaders attempting to milk the system, exploiting a compensation formula that offered no incentives to put buses on the street. However, the fact that these companies failed to put the required number of buses in the street after losing between 12 and 40% of their expected revenues on a bi-weekly basis for over six months confirms that something more than mischief was in play. As one of the sources interviewed for this research concluded, "if this was Navarrete's business model, then it was a very bad business model."

The situation at both Buses Gran Santiago and Buses Metropolitana was dire. Most of their fleets were composed of older model buses, leased from their owners and operated and maintained directly by Navarrete's partners and friends. "Stuff was being robbed from inside their own socks and trousers... everybody felt they owned the firm, and at the same time that nobody did."⁹²⁰ The operational problems caused by this arrangement resulted in abysmal ICPH results. In January 2008 Buses Gran Santiago, running a fleet entirely composed by leased used vehicles,⁹²¹ registered ICPH scores that deprived it from 36% of its expected revenues in trunk

918 Cortázar himself offered the 20-day estimate during a discussion of the subsidy law in Congress. *Historia de la Ley 20.378*, pg 231. Available at <http://www.leychile.cl/Consulta/script/getHL?idNorma=1005871>

919 Buses Gran Santiago (feeder units 5 and 8; and trunk unit 3) and Buses Metropolitana (trunk unit 5)

920 (Pinto, Juan. Personal interview. 27 July, 2012)

921 Buses Gran Santiago had committed to deliver 50 new buses by December 31, 2007. However, it had been incapable to deliver. While its managers placed a purchase order at Mercedes Benz (Comercial Kaufmann), the contract established that buses would not arrive until April 10, 2008.

unit 3, of 37% in feeder unit 8 and of 20% in feeder unit 5.⁹²² Only recently had Buses Metropolitana begun to improve from similar levels of performance, probably as a result of the arrival of 270 of the 500 new buses purchased from Mercedes Benz in mid 2007. The rest of the new buses were scheduled to arrive, 25 to 30 at a time, in a monthly basis. However, it was probably too late. Both companies extinguished their cash reserves, and the payments from the AFT, after the ICPH discounts, were insufficient to cover their operational costs. The companies could not pay the salaries of its employees nor the lease of its vehicles. One consultant working for Navarrete at that time, who asked to withhold his name, abandoned ongoing projects “because there was too much internal conflict.” La Nación reported that “since January, the small entrepreneurs that rent their ‘pimped up’ machines to Metropolitana and to Gran Santiago have not received their payments, and will ask the court to financially intervene the firm.”⁹²³ The scene on the ground was probably much less civilized. As a public official then working at the Coordinación Transantiago told the author, “bus owners had to go in and steal their own vehicles, even using their fists to get them back.”

Manuel Navarrete was smart enough to know that his position was unsustainable. He realized that the government needed to demonstrate to the public and to Congress its willingness to use a firm hand dealing with underperforming operators. Further, Navarrete had already experienced firsthand -jailed and socially stigmatized in the aftermath of the bus blockade of 2002- what it was like to play the role of culprit. He knew that the value of both Buses Gran Santiago and Buses Metropolitana was quickly eroding, and that their stock would be worthless soon. He no longer commanded the respect of the members of his organization, nor was he able to benefit financially from leading them. He was 62 years old, and decided to step down and sell. In February, only one year after the launch of Transantiago, Navarrete resigned as president of the board of both companies, and soon after sold most of the stock he controlled directly or through his closest partners. While the exact amount that resulted from these sales is impossible to know, a source privy to the deal and close to Navarrete told the author “it was monstrous, he got much more than it was worth.” Over the next several months, Jorge Gómez and his partners from the FGDTS acquired approximately 80% of Buses Gran Santiago and roughly 20% of

922 This data was made available to the author by the Coordinación Transantiago.

923 La Nación, Navarrete renuncia a la Presidencia de Buses Metropolitana y BGS, March 7, 2008.

Buses Metropolitana.⁹²⁴ Juan Pinto increased his personal stake in Buses Metropolitana to approximately 29%,⁹²⁵ and with his partners at Comercial Nuevo Milenio bought 22% more, obtaining majority control. Juan Pinto explained how he consolidated the stock of Buses Metropolitana: “I hired one of the old lawyers working at the AGMTP, who knew everyone, and sent him to visit former trade association leaders owning dispersed stock. Many had minuscule shares, and I sometimes had to pay double the price.”⁹²⁶ As part of the purchase, Juan Pinto also acquired the headquarter building of the AGMTP in *Catedral 1712*.

Both Pinto and Gómez had profound roots in the trade associations, but by now were aware that to survive and thrive in the industry they needed to adjust to the new reality. Upon assuming control of Buses Metropolitana, Juan Pinto cleared house. He brought in new administrators -with himself as General Manager- appointed a new board, and implemented the lease model previously implemented at Comercial Nuevo Milenio, making vehicle-owners responsible of their maintenance and paying them according on their vehicle’s performance. Jorge Gómez also brought in new people and adjusted the operations at Buses Gran Santiago. He had a different (and less successful) business model than Pinto, and in fact kept leasing the used buses from Navarrete’s former partners, albeit paying them significantly lower rents. The anticipated arrival of 50 new buses in April, previously purchased by Navarrete, also helped Buses Gran Santiago significantly. Regardless of the managerial differences between Pinto and Gómez, the most important change they embodied was that bus owners still leasing their vehicles to these companies no longer felt *entitled* to ownership. Many bus owners finally realized that their ties to the company would only last until their vehicle became obsolete, or until the owners of the company purchased a bus to replace it. The required expansions to the bus fleet mandated by the MTT certainly extended the usefulness of used buses, granting their owners with an extra two or three years to recoup their investment. However, this period was rapidly coming to a close.

Pinto describes how the exit of the small bus owners took place, at least in firms under his leadership: “I had to deal with that rough period, but I conducted it well, with respect and

924 Gómez would later sell half of his participation in Buses Metropolitana to Juan Pinto.

925 As you may recall, after a negotiation with Manuel Navarrete to coordinate bids for the tender, Juan Pinto retained 8% of Buses Metropolitana. The 29% takes into account owned by Pinto directly and through participation in *Mejores Tiempos Limitada* and *Halcones de Tuluahuén*. The information presented in this paragraph is based on official reports presented to the Superintendencia de Valores, adjusted on account of conversations with some of the parties involved.

926 (Pinto, Juan. Personal interview. 27 July, 2012)

affection. Each time 30 new buses arrived, I had to take 36 old buses out. We would do a full tune up of the leased vehicle, and pay an extra month to the owner. He would thank us and sign a release form, and then we would part ways. We wanted colleagues that had accompanied us to go happy, but they *were not* shareholders. The firm was no longer owned by the trade association. Navarrete, the guy who had really owned the firm -and who had owned the trade association too- no longer did.”⁹²⁷ While not as dramatic, this paradigm shift affected all bus companies that had roots in the trade associations. The tightened regulation implemented by Cortázar forced those still clinging to a *gremialista* mindset to either evolve or exit the market. By the second half of 2008, an ICPH lower than 0.90 was truly rare, and in some cases the companies with roots in the trade associations that had survived outperformed the colombian and the french companies.

In fact, the ICPH had stabilized to such extent, that it was no longer very useful to the MTT. The index was refined in July 2008, to ensure that it only counted buses with actual passengers on board (using data collected from fare cards). However, clearly more direct and fine grained indicators were needed to ensure continuously improving service levels. By mid 2008, the available technology enabled regulators to “follow” each of the buses as they completed their routes. Using a technique called “triadas”, regulators defined 3 points along every bus route. The system produced a time stamp when a bus crossed each of the three points, enabling authorities not only to count the number of vehicles in the street, but also to simulate *tracking* them. With this data, they could evaluate whether or not operators performed according to the approved operational program.⁹²⁸ This technological breakthrough soon spawned a second generation of performance standards: the frequency compliance index (ICF, *indice de cumplimiento de la frecuencia*), and the regularity compliance index (ICR, *indice de cumplimiento de la regularidad*). The ICF measured the percentage of programmed trips that were effectively satisfied in every route. The ICR evaluated the extent to which operators maintained a stable headway between their buses, i.e. measuring their reliability. Both of these measures were important to detect operators who artificially bumped up their ICPH by running empty buses at

927 (Pinto, Juan. Personal interview. 27 July, 2012)

928 (Beltrán, Gschwender, and Palma 2013)

night, who were neglected complicated or distant routes, or that strategically held behind buses behind to allow ridership to accumulate.⁹²⁹

The use of these indicators was not defined in the contracts. Further, operators not only distrusted the “triada” method, but did not want to risk further discounts to their compensation calculation formulas. From their perspective, the rules of the game had already strayed too far from the structure contained in the tendering bases that supported their contracts. They had already -willingly- taken a hit to support the cause of Transantiago: buying more buses and accepting the ICPH. For this reason, the ICF and the ICR were initially employed only with demonstrative purposes. The average frequency indicator (ICF) registered in August 2008 was 0.67, and the average regularity indicator (ICR) was 0.72, but these measures had no consequence on the operator’s bottom line. In part pressured by a political context where support for the subsidy law debated in Congress came conditioned on delivering more accountable bus operators, and perhaps to save face for the IADB loan mishap, Cortázar tried to persuade operators to accept the new indicators voluntarily, for the well of the system. Not much was accomplished. However, when the financial crisis finally caught up with Transantiago, the minister found the card he needed to play to effectively push his new program forward.

A calamitous blessing: The ‘Constitutional 2%’

In the days following the vote in which the court declared unconstitutional the IADB’s US \$400 million loan to Transantiago, President Bachelet weighed her alternatives. Municipal elections were scheduled in a few weeks, and the race to elect her successor in 2009 had practically begun. It was clear that Transantiago would be a dominating campaign item. Allowing the system to come to a full stop would confirm not only that Lagos had planned a major reform poorly, but also that the highly publicized efforts of her own administration to “fix” the system had failed. Keeping the fares frozen had at least tempered the ire of the public. Radically increasing them now would not only push more passengers away from the system, but would probably negate the limited but consistent progress achieved in the public opinion arena. Congress was less likely than ever to approve funds for Transantiago, particularly after the Concertación lost its slim congressional majority with the resignation of Zaldívar’s supporters from the DC. Furthermore, congressmen and senators seemed more interested in pointing fingers

⁹²⁹ For a technical description of how data is collected and how these indicators are derived, please refer to (Beltrán, Gschwender, and Palma 2013).

over the IADB fiasco, than in giving a fair consideration to the bill she had submitted since May for a permanent subsidy. In fact, the rumor was that congressmen from the Alianza por Chile, in tandem with the DC faction led by Adolfo Zaldívar, was inclined to approving only another Ch \$1,000 (US \$2) for Transantiago, repeating the insult from the previous year. Under these circumstances, Bachelet found no better option than declaring Transantiago a public calamity by invoking the “Constitutional 2%.”

Article 32, Fraction 20 of the Chilean Constitution establishes that: “The president of the republic has special powers to... mediating a signature from all cabinet ministers, decree payments not authorized by Law, to respond to needs that cannot be put off derived from public calamities, external aggression, internal commotion, grave harm or danger to national security or the depletion of resources destined to maintain services that cannot be paralyzed without serious harm to the country. The total amount of payments made with these purposes will not exceed 2% of the total amount of expenses included in the Budget Law... The ministers or public officials who authorize expenses that contravene what is here stipulated will be personally responsible for reimbursement, and guilty of the crime of malversation of public funds.”

This rather obscure article had not been invoked since 1985, when President Pinochet used it to fund emergency services after a major earthquake. It made not only the president, but all of her ministers personally liable. The eligible categories defined in Article 32 are so broadly defined that any use of this money could easily end up disputed in court. However, President Bachelet’s legal counsel concluded that the emergency faced by Transantiago tightly fit within the scope of Constitutional Law. All other alternatives had been exhausted. Resources had been depleted, and a service that *cannot be paralyzed without causing significant harm* to the country was certainly in risk. In fact, the legal team quickly dug up precedents. At least two previous Chilean presidents had relied on the “Constitutional 2%” to keep public transit running. President González Videla used it in 1952 to “deliver a sum to the *Sindicato Profesional de Dueños de Autobuses de Santiago*, as an incentive to offer public transit services in the country.” The turbulence during President Salvador Allende’s tenure is demonstrated by the fact that he felt compelled to use this option seven times: “to solve problems of privately owned public transit” (1971, 1972, 1973); “to solve problems of internal commotion caused by privately owned public transit” (1972); “to pay pending subsidies to drivers and entrepreneurs of the urban public transport industry” (1972); “to overcome problems derived from the internal commotion

of the services of collective transport” (1973), and “to solve internal commotion, derived from a conflict between drivers and owners of minibuses and taxi buses”(1973).⁹³⁰ To be sure, nobody thought that the crisis faced by President Bachelet was comparable to the crises confronting President Allende’s in the years prior to the military coup, but using this discretionary funds to keep public transit running was not unheard of.

On September 5, 2008, the eighteen ministers of President Bachelet’s cabinet convened in the Presidential Palace of La Moneda.⁹³¹ “The president signed, all the ministers signed, the scene was a major liturgy, tremendously dramatic since the ministers were liable with their own patrimony, a very Wagnerian thing,” recalls Cortázar.⁹³² On September 10, the Minister of Finance presented Congress with Emergency Decree 1178, authorizing the use of up to Ch \$453,705 million pesos (US \$856 million dollars) for “making the necessary expenses to ensure the continuity of service and the functioning of the City of Santiago’s public transportation system.”⁹³³

Using public subsidies to force regulatory compliance

“The 2% was politically bad for us, terrible, but at the same time it gave us an opportunity to be much more rigorous.”

-René Cortázar.

Both Minister Cortázar and Minister of Finance Andrés Velasco painstakingly studied the Constitution to avoid legal challenges to their use of the 2% emergency fund. They could not get creative with these funds. Every peso spent needed to “ensure the continuity of service and the functioning of the City of Santiago’s public transportation system.” For example, the Bachelet administration could not draw from this fund to repay the IADB for the US \$288 million dollars already spent from the loan. This debt -now unconstitutional- remained in legal limbo for quite a long time.⁹³⁴ The fund could not pay for building infrastructure either, as these investments could

930 For a full list of President Allende’s emergency decrees see (Biblioteca del Congreso Nacional de Chile 2012)

931 El Mercurio, “Gobierno anuncia aplicacion del 2% constitucional para financiar el Transantiago”, September 5, 2008.

932 (Cortázar, René. Personal Interview. 21 July, 2012)

933 (Decreto de Emergencia 1178 para atender los gastos necesarios para asegurar la continuidad del servicio y el funcionamiento del sistema de transporte público de la Ciudad de Santiago). Conversion to US \$ using the September 2008 exchange rate (US \$1=Ch \$530.17)

934 Interest from this loan was paid from the fare box, and the principal remained unpaid until Congress authorized a special purpose appropriation in late 2009.

be postponed, nor pay for future services of bus operators, as these would be included in next year's Budget Law. In the course of exploring valid uses for the emergency fund, Cortázar realized the fund could be used as leverage. "Since the Constitution stipulated that funds from the 2% were 'to *maintain* services that cannot be paralyzed', we interpreted that we could draw from them *only* to pay those operators that effectively *maintained* service. We wouldn't use the money simply to cover an inefficient operator's deficit. To access these funds, this firm needed to *maintain* services".⁹³⁵ The MTT decided it needed an indicator to assess whose services were *maintained* and whose were not. Unsurprisingly, the indicators chosen by Cortázar were the frequency and regularity indices he had been trying to enforce.

With money available at his disposal, Minister Cortázar changed the tone of his rhetoric significantly. His power to regulate services had clearly increased. Both in private conversations and in public appearances, he taunted with canceling the contracts of underperforming operators. Of course the government needed to demonstrate firmness, particularly after the Bachelet Administration had bent itself backwards to inject public money into a highly disliked system. However, Cortázar now casually inserted comments about "frequency" and "regularity" when describing operator's performance, and pointed fingers towards those lagging behind precisely in these metrics. For example on September 26, only a few weeks after the decree authorizing the 2% was signed, he declared in an interview: "Operators not meeting our demands are risking possible cancellation of their contracts... The government will be very strict ensuring that signed contracts are observed, and we have told them that since they now have the bus fleet and have the basic tool *to control regularity*, it is their responsibility to observe the contract."⁹³⁶

Days later, Cortázar signaled his requests should be taken seriously. In late September, the transportation ministry captured the attention of every Transantiago operator by canceling a contract for the first time. Buses Gran Santiago -previously owned by Manuel Navarrete and now controlled by Jorge Gómez- lost its right to operate feeder unit 5. This decision was formally based on the existing contract: the Ministry argued that Gran Santiago accumulated 7,790 UF in fines in one year, exceeding the 6,000 UF threshold established in the contracts.⁹³⁷

935 (Cortázar, René. Personal Interview. 21 July, 2012)

936 El Mercurio, Ministerio de Transporte: Empresa Buses Gran Santiago, la peor evaluada", September 26, 2008 (emphasis added).

937 MTT, Resolucion Exenta 2660/2008.

Jorge Gómez issued a statement on behalf of this company declaring their surprise for the decision, disputing the MTT's sudden interest on a previously unenforced rule, and pointing to undeniable improvements achieved in the ICPH since purchasing the company from the AGMPT.⁹³⁸ However, Cortázar was looking neither at the accumulated fines nor at the ICPH. For all practical matters, he was barely looking at the contract. The message to the rest of the operators was clear. When it came to assessing performance, the MTT would consider first and foremost the frequency and regularity indices, precisely the measures in which Buses Gran Santiago performed the worst. When asked about this, Cortázar reflected: "Perhaps we should have done this much earlier, but in mid 2008 we decided to take a shot at an operator. Doing so was absolutely indispensable to improve the service standard. I would not have dared to do this in September 2007, since I didn't have anybody ready to take over."⁹³⁹ In 2007 shooting an operator would've been tantamount to shooting the government and the system. But things were different in 2008."

However empowering, the MTT regulators knew they should only resort to canceling contracts in exceptional circumstances. Buses Gran Santiago certainly fit the bill, at least in feeder unit 5. Jorge Gómez had concentrated the most battered buses in that particular unit, and his managerial team was probably overstretched. They oversaw not only the three business units operated by Buses Gran Santiago, but also the two feeder units operated by STP, the firm created by Gómez and the FGDTS. Performance suffered as a result, and it showed. Nonetheless the MTT required softer, more manageable penalties to make a positive impact on service levels. Cortázar needed a way to nudge operators into delivering better service without going to the extreme of canceling their contracts. This is where the flexible interpretation of the Constitutional 2% expanded the margin of action available to Cortázar. He announced to operators that the MTT would use the regularity and frequency indices to measure which transport services were maintained. Arguing he could not legally pay for services that were not effectively maintained, he also announced that the MTT would withhold payments according to a "discount" schedule. "We changed the rules of the game again, although this time unilaterally. I

⁹³⁸ Gomez' statement read: "we ignore which contractual failing was used to make the decision, considering this feeder unit has only received fines for 420 UF in the last year, and not the 6,000 UF required." Radio Cooperativa, "Operador Gran Santiago se declaró 'sorprendido' por el fin de su concesión", September 28, 2008.

⁹³⁹ He meant that the Ministry could not legally appoint a provisional administrator in 2007, but could in 2008.

issued a resolution and simply informed them that this is the discount formula.”⁹⁴⁰ On October 18, the Ministry of Transportation published Exempt Resolution 1985.⁹⁴¹ Table 3.4 shown in this page summarizes the schedule of revenue discounts that would be applied as a result of regularity and frequency performance assessed at the route level.

After threatening operator’s bottom line, the average evening peak frequency index (ICF)⁹⁴² increased from 0.67 in August to 0.80 in November 2008. Similarly, the average evening peak regularity index (ICR)⁹⁴³ improved from 0.72 in August to 0.79 in November. This was significant, noticeable improvement. However as you can see from the schedule, all firms with routes operating at average levels of ICR and ICF were penalized. On November 10th, the transportation ministry applied the first round of discounts, corresponding to services rendered during the last two weeks of October.⁹⁴⁴ The results on operator’s bottom lines are shown in Table 3.5 below.

Per-service penalty schedule applied on the basis of frequency (ICF) and regularity (ICR) indices (US\$)

- ICF for trunk services
 - Up to US\$ 9500 for ICF lower than 90%
 - Up to US\$ 4750 for ICF between 90% and 95%
- ICF for feeder services
 - Up to US\$ 4750 for ICF lower than 90%
 - Up to US\$ 2380 for ICF between 90% and 95%
- ICR
 - Up to US\$ 9500 for ICR lower than 80% for a service-period with less than 20 buses programmed per hour
 - Up to US\$ 4750 for ICR lower than 80% for a service-period with 20 or more buses programmed per hour
 - Up to US\$ 4750 for ICR between 80% and 90% for a service-period with less than 20 buses programmed per hour
 - Up to US\$ 2380 for ICR between 80% and 90% for a service-period with 20 or more buses programmed per hour
 - Each company could recover up to 50% of the ICR reductions applied, if the average ICR of all their services was above 90% in the same two weeks period

Source: Beltrán, Gschwendner, and Palma 2013

The bus operators did not remain passive, particularly after realizing that extra-contractual “discounts” assessed in only two weeks of service had resulted in US \$1.4 million withheld from their paychecks. Seven operators legally challenged Minister Cortázar’s Exempt

940 (Cortázar, René. Personal Interview. 21 July, 2012)

941 MTT. Resolución Exenta No. 1985/2008

942 The ICF is estimated as the percentage of programmed bus-trips effectively satisfied.

943 The ICR is estimated as the coefficient of variation (CV) of the headways observed in period p for service j , transformed into a 0 to 1 index.

944 La Tercera, “Gobierno Descuenta \$700 millones a operadores del Transantiago por mala frecuencia y regularidad”, November 10, 2008. Note that this newsstory reported not data for Buses Gran Santiago, that still operated feeder unit 8 and trunk unit 3. I suspect this is related to the fact that the contract for feeder 5 was so recently cancelled. However, in posterior applications of the discounts, BGS was certainly affected, to the point that it was among the firms challenging Resolución Exenta 1985 in court.

Resolution 1985 at the Appellate Court of Santiago, arguing that it negated the framework for compensation established in their contracts. For example, Buses Metropolitana, explained to its stockholders that “the new compliance indices are set unilaterally, and were not included in the tendering bases, nor in the concession contract”⁹⁴⁵. Surely the bad experience with the IADB loan -and the possibility of a court limiting the MTT’s ‘creativity’- was on the back of everyone’s mind. The court ruling on this matter would not come until late in 2009, leaving Transantiago at risk of eventually being forced to return the discounted money to the operators.

To be sure, the ICR and the ICF are far from perfect, and Cortázar could certainly push too hard. For example, Simón Dosque, recalls that “with these extremely perverse indices, (the Ministry) began to cock some operators, placing their financial stability at risk and eventually leading them to bankruptcy. The trouble is that the indices’ thresholds are, in some cases, impossible to meet, and scores depend a lot on the street or zone that has the service”.⁹⁴⁶ Despite the tension (and potential abuse), it is notable that at this point of the history of public transport reform in Santiago, such conflicts are more likely to be resolved in court than through strikes. Despite its flaws, the continued enforcement of the ICR and the ICF through revenue discounts was an effective way to positively influence the behavior of bus operators. Particularly in the months immediately following the application of the discounts, the system registered dramatic improvement in these indicators -as demonstrated by figure 3.25.

Penalties applied to Transantiago bus operators in the last two weeks of October 2008 based on their performance on frequency and regularity indices (US\$)

	Bus operator company	Revenue discounts
Trunk 1	Alsacia	\$190,790
Trunk 2	Su Bus Chile	\$345,045
Trunk 3	Buses Gran Santiago	?
Trunk 4	Express	\$308,511
Trunk 5	Buses Metropolitana	\$101,484
	Total	\$945,829
Feeder 1	Red Bus Urbano	\$69,009
Feeders 2 and 4	STP	\$154,446
Feeder 3	Unitrans	\$36,534
Feeder 5 and 8	Buses Gran Santiago	?
Feeder 6 and 7	Comercial Nvo. Milenio	\$125,840
Feeder 9	Transaraucarias	\$24,356
	Total	\$410,185
	System Total	\$1,356,014

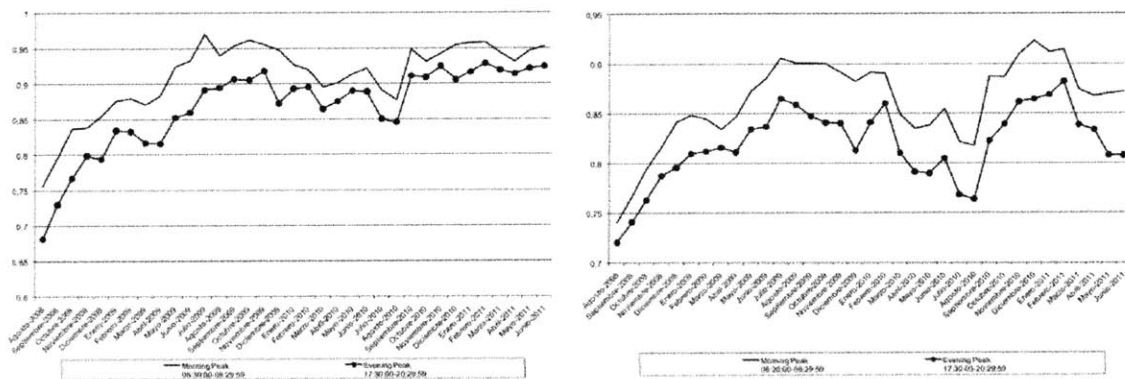
Source: La Tercera, “Gobierno Descuenta \$700 millones a operadores del Transantiago por mala frecuencia y regularidad”, November 10, 2008

945 (Buses Metropolitana 2008)

946 (Dosque, Simón. Personal interview. 15 June, 2012).

In the four months following the president’s signature of Emergency Decree 1178, the MTT spent Ch \$187,323 million (aprox. US \$300 million) from the Constitutional 2% to finance operations of Transantiago. This did not fully contain the electoral progress made by the Alianza por Chile, particularly in Santiago, as this coalition won 9 out of the 14 mayorships in dispute in the Metropolitan Region. For the first time, this coalition of the right leaning parties UDI and RN

Evolution of the average frequency (ICF) and regularity (ICR) indices in peak periods of weekdays (ICF shown left)



Source: Beltrán, Gschwendner, and Palma 2013

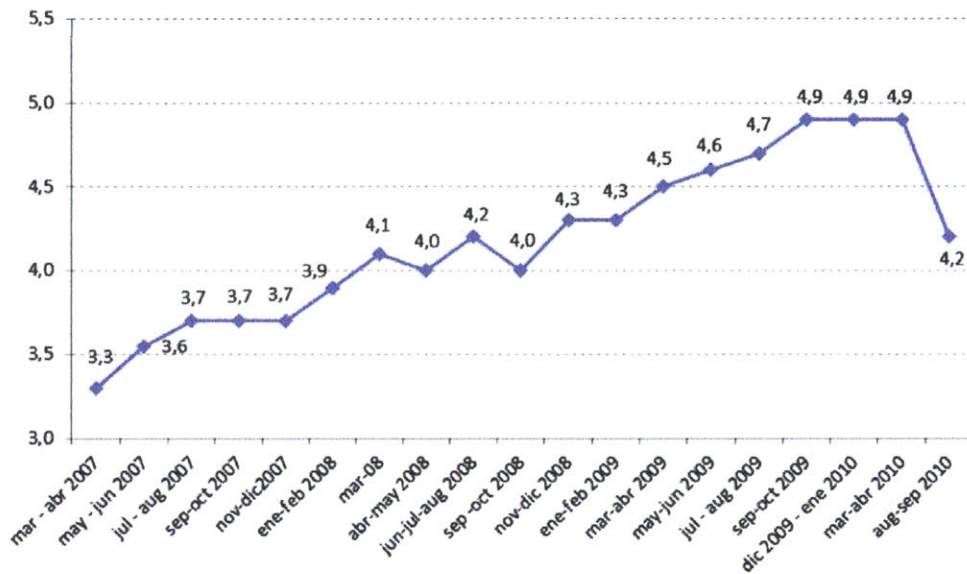
topped the Concertación in nationwide number of votes, and seemed well posed to dispute the presidency. Furthermore, once the budget-year ended, this financial faucet closed down. The national budget approved by Congress for year 2009 repeated the insult of the previous year by authorizing only Ch \$2,000 (US \$3.10) for Transantiago,⁹⁴⁷ and while the House of Representatives finally approved the permanent subsidy law, the Senate continued to hold this bill hostage in a legislative labyrinth. Cornered, the Chilean Government finally conceded that a fare increase was unavoidable. Cortázar declared that it would be necessary, “at some point in 2009, to start a gradual and moderate process of normalization with respect to fares.”⁹⁴⁸ However, the good news was that even in the face of never ending budgetary uncertainty and

947 In fact, the Ch \$2,000 were distributed in two line items of Ch \$1000. The first line item is contained in the *Partida 19, Capítulo 01, Programa 01, Subtítulo 24, ítem 01, asignación 512*; the second one in *Subtítulo 32, ítem 04, asignación 002* of the Budget approved for 2009

948 El Mercurio, “Cortázar confirma alza ‘gradual y moderada’ de tarifas del Transantiago”, December 18, 2009

permanent political scandal, the performance of the bus operators of Transantiago was undeniably improving. Whatever Cortázar was doing seemed to be working.⁹⁴⁹

Figure 3.26 Evolution of general perception of Transantiago



Source: Beltrán et al (2013), based on data from Transantiago-Collect

Above and beyond its role as a financial lifeboat, the Constitutional 2% fund became an extra-contractual enforcement tool for Cortázar. It certainly kept private operators at the table, providing the Ministry with “an opportunity to be much more rigorous.”⁹⁵⁰ For this reason alone, it was unsurprising that once it was clear that Congress would not approve funds for Transantiago, Minister Cortázar confirmed publicly that a new Emergency Decree would be signed by the president and her ministers in the first days of 2009. The Minister of Finance presented Congress with Emergency Decree No. 1 on January 5. It contained the same justification than its predecessor, stating that “the circumstances that motivated the (previous) decree continue for year 2009, and since the financial deficit of the system persists, so does the

949 It is important to note that Rene Cortázar was Minister of Transport for all Chile, with responsibility over other regions and other types of transport infrastructure, such as ports and inter city highways, as well as oversight over telecommunications. The fact that Transantiago dominated his agenda is a testimony to his commitment to solving this crisis, but also proof of the institutional weakness of the emerging system.

950 (Cortázar, René. Personal Interview. 21 July, 2012)

risk of grave danger for the population.”⁹⁵¹ This time, perhaps to assuage fears that the government was depleting money needed in case of a graver emergency, the decree appropriated only up to 1% of the national budget: Ch \$259,434 million (US \$398 million dollars).⁹⁵² The Ministry also decreed a small fare increase; the first since the implementation of Transantiago. Starting February, the cost of fares would be Ch \$400 (US \$0.61) instead of Ch \$380 (US \$0.58). The cost of using the metro at peak hours would be Ch \$460 (US \$0.71) instead of Ch \$420 (US \$0.64). The availability of funds -and of extra-contractual power over operators- further extended the MTT’s capacity to structure better transportation services.

Institutionalizing state capacity for leaner times

While it was clear that the subsidy and the fare increase, relieved the financial pressure *and* provided the MTT with leverage over private bus operators, many of the changes made by Cortázar relied on extra-contractual power, which would not necessarily resist legal challenges or changes in government. During the initial months of 2009, Cortázar sought to institutionalize the MTT’s capacity to guarantee improved bus services. He crafted an entirely new contract to reflect this, and would try to persuade operators to accept it voluntarily. The most important changes proposed are described below:

Making operators more responsive to the MTT: In addition to establishing a formal procedure to revise the operations plan of each firm every six months, the new contracts sought to give the MTT a permanent ability to suggest service changes. The new contract included clauses allowing the MTT to order operators to supply “transitory” services to deal with contingencies,⁹⁵³ to propose the creation of new routes, and to suggest the elimination or modification of existing ones. Furthermore, the proposed contract defined a new performance measure to assess average passenger loads (ICAP: *índice de carga promedio*) on buses, stipulating that when passenger loads fell outside of an ICAP range set between 60% and 95%, the Ministry could order operators to modify the number of buses and the service frequencies offered in that particular route.

951 (Decreto de Emergencia 1 para atender los gastos necesarios para asegurar la continuidad del servicio y el funcionamiento del sistema de transporte público de la Ciudad de Santiago)

952 The exchange rate in January 2009 was US \$1=Ch \$651.51

953 The Ministry could order these with only one day of anticipation and would be “mandatory for the Concessionaire as long it has buses are available”. They would be compensated with a 33% surcharge over the regular rate.

Shifting revenue risk to operators: The contract established that compensation for operators would be estimated as the product of the payment for passenger (PPT) multiplied by a weighted estimation of passenger demand, in which the *referential* demand would be valued at 65% and *actual* demand at 35% (previously valued at 90% and 10% respectively). While not perfect, this represented an important improvement from previous contracts that allocated a much larger weight to *referential* demand in order to lower the risk facing operators. In addition, the new contracts updated the referential demand estimated for each business unit, from the figures originally established in the tendering bases of 2003. Finally, the new contract outlined mechanisms to adjust the PPT monthly, considering fluctuations in the cost of inputs and changes in the number of bus-seats and kilometers actually supplied.

Formalizing extra-contractual performance standards: The contract incorporated the discount schedule already applied to the compensation paid to operators. Not only did it retain the ICPH, but it sought to give a contractual basis to discounts linked with regularity (ICR) and frequency (ICF) indices applied since November 2008. The new contracts would relieve the Ministry from relying on a dubious interpretation of rules governing the Constitutional 2% fund - which in any case could not be expected to be available in later years.

Clarifying the process to evict underperforming operators: The proposed contract reaffirmed the ability of the Ministry to cancel contracts, giving much more discretion to the MTT over final decisions. In addition, it sought to facilitate application of fines, by incrementing the threshold that triggers automatic cancellation of the contracts -from 6,000 UF to 20,000 UF-. The Ministry would no longer have to withhold well-deserved fines in fear of causing a major disruption of service.

Incentivizing renovation of the bus fleet: Finally, the new proposed contract incorporated an incentive to renovate the existing fleet of buses. It stipulated that at the end of the current contract, the new tendering bases would *require* the new winner to purchase the buses added by the incumbent as part of a bus renovation program. The price would be the net present value of the renovated fleet at the time of the start of the new contract. In other words, a challenger willing to take over a contract would face a higher financial barrier of entry if the current operator invested in newer buses, and even in the case of losing its contract, the current operator faced no risk of losing its investment. Operators also had the choice of requesting a “renovation installment” (“cuota de renovación”) up to 10% of the present value of the renovated

fleet, to cover maintenance expenses. Money drawn as a “renovation installment” would then be balanced out against the price that the bidders would need to pay for the buses.

Cortázar’s push to get the new contracts accepted began as early as January 9, 2009. Feeder unit 5 was vacant since the MTT cancelled the contract to Buses Gran Santiago. Cortázar decided to award the new contract to a company called Las Araucarias. Its stockholders also owned Transaraucaria, the firm responsible for feeder unit 9.⁹⁵⁴ This operator had never registered an ICPH lower than 0.90, and had more or less delivered on its commitments and stayed out of trouble with the authorities. Las Araucarias also had the advantage that feeder units 5 and 9 were geographically contiguous, allowing for efficiency gains. Awarding the contract to them assumed an automatic reorganization of operations in the south of the city, with the benefit of eliminating unnecessary transfers without affecting a third party.⁹⁵⁵ What was more important for Cortázar, however, was that the owners of this company were willing to accept the new contract in *both* feeder units. He would change the rules by choosing players willing to accept them. Unsurprisingly, the new contract for feeder 9, held by Transaraucarias, was among the first signed. Quite notably, Transaraucarias signed its new contract on May 8, 2009, several months *before* the Appellate Court ruled on the legality of the discount schedule unilaterally imposed by the MTT. By awarding this contract, Cortázar (1) strengthened a seemingly capable operator, (2) formalized the discounts used to enforce regularity and frequency indices, and (3) began the implementation of rules he desired for the whole system. In other words, he partnered with a cooperative bus operator to enhance the system’s capacity to deliver better service. The opportunity to expand the MTT’s desired regulatory framework to other operators came with the scheduled re-tendering of trunk 3. The same strategy of changing the rules by changing the players applied.

Re-tendering Trunk 3: An exercise of leveraging your assets

Readers may recall that Minister Etcheberry designed the contract award process in 2003 so that that different types of bus companies were attracted to different types of units. Etcheberry

954 Both were led by Adriana Troncoso, a trade association leader that had participated in the old system, but not affiliated to the AGMTP or the FGDS.

955 Feeder area 5 is identified in maps as Unit G, and Feeder area 9 is identified as H. The number and letter scheme to identify units was changed over time, making consistent references difficult and confusing. What is important here is to note that merging these two units provided no-transfer access from the south of the city to downtown.

wanted new buses in the “crown jewel” trunk units 2 and 4, and therefore set the duration of these contracts to 13 years (156 months). Trunks 1 and 5 accepted used buses, and so their initial duration was limited to only 48 months.⁹⁵⁶ Trunk 3 also accepted used buses, but was of a significantly smaller size, and a Metro extension was planned close to this area. For these reasons the contract of trunk 3 was the shortest, only covering 24 months running since the launch of the transition period on October 22, 2005. It was now 2009, and trunk 3 was overdue for a re-tender to award a new contract.⁹⁵⁷ Cortázar was clear that whomever won the new contract for trunk 3 would have to accept his new, more stringent, contractual design. But perhaps more importantly, it is quite likely that the transportation ministry strategically used the timing and rules of the contract award process to strengthen its negotiating position vis a vis *the rest* of the operators, who of course aspired to expand their business in Santiago.

A new tender should have taken place before October 22, 2007. However, the contract of the incumbent Buses Gran Santiago was extended, and upon expiration, the MTT postponed a decision for strategic reasons. The tendering bases, formally approved in February 2008, were in fact not published until late October 2008.⁹⁵⁸ These bases were revised to address questions from interested parties, and a final version was not formally approved until February 10, 2009. Further, this critical document would not be available to potential bidders “until five business days after the publication of the present approval notice”.⁹⁵⁹ This publication curiously did not happen until May 13, a full three months later. What this means in practice is that just as Transantiago’s bus operators challenged the application of the ICR and ICF discount schedule in court, and perhaps even as they actively attempted to resist signing the proposed new contract, Cortázar held over their heads a very tangible reason to make peace with the MTT. At the end, the new contract for trunk 3 became Cortázar’s carrot, held in front of all private operators in the system, just as they chose whether they wanted to fight or to cooperate with the state.

The MTT designed these contract award rules in such way that it was very difficult for outside parties to participate, and did not actively promote the entry of national and international

956 Albeit extendable to the full 156 months if their full fleet was composed of new buses.

957 The Ministry of Transportation had previously extended Buses Gran Santiago’s trunk 3. Once this extension expired the MTT split the unit in two: 40% of the services to be awarded without a tender to both Inversiones Alsacia (trunk 1) and to Express (trunk 4) as compensation for lost ridership resulting from Metro line extensions (to Los Dominicos and to Plaza Maipú). The remaining 60% was to be tendered competitively as a single unit.

958 Ministerio de Transporte y Telecomunicaciones, Resolucion Exenta No. 15, October 27, 2008.

959 Ministerio de Transporte y Telecomunicaciones, Resolucion Exenta No. 37, May 13, 2008.

investors, as Etcheberry had in 2003. This was *not* a reinvigorated call for external competition. The rules clearly stipulated that to accredit the required “technical suitability,” interested parties had to either be a current Transantiago operator or demonstrate “having operated public transportation fleets of at least 300 vehicles, for at least five years.” As a result, six of the seven bids received by the deadline (shown in table 3.6) were put together by firms *already* participating as Transantiago operators. The only bid coming from an “outsider” was the one presented by City Bus, a firm created by Jaime Sánchez, with a long history working with Transantiago operators.

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Company presenting bid	Controlling group	Previous Transantiago presence
Transporte Urbano de Personas	Inversiones Alsacia (Grupo Ríos)	Trunk 1
Su Bus Chile	Su Bus Chile (Fanalca)	Trunk 2
Veolia Transportes Chile	Red Bus Urbano (Veolia)	Feeder 1
Bicentenario Gestion Móvil	Unitrans (former trade union)	Feeder 3
Larco	STP (Jorge Gómez and FGDTS)	Trunk 3, Feeders 2, 4 and 8
Buses Vule	Comercial Nvo. Milenio (Juan Pinto and Siglo XXI)	Trunk 5, Feeders 6 and 7
City-Bus Urbano	Jaime Sánchez and Argentinean investors	No participation in Transantiago

Interestingly, three of the groups that did present a bid (Veolia, Siglo XXI and Unitrans) agreed to modify the contracts governing the operations of their *existing* service areas, *before* the new contract for trunk 3 was finally awarded on August 27. In fact, they agreed to Cortázar’s proposed contractual changes even *before* the Appellate Court ruled on July 1 that the MTT was in fact entitled to legally discount operator’s compensation using extra-contractual indicators. By the time the court ruled, the issue was no longer as relevant. After accounting for the two contracts signed by the Araucarias group, six of the nine feeder units and one of the five trunk units voluntarily agreed to Cortázar’s requests and signed their new contract, perhaps as a strategy to court the Ministry in anticipation of the decision over trunk 3.

To be sure, negotiations with all operators were prolonged and complicated, and the MTT certainly conceded in some points. For example, it agreed that for a period of one year, ICR and ICF estimations triggering discounts would not be drawn automatically from the system, but from physical observations by Ministry inspectors deployed to randomly selected routes. In

practice, this lowered significantly the amount of money that could actually be lost due to bad performance, and gave a window for operators to anticipate the financial threat implicit in these discounts. However, Cortázar successfully linked the negotiation of existing contracts with the possibility of winning a new one. In what represents a fundamental difference with the trade association system, the MTT was now

Transantiago 2009 contract renegotiation: dates of contract signatures and contextual events

Operator/Event	Date	Bid for trunk 3?
Feeder 5 Las Araucarias	Jan 9, 2009	No
Feeder 1 Red Bus Urbano (Veolia)	Apr 29, 2009	Yes
Feeder 9 Transaraucarias	May 8, 2009	No
Feeder 3 Unitrans	May 13, 2009	Yes
Feeder 6 Comercial Nvo Milenio (Juan Pinto/SXXI)	Jun 19, 2009	Yes
Feeder 7 Comercial Nvo Milenio (Juan Pinto/SXXI)	Jun 19, 2009	Yes
Trunk 5 Buses Metropolitana (Juan Pinto/SXXI)	Jun 26, 2009	Yes
<i>Appellate Court decision</i>	<i>Jul 1, 2009</i>	
<i>Senate approval of permanent subsidy law</i>	<i>Aug 13, 2009</i>	
<i>Contract for trunk 3 awarded to Buses Vule (Juan Pinto/SXXI)</i>	<i>Aug 25, 2009</i>	
Feeder 2 STP (Jorge Gómez/FGDTS)	Nov 11, 2009	Yes
Feeder 4 STP (Jorge Gómez/FGDTS)	Nov 11, 2009	Yes
<i>Supreme Court decision</i>	<i>Dec 1, 2009</i>	
<i>Presidential Elections, first round</i>	<i>Dec 11, 2009</i>	
<i>Presidential Elections, second round</i>	<i>Jan 11, 2010</i>	
Trunk 2 Su Bus Chile (Fanalca)	Mar 5, 2010	Yes
Trunk 4 Express (Grupo Rios)	Mar 5, 2010	Yes
Trunk 1 Alsacia (Grupo Rios)	-	Yes
Feeder 8 Buses Gran Santiago	?	
<i>New government sworn in</i>	<i>Mar 11, 2010</i>	

empowered to evict underperforming operators without generating a major crisis -as proven with the example of Buses Gran Santiago- and to use contract renegotiations as a tool to gradually guide private operators to perform according to the Ministry's priorities. The Chilean government no longer inherited private counterparts. It was now empowered to choose which private partners it wanted to grow and which it wanted to evict.

Perhaps offering tentative proof of this, the MTT disqualified all bids for trunk 3 during the technical analysis stage, except *one*. Only the envelope containing the economic proposal submitted by Buses Vule was finally considered, leaving critics to note that perhaps the Ministry accepted a higher-cost bid.⁹⁶⁰ At least five of the disqualified groups voiced their discomfort publicly, calling the process “a joke.”⁹⁶¹ The Ministry unapologetically stood by its decision and awarded the contract for 12 years to Juan Pinto's group, who would take over services starting February 2010, becoming the largest operator in Transantiago. Notably, Pinto's other companies, Buses Metropolitana and Comercial Nuevo Milenio, had played ball with the minister, and had signed their new contracts before the decision of the court was known. It is impossible to know if

960 While it is true that the winning bid was not the cheapest PPT on the table, Cortázar argues that it still came at a 20% lower price than what was paid to Buses Gran Santiago for that same unit. “We could live through the mistake of paying a more expensive PPT, but not through the mistake of once more taking an operator incapable of producing results.”

961 El Mercurio, “Cinco operadores del Transantiago cuestionan licitación del troncal 3”, August 27, 2009.

Cortázar punished operators that postponed signing their new contracts until after the Appellate Court ruling on the issue of the revenue discounts. Swords were certainly drawn. For the colombian firms Su Bus (Fanalca), Express and Alsacia (Grupo Ríos), the issue was so important that they challenged the Appellate Court's ruling, taking the case to the Chilean Supreme Court, and refusing to sign the new contracts until the matter was settled in December 2009. In fact, Su Bus and Express did not sign the new contracts until March 5, 2010, once the new presidential election had been settled and the new administration was only days away from taking office. Inversiones Alsacia never agreed to Cortázar's new terms.

A few spokesmen of the losing companies went further in their critique. One disqualified businessman told the author that Cortázar used this tender as a bargaining chip to ensure the Senate passed Law 20.378, which included the long awaited "national subsidy for public and remunerated passenger transport." According to this source -who of course asked to remain anonymous, "Kaufmann, the firm distributing Mercedes Benz in Chile, was strongly connected to the Alianza por Chile. The president of this company had even been a business partner of their presidential candidate, Sebastian Piñera-. The subsidy law was under intense discussion at that time, and the price charged to Cortázar in exchange for the support of the Alianza's Senators, was delivering this contract to Pinto, who had committed to buy Mercedes' buses." To be sure, the 400 new buses promised by Buses Vule were eventually bought from Mercedes Benz. However this explanation is lacking from the simple fact that the Senate voted to approve Law 20.378 on August 13,⁹⁶² before and not after Pinto's competitors were disqualified. But why then did the Alianza por Chile all of a sudden support the subsidy bill for Transantiago, after being consistently against it during the prior years?

The bill finally passed with 33 Senators voting in favor, one against (Adolfo Zaldívar) and two abstaining. In the same session, the Senate authorized repayment of the US \$288 million dollars drawn from the IADB loan declared unconstitutional,⁹⁶³ helping close an embarrassing and painful chapter in the history of Transantiago. I have no reason to believe nor evidence to suggest that horse-trading votes in Congress was the key factor determining the winner of the tender for trunk 3. Pork had certainly been used in the past, for example when the government

962 La Tercera, "Senado aprueba subsidio para Transantiago de más de US \$3600 millones", August 13, 2009

963 While the law would still return to the House of Representatives, and not be approved until September 9, the most critical roadblock preventing enactment had been surpassed.

authorized a mirror fund to court congressmen from districts outside of Santiago to support the first stabilization fund for the system. However, at this point of the story, the financial emergency of Transantiago had effectively passed, at least when analyzed from the immediate political perspective of Bachelet and Cortázar. The presidential term was already in its final year, and the Emergency Decree ensured sufficient financial coverage for the remaining months. Bachelet and Cortázar could just as well carry the system with these funds until the end of the administration, and allow the next government to deal with the difficulties of obtaining a new subsidy or increasing fares. Instead, it was paradoxically the Senators of the Alianza who suddenly found a powerful political incentive to approve this law. Their candidate for the presidency, Sebastian Piñera, was showing a commanding lead in the polls,⁹⁶⁴ while the Concertación was engulfed in internal turmoil. Faced with a real possibility of winning the presidency in the December 2009 election, the UDI and the RN had to think hard about their approach to Transantiago. Even if they chose to fully cancel the system, their administration would need time to design and implement an alternative. What would happen in the meantime? Would it paralyze services, or increase the fares? Either option promised to harm the popularity of the new government significantly, even as it started its term. It is likely that these questions alone sealed the votes of the Alianza in favor of the permanent subsidy for Transantiago.

Furthermore, in contrast to the previous contract award round, the MTT had a clear measure to determine the “technical suitability” of bids. Interested parties with links to existing Transantiago operators were assessed on the basis of their “average ICPH during the 6 months prior to submitting the bid”.⁹⁶⁵ The system had evolved to the point that it was no longer necessary to compromise in technical capability in order to ensure a financially sound result. In contrast to his predecessors, Cortázar could give himself the luxury of not auctioning the system to the highest bidder. As he recalled, “I did not want a system that was so committed to the financial balance, that it disregarded the technical risk of operation, particularly facing the future. The ‘*Navarretes*’ could *not* participate, only those that met a technical minimum.” Awarding the

964 The Candidacy of Sebastián Piñera seemed highly likely at this point. The two leading parties of the Alianza -*UDI* and *Renovación Nacional* -wanted him to run on his ticket. On the other hand, the Concertación was deeply divided between running under 70 year old former President Eduardo Frei and 39 year old Marco Enriquez Ominami. Partly as a result of this division, polls taken as early as December 2008 showed a clear lead for Piñera.

965 Ministerio de Transportes y Telecomunicaciones, Licitación pública de uso de vías de la Ciudad de Santiago para la prestación de servicios urbanos de transporte público remunerado de pasajeros mediante buses (Licitación de Vías 2008), pg 15.

new contract for trunk 3 to Juan Pinto's group probably did not help secure votes for the much anticipated permanent subsidy law in the Senate. What is undeniable, however, is that the decision served many other purposes: It allowed the Ministry to replace one of the worst performing operators in the system (Gran Santiago) for one of the best. It allowed the minister to accelerate the substitution of a fleet mostly composed by used buses for 400 new buses promised by Vule. It reduced transfers and optimized costs, as trunk 3 operated mostly in the territory of the two feeder units already controlled by Pinto. And, as an added bonus, the tendering process allowed Cortázar to successfully continue -as he put it- "forcing changes into their contracts."⁹⁶⁶

A permanent subsidy for Transantiago, and the future of the system

The backbone of Law 20.378, Approved in August 2009, is the creation of a "permanent subsidy", "destined to compensate for the lower prices paid by students using public transportation."⁹⁶⁷ The funds available yearly for this purpose amount to a maximum of Ch \$230,000 million (approximately US \$460 million). To maintain fairness (and to please Senators with constituencies outside of the capital) the Law established that this permanent fund would be distributed equally between Santiago and the regions of the country. In the case of Santiago, money is earmarked for "ensuring the financing of the public transit system," and "transferred according to what the transport system requires, according to what the Ministry of Transport and Telecommunications informs and projects." An elaborate set of rules was included to determine how to distribute and spend the money in the regions.

The law also includes a "transitory subsidy" "for the public transit system of the City of Santiago," *and* a "special contribution to the regional governments". Notably, the subsidy for Transantiago -Ch \$549,548 million (aprox. US \$1,099 million)- was significantly lower than the contribution for the regional governments -Ch \$721,348 million (aprox. US \$1,443 million)-, perhaps reflecting the cost of getting support for a local project in a national legislative arena. Furthermore, the money for Santiago would be available immediately, and diminish yearly between 2009 and 2014, reflecting that it was designed to cover an urgent need, and hoping that either fare increases or efficiency gains would make it unnecessary in the future. In contrast, the

966 (Cortázar, René. Personal Interview. 21 July, 2012)

967 (Article 1, Ley 20.378 Chile)

money for the regions would first be available in 2011, reflecting that many of these regions needed time to decide how to spend the probably unexpected windfall.

Table 3.8 Public subsidy authorized for Transantiago, 2009-2014 (Ch \$, millions)

	2009	2010	2011	2012	2013	2014
<i>Constitutional 1% fund</i>	<i>249,351</i>	-	-	-	-	-
Permanent Subsidy	-	115,000	115,000	115,000	115,000	115,000
Transitory Subsidy	156,684	216,988	133,349	29,641	9,283	3,654
Total	406,035	331,988	248,349	144,641	124,283	118,654

Source: Coordinación Transantiago and (Ley 20.378 Chile)

And finally, Law 20.378 established a mechanism to raise fares, with the objective of keeping this politically charged topic from threatening the financial sustainability of the system in the future. An “expert panel” would determine monthly adjustments “to maintain the real value” of fares in the system, and determine “the level of fares that allows financing the system each year, given the amount of subsidy referred (in this law).” Fare increases determined by the panel of experts could not be more than 5% per month, and it could not approve fare decreases as long as the transitional subsidy persisted. To be sure, the Ministry retained the ability to change the fare structure of the system and even to raise fares above the 5% in “extraordinary” circumstances, but it could always defer to the experts for gradual adjustments.

All this sounded fine, but the Bachelet Administration would not appoint the Expert Panel until January 29,⁹⁶⁸ and in fact there would be no further fare increase until the next president was sworn in. There was no urgent reason to do so, and perhaps more importantly, Chile was going to the polls to elect a new president in December. Despite the profound problems and challenges that still haunted Transantiago, the public was slowly but consistently improving its opinion about the system.

As previously mentioned the Alianza had long resolved its candidacy in favor of former Senator Sebastian Piñera (RN), a Harvard educated business tycoon who owned a national TV channel and held stock in both the Chilean flagship airline (LAN), and one of the Chilean most popular soccer clubs, the Colo Colo. Piñera was running for president a second time, after being

968 The Minister of Transportation appoints the three panel members, selecting from candidates proposed by professional associations and universities.

defeated in the Alianza's primary election four years prior. This time, propitious circumstances seemed to work on his favor. The Concertación struggled too long deciding who should represent them on the ballot. To the "left" of its party coalition, Former President Lagos announced he would not run, and former Minister of the Interior Jose Manuel Insulza lost local support while serving abroad as Secretary General of the Organization of American States (OEA). The only heavyweight remaining in the race was former President Eduardo Frei Ruiz-Tagle, who argued that it was the turn of the DC to lead the ticket. Frei won a primary election and became the *Concertacionista* standard-bearer in April 2009, but his candidacy did not harbor support among socialists, many of which eventually voted for 39 year old Marco Enriquez Ominami, a former member of the PS running as an independent. The long period of the Concertación in power -20 years and 4 presidential terms- had certainly taken its toll. Despite the profound economic transformation experienced in this country, and the personal popularity of President Bachelet, the public was willing to take a turn to the right. On December 11, 2009, Piñera obtained 44% of the vote, Frei 29.60% and Marco Enríquez 20%. The second round, held in March 11 2010, validated this result: Piñera (51.6%) vs Frei (48.3%). The staunchest critics of Transantiago were now in charge of running it.

Over the next four years, the Piñera administration continued much of the work started by Cortázar, tightening contracts, enforcing performance standards, attempting to contain costs while also maintaining standards of service. The electoral triumph of the Alianza por Chile did not mean the end of Transantiago, as many critics predicted. In fact, by 2011 the Piñera administration publicly advocated in favor of making the system's "transitory subsidy," permanent, while simultaneously negotiating further contractual changes with Transantiago's operators. Beyond taking the system off of a permanent financial cliff, the permanent subsidy to public transport in Santiago embodies the institutionalization of the MTT's leverage over private transport operators. It is a powerful instrument to align the goals of public and private stakeholders, allowing authorities to effectively represent previously unrepresented interests at the table. When only the user pays the fare, issues like air pollution, congestion and accidents do not enter into the operator's cost function and inevitably fall through the cracks. Only when authorities are able to put incentives into the table, will their demands for more stringent rules receive their fare share of attention. At least in the case of Santiago, it appears that the capacity of the government to nudge the public transport system into advancing chosen policy goals has

been institutionalized. To be sure, private and public players continue to fight over money and rules, but the capacity of the state to adjust the mix of money and rules to harbor a cooperative relationship with its private counterparts has undeniably increased, and in the process, the broader population of this city has benefited.

Case conclusion

In the course of 20 years, the governments of the Concertación transitioned an atomized, deregulated, private transport system into a more accountable, reliable, and gradually more efficient Transantiago. In the process, the role of the state as planner and regulator of service was reestablished and enhanced. Conflicts between private and public actors participating in this system evolved from service stoppages to court battles, and from strikes to periodic contract renegotiations. The trade association system was gradually phased out, with the transition carefully designed to minimize social dislocation associated with a reform of this magnitude. Not only did potentially displaced bus owners have the chance to remain in the system until their vehicles became obsolete, but the rules in place actually allowed the best among them to adapt their organizations and thrive in the new system. At the same time, the participation of the trade associations in the transition allowed authorities to keep the financial and political costs of reform in check. In these 20 years, the structure of the public transport industry in Santiago changed dramatically, from a system operated by thousands of vehicle-owners organized in more than a hundred trade associations governed by a cartel, into a handful of “modern” professional transportation companies able to make larger investments and to make longer term decisions. The business model of these companies is based on providing world class transport services to Santiago, and not on extracting rents from individual bus owners. The line dividing the subway and the bus systems gradually blurred, with both modes now complementing each other rather than competing. Physical, operational and financial inter modal integration has resulted in faster, more cost effective trips for santiaguinos, and in a more efficient use public resources.

Evidence is starting to emerge demonstrating how with a much smaller bus fleet than comparable cities, Transantiago achieves faster and more predictable travel times. In fact, a recent study sampling 400 public transit trips of similar lengths across six Latin American cities found that they are on average faster and less variable in Santiago than in Guadalajara, Mexico

City, Lima and Porto Alegre, and only comparable to Bogota.⁹⁶⁹ But in addition to meeting the mobility needs of the public, Transantiago's fleet of buses is the less polluting, less congesting, less dangerous and more accessible in any major Latin American city. By 2011, 90% of the fleet was Euro III or higher, compared to 30% in 2006. As a result, pollutant emissions have sharply declined. In that same period, CO₂ emissions fell 28%, NO_x by 50%, and breathable particles (MP) by 74%. In the old system there were no handicapped accessible vehicles, while 76% of Transantiago's current fleet has low floors and ramps. In 2004 there were 118 people killed in Santiago in accidents involving a public transport vehicle. By 2009, this number had dropped to only 58.⁹⁷⁰ In other words, the ability of the Chilean government to address second-order transportation challenges has undeniably increased throughout the City of Santiago.

This is not a story about miracle cures or silver bullets. Getting the actors that enabled this reform to come to the table and to consider a different way of organizing their services was undoubtedly a major challenge; a task that could only be advanced through a series of small steps over a prolonged period of time, and perhaps facilitated by the legacy of 16 years of authoritarian rule that profoundly weakened forces that in other cities have staunchly opposed similar efforts. Similar to many other similar cities, the old system satisfied quite well the first-order goal of public transportation: Transporting people to the places they need to go at an affordable price. The fragmented, deregulated, artisanal private sector delivered on this goal without requiring much public financing, and without tasking public officials with oversight responsibilities. Expanding the capacity of the state in Santiago was thus a triple-sided challenge for authorities: Forcing private operators to address second-order goals of public transportation, expanding institutional capacity to monitor their performance, and finding alternative ways of compensating them for their improvements. Each of these tasks is important but insufficient. It is through their simultaneous development that the typically adversarial relationship linking private and public actors in this industry, can transition into a cooperative joint effort, where each side pushes the other into meeting its end of the bargain. The story of how this developing world city gained the capacity to use transportation policy as a tool for urban planning is of course evolving. The system still has many flaws, and will continue to be periodically challenged. However, one thing

⁹⁶⁹ The average speed in public transport in Santiago is 14.5 km/h, vs 13.8 km/hr in Mexico City. For the full report, see (BRI-Across Latitudes and Cultures 2012)

⁹⁷⁰ All of these figures were provided by Raimundo Cruzat, who served as Coordinator of Transantiago in 2011.

is clear. This bold, ambitious, transformative reform process has the potential of inspiring planners across the developing world, and to serve as proof that transforming urban transport in a developmental context is a feasible and worthwhile goal.

Chapter 4: Conclusion

The two preceding case studies laid out in detail the complex challenges faced by public authorities seeking to expand the transportation planning and regulatory capacities of their governments amidst a context of scarce fiscal resources and weak institutions. Regardless of different ideological and normative preferences held by government officials in Mexico City and Santiago, the money and rules dilemma initially cornered both cities into tolerating a quasi-informal, loosely-regulated and highly-fragmented private industry that was able and willing to cover the mobility needs of the public without requiring high fares or public subsidies. Despite the instrumentality of nurturing this industry structure, government action grew increasingly constrained as a result, particularly as the focus shifted toward second-order concerns such as air quality and congestion. The incumbent private transport operators lacked the technical capabilities, the access to financing and the organizational strength required to pursue more stringent service standards in a cost effective fashion. In an attempt to disrupt this equilibrium, both cities attempted to “modernize” the incumbent private transport industry through the introduction of disruptive transport innovations, such as BRT, heralded as tools to expand the government’s transportation planning and regulatory capacity. This conclusion seeks to step back from the rich details of both cases and to outline the factors that explain why Santiago proved more successful than Mexico City in meeting this goal.

Transportation planning capacity as a function of public-private collaboration

Our starting point for analysis is a resource-constrained and institutionally-weak state, where the private sector already supplies the lion’s share of transportation services with little government direction. The challenge for public authorities in such a city is to extend the reach of the state into what has practically become a private transaction, and to get suppliers to accept regulation of services so as to achieve second-order goals. To be sure, the basic transaction that underlies public transit services, i.e., paying a fare to a stranger to take you where you need to go, can function well without much state involvement and in fact pre-dates the modern state.⁹⁷¹

971 The earliest documented reference to public transit is found in Greek funerary vases dated in the middle of the first millennium BC. According to the story shown on the vases, later detailed by a many Greek authors, such as Aristophanes and Virgil, a mythical ferryman named Charon would take recently departed souls across the river Styx to meet the god Hades, in exchange for a fare. We do not know if the gods took the place of the state regulating the service, but the literary references suggest that Charon was free to modify the fare or refuse service. See Grinsell 1957, 260-263.

Given that people need to move around the city to solve their basic needs, we can expect a market for “first-order” transportation services to develop organically. The characteristics of the services available in this market are of course established by suppliers seeking to maximize their gains with negative collective impacts usually unaccounted and socially desirable features of service undersupplied. This state can only gradually insert itself as mediator in this private transaction, walking a very thin line: on the one hand demanding socially desirable service standards and on the other ensuring that compliance with these standards does not render services unaffordable. Striking this regulatory balance is difficult and often places governments in the position of either subsidizing services to entice private-sector compliance or tolerating lower service-standards to maintain transport alternatives affordable and available. As previously described, this tension has on occasion led governments to directly take over the provision of public transport services or to forcefully evict incumbent private operators unwilling or unable to meet the expected standards. The cases included in this dissertation demonstrate how, once the dust from conflict settles, the money and rules dilemma typically forces public and private stakeholders to come back and repair their relationship. The reason is that weak states *need* the cooperation of a vibrant private-sector to cover the “first-order” transportation needs of the public, particularly in the context of resource constraints and rapid demographic, economic and spatial urban growth. In this way, for example, the quest of Chilean authorities in 1968-1970 and of Mexican authorities in 1978-9 to revamp the public transport industry drawing on strict regulation, direct service provision and centralized government control soon proved financially unsustainable, laying the groundwork for the arms-length approach that resulted in industry deregulation in both cities during the eighties, which soon created its own set of problems. This confirms that, as Gwilliam aptly suggested, the regulatory cycle in bus transportation “is never complete.”⁹⁷² Thus, rather than refocusing on the long identified cyclical shifts between public and private provision of services and strong and lax regulatory regimes, this thesis sought to contribute to our understanding of how the state negotiates strategically (or not) with private

972 Gwilliam, 2008, 1192.

operators, particularly as it expands its policy aims beyond the basic task of managing mobility.⁹⁷³

Seen jointly, the Santiago and Mexico City cases suggest that given a context of scarce resources and weak institutions, public-private collaboration continues to be the key. These cases also demonstrate, however, that, as the aims of this collaboration extend beyond mobility and towards second-order goals, the public-private relationship grows significantly more demanding and is more prone to conflict. The reason is that the pursuit of second-order goals requires private operators to behave in ways they would not choose independently. It requires them to make costly investments, to accept more intrusive government intervention, to optimize their operations and to fundamentally revise their way of doing business. Governments need to be much more proactive, not only to gain acceptance to its proposed reforms, but even to ensure that private operators come to the table to discuss them constructively. In short, the cases studied in this thesis suggest that public-private collaboration to pursue second-order transportation planning goals is contingent on the willingness and need for both parties to come to the table in order to safeguard their own relatively autonomous interests. Such propitious conditions do not emerge spontaneously and need to be manufactured. They require the existence of a “table,” an institutionalized forum where public and private actors discuss terms and make binding commitments, and through which trust, defined as the willingness to take increasing risks on behalf of the reform project, and fear, defined as the awareness that non-collaboration is costly, can materialize and develop. Among the factors that structure/condition/affect the state and the private providers’ willingness to come to this table to negotiate an outcome are the following:

Transparency of financial resources invested by the state The transition from a deregulated to a regulated service modality and the extension of policy goals beyond mobility come with costs attached. While it is impossible to generalize based on only two cases, the

973 The suggestion of looking at the evolving negotiations between public and private actors to understand transportation policy is in fact rooted in the broader planning and policy literatures. In “Governing the Commons,” Ostrom identifies two general types of “metaphors” that policymakers propose as solutions to problems of collective action: *Leviathan* (everything should come under central control), or *privatization*, warning us that both sides are “too sweeping in their claims” (Ostrom, 1990, 14) and that their effectiveness is both changing and context-dependent. As Kim persuasively argues, “problems in planning do not originate in the false choice between state and market or public or private, they lie in the question of how to negotiate such dualities” (Kim, 2011, 329).

evidence suggests that public authorities that expect these costs to be borne solely by the private sector through efficiencies set themselves up for disillusion. Not only do these authorities come to the table at a significant disadvantage, but, perhaps more importantly, they relinquish a major source of leverage. To be sure, the cases presented in this thesis suggest that governments that have access to public subsidies, authority over fare increases and/or access to low-cost financing are able to elicit more cooperation from operators. And consequently, when loans, fare increases, subsidies of other sources of financing made available to the private sector by government authorities are transparently linked to the pursuit of second-order goals, public and private operators find themselves needing to collaborate, if only to present the public paying higher fares or the body authorizing the subsidies (such as Congress) with reasons to keep these financing lines open in the future.

Technocratic capacity Similarly, moving away from artisanal service delivery requires private operators to develop professional management skills, and government regulators to develop bureaucratic capacity to monitor and enforce standards. This implies that in order to *jointly* pursue second-order goals, both types of stakeholders need to acquire technical capabilities that previously were not needed. Collaboration is contingent on the ability to speak “a common language,” of jointly identifying the metrics that are worth monitoring, and of agreeing on the standards of success. The importance of technocratic capacity is most evident when we consider the long run -i.e., not only the negotiation to implement a particular project like a BRT corridor, but the permanent, everyday interactions taking place to monitor the extent to which the objectives of such projects are in fact being met and to adjust performance accordingly.

Degree of corporatization of the industry The roles of trade-association leaders and of public transport entrepreneurs are often non-compatible. The former is supposedly charged with representing the interests of members, while the later is concerned with increasing stockholder profits. The more atomized vehicle ownership in the industry, the more difficulties faced by this critical actor to make efficient, pragmatic, binding decisions. In other words, the degree of corporatization of the industry determines the quality of the interlocutors participating in discussions at the table and affects whether the reforms can be pursued city-wide or, rather,

limited to concrete, clearly-bounded projects where cooperation is assured. This does not mean necessarily that transport-operator associations have to become corporate firms as a prerequisite of collaboration. Rather, it means that, when leaders of the transport associations have authority to make decisions on behalf of members, even if informal, collaboration is easier to establish.

Political embeddedness of the state with the incumbent operator industry Quasi-informal transport operators develop linkages to the political regime governing the city. They are, after all, an organized interest-group working in the context of a pluralist democracy. This relationship can mediate the disposition to collaborate, and perhaps more importantly, limit the autonomy of government to pursue disruptive reforms. The cases indeed suggest how alliances between transport operators and government officials often had little to do with transport-related concerns. One key example that we can highlight from the cases is how the close alliance of the Mexican labor movement with the governing regime shaped the history of public transport in Mexico City, creating a culture of political reciprocity between “informal” operators and the state. In contrast, the destruction of the labor movement by the military regime in Chile crafted a different path for the democratic governments that later pursued forceful strategies of reform.

Competitive context The depth of public private collaboration also depends on whether or not there are alternative service suppliers interested in entering the market. That is, can uncooperative or underperforming incumbent operators be replaced? The availability of well-capitalized, professional and ready-to-go competitors certainly strengthens the position of public authorities, who can only then credibly threaten operators with eviction. Similarly, conflict-averse authorities may offer to shield operators from competitive pressure (and to assume the resulting higher costs) as a way to entice their participation. Regardless of the intention to force or to foster collaboration, the cases in this thesis suggest that authorities can deliberately tweak the conditions under negotiation to shape the competitive context.

Political context As mentioned, governments are not unitary bodies able to reach internal consensus automatically. Just as the degree of corporatization influences the capacity of private actors to make credible and efficient decisions, the political context influences the forces

that shape government authorities' attitude toward conflict or collaboration. Who are the constituencies served by the public decision-makers in this particular case? Are they national or local populations? Similarly, what is the degree of autonomy to make decisions relative to other governing bodies? i.e., vis-à-vis other levels of government (city, state, national), other administrative bodies (transport ministry, environment ministry, mayor's office, subway company etc), other jurisdictions (metropolitan, neighboring municipalities, etc?). Finally, are there critical junctures approaching, such as a change of administration or an election? The cases reviewed in this dissertation clearly show how public transport reform is permanently embedded in a political context that strongly influences the outcomes.

A key finding is that all of the previously noted factors that influence the likelihood of public-private collaboration can be developed over time. There is a clear role for government agency: authorities can extend the reach and aims of collaboration by cultivating propitious contextual conditions. In other words, the willingness to take on increasing risks on behalf of the reforms (i.e., trust) and the awareness that non-collaboration is costly (i.e., fear) are acquired through experience. Collaboration begets collaboration. Once private stakeholders realize that they have more to gain from participating in the reform efforts than from protecting the status quo, then their relationship with public authorities becomes less adversarial and transactional. This framing assumes that the capacity of public and private sector actors change over time, simultaneously, as they adapt over the course of their negotiations, adjusting the prevailing business model and modifying the structure and composition of their industry to meet more stringent service demands. So, given all of the above, why was Santiago more successful than Mexico City?

Contrasting planning capacity in Mexico City and Santiago

To highlight the differences, we begin by noting a few similarities. First, deregulated/privatized public transportation only became a problem in need of a solution when authorities switched their focus from first- to second-order transportation concerns, and this only happened as these cities grew spatially, demographically and economically. In fact, the deregulated/privatized public transportation system made a substantial, positive contribution to the transit dependent public in both cities, offering ubiquitous, flexible service without requiring hard-to-sustain subsidies or sophisticated oversight capabilities from the government. The incumbent private operators of both cities extended the reach of government-run services, entered hard to

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reach areas, and responded with relative ease to changes in service demand.⁹⁷⁴ They grew ubiquitous precisely because they solved a real social need. Even when the quality of their services lagged, the constituency of users actively demanding change and the interest of public authorities to pursue reforms were systematically weak. It is not surprising that transit users did not play an active role in the negotiations shaping the standards of service. To be sure, the public mattered, indirectly limiting the choices available to governments sensible to opinion polls. However, as long as the affordability and accessibility of transit services were maintained, i.e., as long as private operators addressed first-order demands, unhappy users in both cities could be classified in two groups: on the one hand were those who could afford an alternative means of transportation and who typically preferred to express their dissatisfaction by choosing, in Hirschmanian terms, “exit” over “voice.” They switched to modal alternatives (such as a car) instead of mobilizing politically to demand public transportation reform. On the other hand were transit-captive people who, lacking options, tended to “resign themselves to inferior levels of service if they have nothing with which to compare their experiences and have no basis for thinking that they deserve any better.”⁹⁷⁵

In the same vein, public officials seemed for a long time satisfied with an industry structure that under-emphasized second-order concerns. After all, the cartel significantly facilitated the jobs of planners and regulators by injecting a minimal level of rationality to the system. Quasi-informal route associations conveniently determined the location of terminals, decided on the frequency and dispatch of vehicles, monitored service, programed maintenance, penalized underperforming drivers, maintained a registry of vehicles and conducted many other important functions at no cost to governments.⁹⁷⁶ It also enhanced the ability of local authorities to pursue incremental reforms, as the hierarchical structure of bus-operator organizations provided a relatively binding mechanism to make service-related compromises and to extract commitments from thousands of industry participants.⁹⁷⁷ In addition, maintaining individual

974 As noted by Cervero and Golub, these transport operators “are consummate gap fillers”: “They allow car-less, disadvantaged individuals to reach jobs, buy and sell produce, and access medical care. They also enlarge labor-sheds, expanding the supply of workers across many skill levels from which firms and factories can draw upon”(Cervero and Golub, 2007, p. 456).

975 Lipsky, 1980, p. 53)

976 de Soto, 1989; Hernandez 2007.

977 For an example, see Davis, 1994, 141.

transport operators in the “grey area” of informality was occasionally useful as a tool for political control, as the selective enforcement of rules allowed the state to govern the system by occasionally and selectively leveraging its ability to choose winners and losers among vast numbers of operators and associations.

Beyond direct benefits to users and public officials, there were important social advantages to tolerating a quasi-informal and fragmented industry. This labor-intensive transport industry offered a reliable source of employment to large numbers of low-skilled individuals in the context of profound economic restructuring.⁹⁷⁸ Government authorities were certainly not keen on meddling with the proven means by which the poor accessed employment and services, especially given the uncertainty about the availability of an alternative that achieved the same outcome while *also* preventing negative impacts, such as accident rates, congestion and air pollution.⁹⁷⁹ In sum, maintaining the status quo and under-emphasizing second-order concerns was for a long time a sensible policy in both Mexico City and Santiago, which manifested itself through an instrumental partnership between public and private actors committed to maintaining the status-quo, or to very slow, incremental change.

Both cases, however, also demonstrate how a hands-off approach to public-transport planning and regulation becomes increasingly problematic as developing world cities grow and develop. As both Mexico City and Santiago grew spatially, demographically and economically, the travel needs of their surging populations changed dramatically. On the one hand, the spatial characteristics of the expanding cities forced people to commute longer distances,⁹⁸⁰ and the growing spending capacity of their inhabitants was reflected in an increased number of trips. Government efforts to directly provide public transport services, running buses and operating subways, and to expand road infrastructure to accommodate increasing numbers of cars proved prohibitively expensive and in any case insufficient to cover demand, with the result that the informal transport network soon became not only a complement but the true backbone of urban transportation services in both cities. This happened precisely as second-order concerns, such as

978 For example, see Rizzo, 2011. Figueroa (2005, 46) aptly noted how the public-transport industry employed individuals displaced from their jobs as a result of trade liberalization policies adopted throughout Latin America in the 80s and 90s.

979 Gwilliam, 1997, 173.

980 For example, Escudero and Lerda (1996) estimated that in this period the average length of motor vehicle trips in Santiago grew by an estimated 1.3% per year.

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deteriorating air quality, increasing traffic congestion and surging accident rates became staple features of how citizens experienced urban life.

Governments in both Mexico City and Santiago certainly tried to tighten the rules governing the quality of privately supplied transit services, a change that put pressure on the relationship with private operators, but these standards proved hard to enforce against the grain of the economics of fragmented, deregulated service. As small-scale operators attempted to cut costs, they under-maintained their vehicles and allowed vehicle fleets to age. Operators also saved by not paying taxes and by overworking their drivers, keeping them outside of the social security system. In other words, in order to maintain mobility affordable to users and profitable to individual vehicle owners, private transport operators transferred many costs of their services to society, or to future generations, with the implicit or explicit permission of planners and regulators. This triggered a chain reaction: Bus operators abused their drivers, who in return abused the vehicles and, most importantly, abused the users, not only by offering polluting, congesting and unsafe services, but also by continuously exacting value from them: for example, by retaining “change” or by altering the authorized fare.⁹⁸¹ These incentives, combined with weak regulatory capacity to enforce existing regulations, unsurprisingly resulted in a deeply-engrained culture of “powerful drivers and meek passengers” (Tomic and Trumper 2005)

Just as rules became hard to enforce, injecting money into the system to facilitate the pursuit of more ambitious policy aims became increasingly difficult.⁹⁸² In fact both cases in this thesis demonstrate four interrelated ways in which the deregulated and fragmented industry structure reduced the attractiveness of investing in the public transport system:

- a. Lacking clear rules of the game, outside investors perceived higher risks and refrained from entering the market.

981 See Navarro Benítez, 2005.

982The description of Schipper and Fulton certainly applies to Mexico City and Santiago: “there are often many independent bus providers, often quite small, surviving on a day-to-day basis. These companies are not able to make major investments in buses or bus systems. Companies often compete to provide service on the same routes, resulting in low bus-load factors, poor service for customers, and general chaos on the streets” (Schipper and Fulton, 2002, 48).

b. Lacking a way to rationalize service supply, operators already competing *in* the market remained barely profitable, not their organizations, but individual bus owners, and were left with little money to reinvest.

c. Lacking acceptable levels of service quality, users resisted proposals to increase fares and in fact felt justified in evading fares when possible.

d. Lacking a formal, accountable, consolidated private bus-operator administration, government authorities were reluctant to direct public subsidies to this service, as this money was likely to be wasted or appropriated as rents by leaders of bus-operator organizations.

As public transit in both cities became balkanized and left to self-plan, self-finance and self-regulate, the understanding of urban mobility as part of an integrated system that is useful for deliberate, proactive urban planning was essentially lost. Not only did the public/regulated modes (particularly the subway) face increasing competition from an expanding private/unregulated system,⁹⁸³ but it became increasingly difficult to link and coordinate transportation with second-order policies relating to non-mobility concerns, such as land use planning, energy consumption, air quality, equity, safety, congestion, noise, etc. For example, lacking an integrated system, passengers in both cities were forced to pay a new fare after every transfer, which implied that commuters traveling the longest distances, typically the poorest, ended up paying significantly more. And no system remained in place to cross-subsidize unprofitable services, resulting in excess bus capacity concentrated in a few highly-patronized corridors, leading to congestion, and in spotty service in the less-patronized areas, leading to mobility deprivation.⁹⁸⁴

To be sure, even in this scenario of low funding and lax regulation, government authorities and transport operators in both Mexico City and Santiago continued to negotiate over the first-level function of the system. However, the inability to establish and enforce rules and to raise and distribute resources seriously undermined the ability of policy makers to effectively move the conversation toward more ambitious goals. Suggestions that operators must “modernize,” for example, by consolidating their operations around fewer and larger vehicles,

983 For example, Kim and Gallent, 1998, 91.

984 As summarized by Gwilliam, “because of the prevalence of externality and spill-over effects, unregulated private behavior is very unlikely to coincide with any generally acceptable concept of the public good” (Gwilliam, 2008, 1192).

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corporatizing the ownership structure of their organizations or redefining their routes and service frequencies to achieve system-level and not vehicle-level objectives were initially met with fierce resistance. In fact, the opposite tended to occur: “Traditional” bus-operator organizations were frequently able to leverage their control over rules and money to entrench the status quo and to expand their ability to extract rents. The reason was that a deeply-rooted business model had in fact developed around this atomized industry structure. Drivers became the most entrepreneurial actors in the system, attaining profits that varied according to their ability to maximize the number of passengers boarding each vehicle. Fare revenues flowed up to vehicle owners, and then to their associations and federations in the form of membership dues. As a result, the most powerful actors in this chain, the leaders of the bus-operator associations, also became the most conservative and risk-averse. They were the least interested in optimizing services and, in fact, had an opposite incentive to expand their member rolls. Further, only major events, such as a large and highly-publicized crash, resulted in the cancellation of a license or contract. In both cities, bus licenses were informally sold or even inherited, without authorization from the government, and bus license registries were grossly inaccurate. As a result, bus operators developed a sense of entitlement to continue delivering public transit service. From their perspective, they did not hold a license awarded and periodically ratified by the state, but an unalienable right to continue to exploit routes that they *owned*.⁹⁸⁵

In this context, the conversation between government regulators and private transport operators in both cities became circumscribed to bartering fare increases for marginal improvements, and even these talks were conditioned on an implicit threat of paralyzing the city through strikes. Rather than negotiating to *expand* state-planning capacity, transportation authorities often came to the bargaining table seeking only to *maintain* the existing system. In other words, while a crisis occasionally turned the system on its head, early discussions between government authorities and private transport operators tended to be embedded in a permanent and evolving process of negotiation over the first-order function of the system. These negotiations had more transactional than transformative qualities, as the imperative to keep the system running carried its own political economy. After all, “few governments can impose (service) regulations and pricing. There are immediate apparent losers: private vehicle owners

985 To be sure, this behavior is not exclusive to cities of the global south. Holders of taxi medallions in many US cities display a similar sense of entitlement.

and transit riders who face higher costs or more inconvenience. There are also apparent losers in the longer term: transport operators and vehicle and fuel manufacturers, all of whom must adjust their business practices” (Schipper 2002, 13). Clearly, the state was not omnipotent: its capacity to execute or modify transportation policies fluctuated over time, varying as economic and political conditions changed. Demanding higher-order goals at this negotiating table represented a complex challenge for public authorities, even for those emerging from the authoritarian regimes that governed Mexico and Chile during the seventies and eighties, since doing so normally increased the financial and regulatory demands placed on the protagonists. At the same time, pursuing these goals outside of this table, for example, by using legislation to mandate non-negotiated service standards, was even more daunting, as it carried the risk of alienating incumbent private operators and collapsing the system, meaning not only that the capacity to use transport policy as a tool for sustainable urban planning would remain elusive, but also that the capacity to deliver minimally acceptable transport services could be lost.

When transport authorities did reach further, demanding costly or threatening standards of service that addressed “second-order” policy objectives, well organized transport operator organizations left the table, mobilizing in protest and/or seeking “back doors” to the key decision-makers able to force the conversation back to merely maintaining the status quo. There was practically no cost to doing this, as the threat of eviction carried no credibility. Further, governments are not unitary bodies, and transport operators exploited this to their advantage. Higher level decision-makers, the mayors, the governors, the ministers of the interior, the presidents, were often more interested in maintaining governance and political control of the city and thus prioritized appeasement over disruptive change. When “second-order” policy reforms did not figure high in the agenda of higher-ranking decision makers, transport officials found little support from their own government peers, and ended up pressured by politically stronger operators.

As rising public awareness over second order concerns such as air pollution and congestion grew, however, authorities in Mexico and Chile during the late 1970s concluded that forceful reforms were needed to reestablish authority in the sector. Interestingly, they implemented diametrically opposite policies to obtain starkly similar results. The bet made by Mexican authorities was in favor of *more* government intervention, establishing a publicly-run monopoly provider of bus-services, with the aim of providing “a clean and efficient service, operating at fixed stops, with good maintenance practices, an integrated fare policy, and well

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defined routes and hierarchies” (Molinero 2000, quoted in Gakenheimer et al. 2002, 240). Almost at the same time in Chile, the Pinochet regime placed a contrasting bet in favor of *less* government intervention. Consistent with his free market ideology, Pinochet implemented a series of measures to fully deregulate bus-services in Santiago, assuming that the forces of the market could discipline private operators into providing better service.⁹⁸⁶ Paradoxically, the consequences of such apparently contrasting strategies were roughly the same in both cities: an explosion of the informal sector, the emergence of a fragmented private bus-industry and a profound weakening of the state capacity to address second-order functions of transport policy.⁹⁸⁷ What emerged in both Mexico City and Santiago was a temporary coexistence of privatized, deregulated services that prioritized first-order goals and publicly-operated regulated services that prioritized second-order goals. In the brief periods where resources were abundant, authorities sought to expand the reach of the regulated network. Most of the time, however, public authorities struggled to maintain the market-share of the surviving publicly-owned transit companies, particularly the subway. This challenge alone crowded out other investments and severely constrained local budgets, often requiring cities to take on substantial debt,⁹⁸⁸ as happened in Mexico under President López Portillo or in Chile during the early years of

986 Between 1979 and 1989 the public bus company, ETCE, was dispersed, any individual with a suitable vehicle allowed to operate public transport services, and fares entirely deregulated.

987 In Mexico City, the publicly run AUP-R100 proved unable to sustain quality service at an acceptable cost, and its union became as conflictive as the union of the defunct trolley company. By the time this public bus company was formally declared bankrupt in 1995, public authorities in Mexico City had already welcomed a new wave of informal bus-operators into the system, in what amounted to an implicit deregulation policy, of a scale similar to what was being experienced in Santiago. In this period of deregulation, low-capacity vehicles flooded the public transport market and established themselves as the principal mode of transport in both cities. According to 1994 official estimates, 23,247 minibuses and 22,749 combis and sedans offered transportation services in Mexico City’s Federal District (Gakenheimer et al., 2002, p. 233). Minibuses and combis replaced buses as the main public-transport mode in Mexico City, surging from only 6% of total trips in 1986 to 55% by 2000. In fact, the number of standard-size buses in the MCMA (mostly owned by AUP-R100) shrunk from roughly 15,000 vehicles at the beginning of the 1980s to a little over 2,500 in 1998 (Zegras et al., 2000). Notably, the mode-share of the subway decreased in this period, even as the Mexican government continued to invest significant resources to expand its network. Santiago experienced a similar surge in the number of lower-capacity public transport vehicles. Just as the Chilean government decommissioned the ETCE, the number of privately-owned buses operating in the streets exploded from 4,760 in 1977 to a peak of 13,353 by 1991 (Paredes, Sanchez, and Sanhueza, 2001). And while metro ridership in Santiago did increase in this period, the system's costly infrastructure remained under-utilized, in 2000, the principal subway line in Santiago carried only 70% of its theoretical capacity at peak hours (Zegras and Gakenheimer. 2000, 35).

988 See Ingram, 1998, 1025.

Pinochet. Over time, and irrespective of the stated policy goals of the government, the mode-share of public/regulated mass-transit modes inevitably stagnated or shrunk, as public money was far from enough to keep up with rising populations and sprawling city limits. In contrast, the privatized/unregulated share of the public transit market continued to fill an expanding void.

This is not to imply that transport authorities were fully disempowered. Ananya Roy (2009, 83) makes a useful distinction between unregulated systems and deregulated systems, noting that “deregulation indicates a calculated informality, one that involves purposive action and planning, and one where the seeming withdrawal of regulatory power creates a logic of resource allocation, accumulation, and authority.” Roy suggests that state actors may make a studied choice to withdraw from providing and regulating crucial services, such as public transport, and to allow entrepreneurs from the private sector to take over, but without entirely foreclosing the option of re-entering the market or of unilaterally changing the rules.⁹⁸⁹ These operators are thus left in a permanent grey area, which presumably puts them at a disadvantage if an authority down the line is willing and able to muster the required support to intervene the sector, i.e., to “put the tiger back into the cage,” as noted by former Minister Correa. In other words, the reach of regulation can be managed as a thermostat, expanding when fiscal resources become available and contracting when they are not. Such rationale is in fact consistent with the way both Mexico City and Santiago authorities rationalized their strategic approach to enhancing planning-capacity. This may suggest that the apparently chaotic services found in many cities of the developing world could be due to multi-faceted rationales, and not purely to the incompetence of government officials.⁹⁹⁰ Cautious, pragmatic governments gauge the financial and regulatory resources at their disposal, and attempt to leverage them in the pursuit of marginal gains. While helpful when the sole objective is to maintain a minimal level of services, and perhaps even to facilitate the governance of the city, such an ad hoc approach to negotiations is not necessarily conducive to the type of deep, institutionalized, public-private collaboration that can support comprehensive, ambitious transportation reforms amidst a context of resource scarcity and weak institutions.

989 While such deregulation can be an explicit policy, as in Seoul, Korea and Santiago, Chile during the eighties, it also occurs implicitly, as in Mexico City after the demise of Ruta 100, where informal operators, began to be “tolerated” by the authorities (Islas Rivera, 2000, 315).

990 Perrow explored this issue in his study of the use of power in organizations. He alerts us of “the possibility that what we see as incompetent performance or policy really reflects what some leaders wanted all along” (1979, 13).

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When the democratically elected governments came into office in Santiago in 1990 and in Mexico City in 1997, authorities found a deeply-engrained tradition of transactional negotiations, limited mostly to mobility concerns. While authorities in both cities acknowledged the importance (and need) to expand this collaboration to second-order concerns, the context was not propitious for radical reform. Resources were scarce, particularly so in the case of Mexico City, where authorities could no longer count on the periodic economic backing of the federal government. Technocratic capabilities were low, especially in Chile, where the Transport Ministry had long been hollowed by a dictatorship committed to a small government. In both cities, the industry-structure was deeply atomized, albeit paradoxically the hierarchical, “cúpula” structures developed under the PRI in Mexico and the strong federations of associations that dominated service in Santiago initially suggested that the authorities could establish city-wide policies by negotiating with a few individuals. Further, these governments marked the end of two long regimes. As such, the incoming authorities were not deeply embedded with the incumbent transport-industry, which presumably granted them a window of opportunity to be forceful without hurting political allies. However, the broader political context was such that these democratically-elected governments were not inclined to a public standoff with operators, and the competitive context of the industry suggested that only the incumbent operators were interested in this industry.

The Chilean tendering processes from the nineties reflect in fact a gradual strategy to create the conditions for a more profound public-private collaboration. The case-study suggests how during this period, the MOTT reasserted its authority while simultaneously empowering the transport operator organizations. While later dismissed as timid, or worse yet, as the “legalization of the cartel,” the reforms pursued were non-threatening to individual vehicle-owners, and in fact resulted in a significant round of subsidies to replace old vehicles with newer ones. Further, in this period the Chilean government established a strong cadre of technocrats charged with re-imagining urban transport in the city and commissioned several studies on how to “modernize” the incumbent transport industry. In contrast, the policies pursued soon after democratization in Mexico City complicated rather than enhanced the plausibility of collaboration. To begin, authorities from the left-leaning PRD pulled the plug on the area-based contracts awarded by their predecessors and reduced their scope to route-based contracts. This, combined with the decision to disempower the “cúpulas” as interlocutors to the government, seen as part of the PRI

electoral machine, reduced the likelihood of city-wide, binding agreements. SETRAVI lacked a technically capable arm similar to Chile's SECTRA and remained more focused on negotiating immediate conflicts rather than on producing a technically robust and financially-feasible vision for the future. Further, resource constraints were such that the vehicle substitution program championed by Cárdenas had only marginal impact.

By the year 2000, the structure of the transport industry was notably different in Mexico and Santiago. While vehicle ownership was similarly atomized, in Santiago the leaders of the bus operator federations concentrated immense power, while in Mexico City cúpula leaders faced dissidence in each individual route. To be sure, this implied that the incumbent transport industry was significantly more cartelized in Santiago than in Mexico City. It also implied, however, that conditions were more propitious for collaboration. The introduction of Metrobús and of Transantiago as an idea generated resistance in both cities., In the case of Transantiago, however, the critical task was disciplining the leaders of the cartel, whereas in Mexico it was about mitigating potential harm to hundreds of individual vehicle-owners. This is a powerful reason why Santiago was able to pursue city-wide reforms, whereas Mexico City has been limited to select corridors. It also explains why, in the case of Santiago, the need to pay for collaboration has decreased. For example, the tender process of 1992 resulted in vehicle-substitution subsidies for US \$14 million, whereas later reforms have no longer included financial payments for individual vehicle-owners. In contrast, the financial model of each new Metrobús corridor was structured to yield guaranteed revenues, not for the firms as a whole, but for each individual vehicle-owner-turned-stockholder.

Fear, the realization that non-collaboration is costly, is much more evident in Santiago than in Mexico City. In fact, the subway-feeder contracts tendered in Santiago in 2002 demonstrated the willingness of authorities to evict incumbent operators not inclined to meet the required standards. Further, the intense promotion of the Transantiago project among credible, internationally-renowned competitors certainly influenced the competitive context. Instead, incumbent bus associations from Mexico City continue to negotiate with authorities with the premise that their "rights" over a particular route will be acknowledged and respected. While this constraint has been recently relaxed, Mexico City has yet to organize a single competitive process to choose its own operators. Trust, the willingness to incur in risks on behalf of the reform project, seems paradoxically more established in Santiago than in Mexico City. In fact, private operators of Transantiago accepted 19 contractual revisions between 2004 and 2012, with

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most of the changes benefiting the government. This is perhaps associated with the fact that Chilean authorities staked their personal prestige and even their personal patrimonies in order to obtain the financing required to keep the project afloat. The use of the rare Constitutional 2% provision to bypass congressional authorization to subsidize the system is testament of the willingness of government authorities to incur risks. In contrast, the concession contracts of Metrobús operators become quite rigid once signed, and their most important premise, a guaranteed level of profits for individual stockholders, remains in full force.

Another mediating factor explaining the different fates of Metrobús and Transantiago is the fact that the project was championed by local authorities in Mexico City and by national authorities in Santiago. This difference is of course a recent development, as only after democratization did the role of the national government in local transport recede significantly in the case of Mexico City, making the mayor and the local Transportation Ministry the key actors currently shaping local transport policy. In contrast, the national government continues to be overwhelmingly dominant in the case of Santiago, where the President and the national Transportation Ministry remain the most visible protagonists on behalf of the state. National authorities have broader constituencies and are therefore less concerned about the local political fallout from service disruptions, or about the financial implications of a particular project. They also have access to more sources of financing and thus tend to be capable of more “forceful” strategies. In fact, we must recall that it was national authorities in Mexico City who made the decision of forcefully municipalizing private bus operations and of establishing a publicly-run bus company in 1981. Similarly, we should to acknowledge that attempting a reform process of the scale of Transantiago in Mexico City would require a kind of metropolitan collaboration that seems unimaginable today, given the competing jurisdictions of authorities in the Federal District and in the dozens of municipalities that surround it.

Chile was more successful than Mexico City, because the actors that came to the table previously safeguarded their own relatively autonomous interests, and created an environment that was conducive to the pursuit of more ambitious goals. As a result of the reforms that began in the nineties, the Chilean government emerged (1) more technically capable to monitor and enforce standards, (2) better able to secure subsidies to entice private-sector collaboration and to use as leverage subsequent negotiations and (3) more capable of making credible threats of eviction to uncooperative or underperforming operators. Similarly, private operators, and more

explicitly the leaders of the incumbent transport operator associations, emerged (1) more autonomous from individual vehicle owners, (2) less fearful of eviction (contingent on participation) and (3) convinced of their capacity to obtain the required financing to modernize their operations. This process was of course a long-term, complicated, and conflictual process that was mediated and affected by a range of forces and conditions related to politics and to the urban structure. As this process unfolded, however, the private transport industry of Santiago was able to expel those members that were still committed to the “traditional” business model, and to empower those predisposed to “modernize,” while at the same time providing a malleable transition-window and somewhat soft tendering rules to minimize as much as possible the potential harm to individual vehicle-owners and to guarantee the permanence of most of the incumbent operators in the new system.

Mexico City seems less successful, because previous negotiations actually endangered the relatively autonomous interests of the participants at the table, particularly because the two sets of forces,-public and private, were institutionally and politically allied/embedded in each other. The reciprocal relationship of patronage and political support that emerged under the PRI was certainly instrumental to maintaining extensive transit services across the city, but in fact had little to do with transportation. As a result of the failed attempt to privatize services after the demise of AUP-R100, and of the weakening of the PRI-networks, the democratic governments of Mexico City found themselves unable to attract private investment into the industry and surrounded by a profoundly fragmented and conflicted incumbent industry. Lacking money to resuscitate the publicly-operated bus company and interlocutors able to make city-wide commitments, authorities scaled down the ambitiousness of their aims, settling for intervening in only one corridor at a time, deliberately structuring the business model of Metrobús to avoid conflict with potentially-affected operators, and leaving system-wide integration for better times.

The above should not suggest that Santiago is without its flaws. In fact, Transantiago serves as a powerful proof that expanding planning and regulatory capacity to address “second-order” goals implies costs that eventually make their way to the price of fares or to the amount of public subsidies required to operate the system. In other words, there is no free lunch. Interestingly, the fact that the desirability of these expenditures has been intensely debated in Chile has in turn empowered regulators and created a shared sense of urgency at the table about the need to continue to improve performance. In contrast, the still-manageable but certainly growing subsidies required by Metrobús are hidden in a black box and often spent at the expense

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of the only publicly run BRT operator. As such, no political debate about the desirability of public subsidies for Metrobús is taking place in Mexico City, and thus public and private stakeholders have neither a mandate nor a sense of urgency to improve the level of service.

Further, it is not clear what the future may hold. A pessimist could plausibly argue that Transantiago is similar to Mexico City in 1981, when public transportation services in the city were integrated under strict government control. Perhaps Transantiago's costs will continue to increase, to the point that authorities are eventually forced to "tolerate" out-of-network services, once more opening the door to loosely-regulated, quasi-informal services as a strategy to navigate the money and rules dilemma. An optimist, however, could also make the case that Mexico City today is reminiscent of Santiago in 1992, when the cautious first steps of a tremendously ambitious transformation were initially taken. Perhaps current Mexico City authorities will soon find a financially sustainable way to expand the regulatory model of Metrobús beyond the few corridors that are physically suited for BRT operations. Perhaps the integration of the collective taxis, the Metrobús and the subway is not a far-fetched dream.

In concluding

While the basic task immediately facing transport authorities across the developing world is certainly about enabling people to move efficiently from their origins to their destinations, government planners and regulators can also strive to influence individual behavior and advance social goals by reshaping the existing urban context and improving the transportation alternatives available to the public. In principle at least, governments may actively use transportation-policy to guide the direction and manner in which cities grow, to reduce the negative externalities associated with individual transport-decisions, and to harness the positive spillovers presumably associated with modal alternatives. In other words, transportation policy may be ambitiously used as a tool for sustainable urban development.⁹⁹¹ However, pursuing these "second-order" functions demands significant planning and regulatory capacity from government authorities. While individuals may be capable of solving their transportation needs with little intervention from the state, "second-order" functions of transport policy deal with "wicked" problems that are difficult to define, contain an interconnected web of sub problems, and imply solutions that are

⁹⁹¹ Sustainable development indicates an interest linked to improving human welfare, satisfying basic human needs, protecting the environment and future generations, promoting social equity and encouraging civic participation in decision-making (Lafferty and Meadowcroft, 2000, 19).

costly and uncertain to succeed.⁹⁹² This thesis has shown how tackling them effectively requires sustaining multi-stakeholder engagement, commitment and coordination, while simultaneously challenging the values and established patterns of behavior of many of the same stakeholders. Further, the promised outcomes are composed mostly of intangible social benefits that the private sector cannot easily monetize and that, in any case, are only likely to materialize in the long-term. Only a capable state, sufficiently autonomous⁹⁹³ to resolve collective action problems and transcend individual interests, and sufficiently embedded in society to establish legitimate priorities and enlist the committed collaboration of competent and qualified private sector partners,⁹⁹⁴ can effectively use transportation policy as a tool for sustainable urban development. While complex and daunting, the challenge of expanding transportation planning and regulatory capacity in the cities of the global south remains a worthwhile and urgent pursuit.

992 For a discussion on “wicked problems” see Rittel and Webber, 1972; and Chrustie et al., 2010.

993 By autonomy, I refer to the ability of the state “to formulate and pursue goals that are not merely reflective of the demands interests of social groups, classes or society” (Skocpol, 1985, 9).

994 The critical importance of combining state autonomy and state embeddedness to achieve effectiveness is a seminal contribution of Peter Evans. As he put it, “only when embeddedness and autonomy are joined together can a state be called developmental” (1995, 12).

Appendices

Appendix A. Public Subsidy to Transantiago under the Concertación

Public subsidy to maintain Transantiago operations 2007-2011 (CHL\$, million)

Date	Source	Amount
Jul-07	Fiscal contribution Law No 20.206, 2007	52,000
Aug-07	Fiscal contribution Law No 20.206, 2007	21,000
Sep-07	Fiscal contribution Law No 20.206, 2007	23,000
Oct-07	Fiscal contribution Law No 20.206, 2007	12,000
Nov-07	Fiscal contribution Law No 20.206, 2007	33,400
Dec-07	Fiscal contribution Law No 20.206, 2007	9,400
Sep-08	Constitutional 2% Funds, 2008	33,900
Oct-08	Constitutional 2% Funds, 2008	50,621
Nov-08	Constitutional 2% Funds, 2008	53,682
Dec-08	Constitutional 2% Funds, 2008	49,120
Jan-09	Constitutional 1% Funds, 2009	30,934
Feb-09	Constitutional 1% Funds, 2009	21,622
Mar-09	Constitutional 1% Funds, 2009	24,860
Apr-09	Constitutional 1% Funds, 2009	32,836
May-09	Constitutional 1% Funds, 2009	36,367
Jun-09	Constitutional 1% Funds, 2009	32,580
Jul-09	Constitutional 1% Funds, 2009	32,860
Aug-09	Constitutional 1% Funds, 2009	37,290
Sep-09	Subsidy Funds Law No. 30.378	13,722
Oct-09	Subsidy Funds Law No. 30.378	59,756
Nov-09	Subsidy Funds Law No. 30.378	12,433
Dec-09	Subsidy Funds Law No. 30.378	60,745
Jan-10	Subsidy Funds Law No. 30.378	24,815
Feb-10	Subsidy Funds Law No. 30.378	10,911
Mar-10	Subsidy Funds Law No. 30.378	44,024

Total 813,880

US\$ 1627.76

Source: Ministerio de Transportes

Appendix B. Public officials involved in the implementation of Transantiago

President	Minister of Transportation	Under-Minister of Transportation	Coordinator of Transantiago	
Patricio Aylwin, PDC (Mar/90-Mar94)	German Correa, PS (Mar/1990-Sep/1992)	Sergio González Tagle, PDC (Mar/90-Mar/94)		
	German Molina, PPD (Sep/92-Mar/94)			
Eduardo Frei Ruiz-Tagle, PDC (Mar/94-Mar/00)	Narciso Irueta, PDC (Mar/94-Sep/96)	Claudio Hohmann, PDC (Mar/94-Sep/96)		
	Claudio Hohmann, PDC (Sep/96-Mar/00)	José Andrés Wallis, ? (Sep/96-Mar/00)		
Ricardo Lagos, PPD (Mar/00-Mar/06)	Carlos Cruz, PS (Mar/00-Jan/02)	Patricio Tombolini, PRSD, Mar/00-Jun/02)		
	Javier Etcheberry, PPD (Jan/02-Jan/05)	Guillermo Diaz Silva, PDC (Jun/02-Mar/06)		
	Jaime Estevez (Jan/05-Mar/06)			
Michelle Bachelet, PS (Mar/06-Mar/10)	Sergio Espejo, PDC (Mar/06-Mar/07)	Danilo Nuñez, ? (Mar/06-Jan/08)		Fernando Promis (Mar/06-Aug/07)
	Rene Cortazar, PDC (Mar/07-Mar/10)			Silvio Albarran (Aug/07 -Jan/08)
				Elinett Wolf, PS (Jan/08-Apr/08)
		Raul Erazo, PS (Jun/08-Mar/10)		
Sebastian Piñera, RN (Mar/10-	Felipe Morande, Independent (Mar/10-Jan/11)	Gloria Hutt, Independent (Mar/10-		Ana Laura Covarrubias (Mar/10-Jul/10)
	Pedro Pablo Errazuriz, independent (Jan/11-)		Raimundo Cruzat (Jul/10-Oct/11)	
			Patricio Perez (Oct/11-	

Concertación: PDC- Partido Demócrata Cristiano; PS- Partido Socialista; PPD- Partido por la Democracia' PRSD, Partido Radical Socialdemócrata
Alianza: RN-Renovación Nacional

Appendix C. List of interviews in Mexico City

Interview Number	Name	Stakeholder Type	Positions held / Organization	Case study	Date
1	Herrera, Arturo	Government official	Minister of Finance, Mexico City	Mexico City	Jan 18, 2010
2	Bejos, José Miguel	Private sector	Private investor	Mexico City	Jan 19, 2010
3	Serranía, Florencia	Government official	Director, STE; Director, STC-Metro	Mexico City	Jan 19, 2010
4	Padilla, Jesús	Transport operator	President, CISA; President, Ruta 2	Mexico City	Oct 1, 2010
5	Lobo, Adriana	NGO	Consultant; Director, Centro de Transporte Sustentable (CTS)	Mexico City	Jan 27, 2011
6	Gutiérrez, Luis	NGO	Director for Latin America; Embarq	Mexico City	Jan 27, 2011
7	Molineró, Angel R.	Government official; Consultant	Director of Planning and Regulation, SETRAVI	Mexico City	Feb 25, 2011
8	Hernández, Mario	Consultant	President, Confederación Nacional de Transporte Urbano y Suburbano de la República Mexicana	Mexico City	Feb 25, 2011
9	Serranía, Florencia	Government official	Director, STE; Director, STC-Metro	Mexico City	Feb 26, 2011
10	Núñez, Felipe	Transport operator	President, Ruta 3	Mexico City	Feb 28, 2011
11	González, Luz Elena	Government official	Director, RTP	Mexico City	Feb 28, 2011
12	Ruiz, Luis	Government official	Director of Planning and Regulation, SETRAVI; Minister, SETRAVI	Mexico City	Mar 1, 2011
13	Villegas, Alejandro	Government official; NGO	Director of Planning and Regulation, SETRAVI; Manager, Hewlett Foundation	Mexico City	Mar 2, 2011
14	Puchet, Rodrigo	Government official	Advisor to the Director, Metrobus	Mexico City	Mar 3, 2011
15	Calderón, Guillermo	Government official	Director, Metrobus	Mexico City	Mar 3, 2011
16	Moreno, Arturo	Government official; Transport operator	Program manager, SETRAVI; Operations director, CISA	Mexico City	Mar 3, 2011
17	Hernández, Javier	Government official; consultant	Module manager, AUP-R100; Chair of the transport engineering program UPIICSA	Mexico City	Mar 4, 2011
18	Juárez, Encarnación	Transport operator	Cúpula leader "Nuevo Milenio"; Member of the board, COPSA	Mexico City	Mar 4, 2011
19	Rendón, Noé	Transport operator	Leader ITEC - (Ruta 1 dissidence)	Mexico City	Mar 6, 2011
20	Rocha, Jorge	Government official	Operations Director, Metrobus	Mexico City	Mar 7, 2011
21	Padilla, Jesús	Transport operator	President, CISA; President, Ruta 2	Mexico City	Mar 7, 2011
22	Gómez, Nicolás	Transport operator	Cúpula leader	Mexico City	Mar 7, 2011
23	González Galán, José	Transport operator	Cúpula leader	Mexico City	Mar 7, 2011
24	Hernández, Agustín	Transport operator	Cúpula leader	Mexico City	Mar 7, 2011
25	Sánchez Escalante, José	Transport operator	Cúpula leader	Mexico City	Mar 7, 2011
26	López, Enrique	Transport operator	Operations manager, Ruta 110 (former SUTAU-100)	Mexico City	Mar 8, 2011
27	Martínez, Federico	Transport operator	Operations manager, CE4-17M (former SUTAU-100)	Mexico City	Mar 8, 2011
28	García, Gonzalo	Transport operator	Director of Metropolitan Transport, ADO/MVSA	Mexico City	Mar 9, 2011
29	Coxteñica, Jorge	Government official	Technical-Operations Director, Metrobus	Mexico City	Mar 9, 2011
30	Sheinbaum, Claudia	Government official	Minister, SMA	Mexico City	Mar 11, 2011
31	Navarro, Bernardo	Government official	Chief of advisors to the Minister, SETRAVI	Mexico City	Mar 14, 2011
32	Barragán, Magdalena	Transport operator	President, Ruta 88	Mexico City	Mar 14, 2011
33	Mejía, Martín	Government official	Regulation Director, SETRAVI	Mexico City	Mar 17, 2011
34	Amador, Edgar	Government official	Undersecretary of Economic Development, Secretary of Finance	Mexico City	Mar 18, 2011
35	Blancas, Silvia	Government official	Fideicomiso Calidad en Vida	Mexico City	Mar 18, 2011
36	Quiroga, Mauricio	Government official	Finance Director, Metrobus	Mexico City	Mar 18, 2011

Appendix D. List of interviews in Santiago

Interview Number	Name	Stakeholder Type	Positions held / Organization	Case study	Date
37	Name withheld*	Government official	Concessions department, MOPTT	Santiago	Apr 9, 2012
38	Name withheld*	Government official	Metro de Santiago	Santiago	Apr 4, 2012
39	Name withheld*	Government official	SECTRA	Santiago	Apr 7, 2012
40	Correa, Germán	Government official	Minister MTT; Coordinator PTUS	Santiago	Jun 13, 2012
41	Dosque, Simón	Transport operator	Federación Siglo XXI; Buses Metropolitana; Buses Vule	Santiago	Jun 15, 2012
42	Thomas, Alan	Government official	SECTRA	Santiago	Jun 15, 2012
43	Puga, Diego	Government official	Finance Director, Transantiago	Santiago	Jun 18, 2012
44	Minteguiga, Jorge	Consultant/supplier to transport operators		Santiago	Jun 18, 2012
45	Willumsen, Luis	Consultant to transport operators	Steer Davies Gleave	Santiago	Jun 20, 2012
46	Marinakis, Cristián	Transport operator	AGMPT	Santiago	Jun 20, 2012
47	Moya, Héctor	Transport operator	President, Su Bus Chile	Santiago	Jun 21, 2012
48	Román, Carlos	Transport operator	AGMPT	Santiago	Jul 6, 2012
49	Cruzat, Raimundo	Government official	Director, Transantiago	Santiago	Jul 9, 2012
50	Urquiza, Alberto	Transport operator	Country manager, Veolia; General Manager Red Bus	Santiago	Jul 11, 2012
51	Marinakis, Demetrio	Transport operator	President, Línea Ovalle-Negrete; President, AGMPT	Santiago	Jul 12, 2012
52	Nogales, Dominga	Transport operator	President, FGDS	Santiago	Jul 13, 2012
53	Etcheberry, Javier	Government official	Minister, MOPTT	Santiago	Jul 17, 2012
54	Covarrubias, Ana Laura	Government official	Director, Transantiago	Santiago	Jul 18, 2012
55	Simonetti, Carolina	Government official	Transantiago	Santiago	Jul 18, 2012
56	Huerta, Armando	Transport operator	President, FGDS	Santiago	Jul 18, 2012
57	Panza, Orlando	Transport operator	President, Federación Santiago	Santiago	Jul 19, 2012
58	Múñoz, Juan Carlos	Government official/Academic	Advisor to the Minister, MOPTT; Professor, Catholic University	Santiago	Jul 20, 2012
59	Cortázar, René	Government official	Minister, MTT	Santiago	Jul 21, 2012
60	MacAllister, Edgar	Transport operator	Manager, Inversiones Alsacia	Santiago	Jul 23, 2012
61	Sánchez López, Jaime	Transport operator	Manager, Red Bus; Inversiones Alsacia	Santiago	Jul 23, 2012
62	Gúzman, Isabel	Government official	Coordinator, Transantiago	Santiago	Jul 26, 2012
63	Pinto, Juan	Transport operator	Treasurer and President, AGMPT; President, Federación Siglo XXI; President, Buses Metropolitana	Santiago	Jul 27, 2012
64	Díaz, Guillermo	Government official	Under Minister of Transport, MOPTT	Santiago	Aug 4, 2012

Appendix E. Abbreviations

Abbreviation	Meaning
ADB	Asian Development Bank
ADO	Autobuses de Oriente, SA (Eastern Buses)
AFT	Administrador Financiero de Transantiago (Transantiago's Financial Administrator)
AGMTP	Asociación Gremial Metropolitana de Transporte de Pasajeros (Metropolitan Passenger Transport Trade Union)
ALSA	Automóviles Luarca, Sociedad Anónima (Luarca Automobiles, Limited)
AUP-R100	Autotransportes Urbanos de Pasajeros - Ruta 100 (Urban Passenger Auto-transports, Route 100)
BARTSCE	Bloque de Agrupaciones y Rutas de Taxistas (Block of Taxi Routes and Groups)
BRT	Bus Rapid Transit
BRT	Bus Rapid Transit
C4-17M	Corredor Eje 4-17 de Marzo, SA (March 17, Eje 4 Corridor)
CAF	Corporación Andina de Fomento (Latin American Development Bank)
CAT	Coalición de Agrupaciones de Taxistas (Coalition of groups of taxis)
CGT	Coordinación General de Transporte (General Coordination of Transport)
CGTr	Confederación General de Trabajadores (General Confederation of Workers)
CISA	Corredor Insurgentes, SA (Insurgentes Corridor, Limited)
CNCF	Constructora Nacional de Carros de Ferrocarril (National builder of railroad cars)
CNRT	Confederación Nacional Revolucionaria del Transporte
CODETT	Consejo de Defensa de Trabajadores de Transporte (Council for the Defense of Transportation Workers)
COPSA	Corredor Oriente Poniente, SA (East-West Corridor, Limited)
CORFO	Corporación de Fomento a la Producción (Chilean Economic Development Agency)
COVITUR	Comisión de Vialidad y Transporte Urbano (Road and urban transport commission)
CROM	Confederación Regional de Obrero Mexicanos (Regional Confederation of Mexican Workers)
CTM	Confederación de Trabajadores de México (Confederation of Workers of Mexico)
CTTSA	Corredor Tacubaya Tepalcates, SA (Tacubaya-Tepalcates Corridor, Limited)
CUTAC	Consejo Unificador de Taxistas (Taxi Driver Unifying Council)
DC	Partido Demócrata Cristiano (Christian Democrat Party)
DDF	Departamento del Distrito Federal (Federal District Department)
DF	Distrito Federal (Federal District)
ENAP	Empresa Nacional de Petróleo (National Oil Company)
ENTC	Empresa Nacional de Transporte Colectivo (National Collective Transport Enterprise)
ENTC	Empresa Nacional de Transportes Colectivos (National Collective Transport Enterprise)
ETCE	Empresa de Transportes Colectivos del Estado (Collective Transport Enterprise of the State)
EZLN	Ejército Zapatista de Liberación Nacional (Zapatista Army of National Liberation)
FANALCA	Fábrica Nacional de Carrocerías, Colombia
FCT	Federación de Cooperativas de Taxistas (Federation of Taxi Driver Cooperatives)
FGDTS	Federación Gremial de Dueños de Taxi Buses de Santiago (Trade Union Federation of Taxi Bus Owners of Santiago)
FMT	Federación de Taxistas de México (Federation of Tax drivers of Mexico)
GEF	Global Environmental Facility
GMT	Grupo Metropolitano de Transporte (Metropolitan Transport Group)
GTZ	German Society for International Cooperation
IADB	Interamerican Development Bank
IADB	Inter-American Development Bank
ICA	Ingenieros Civiles Asociados (Civil Engineering Associates)
ICAP	Índice de carga promedio (Average load index)

Abbreviation	Meaning
ICF	Índice de cumplimiento de la frecuencia (Frequency compliance index)
ICPH	Índice de cumplimiento de plazas-hora (Seat-hour compliance index)
ICR	Índice de cumplimiento de la regularidad (Regularity compliance index)
ITDP	Institute for Transportation and Development Policy
MCMA	Mexico City Metropolitan Area
MIVSA	Movilidad Integral de Vanguardia, SA
MOP	Ministerio de Obras Públicas (Public Works Ministry)
MOPTT	Ministerio de Obras Públicas, Transporte y Telecomunicaciones (Ministry of Public Works, Transport and Telecommunications)
MPI	Movimiento Proletario Independiente (Independent Proletarian Movement)
MTT	Ministerio de Transporte y Telecomunicaciones (Ministry of Transport and Telecommunications)
NAFTA	North American Free Trade Agreement
PHRD	Japan Policy and Human Resources Development Fund
PPD	Partido por la Democracia (Party for Democracy)
PPT	Pago por pasajero transportado (Payment per transported passenger)
PRD	Partido de la Revolución Democrática (Democratic Revolution Party)
PRI	Partido Revolucionario Institucional (Institutional Revolutionary Party)
PS	Partido Socialista de Chile (Socialist Party of Chile)
PTUS	Plan de Transporte Urbano para la Ciudad de Santiago 2000-2010 (2000-2010 City of Santiago Urban Transportation Plan)
RECSA	Rey Cuahutémoc, SA
RIT	Rede Integrada de Transporte (Integrated transport network)
RN	Renovación Nacional (National Renewal)
SAJJ	Sánchez Armas Juan José, SA
SARO	Sistema Alimentador de la Red Ortogonal (Orthogonal Network Feeder System)
SECTRA	Secretaría Interministerial de Planificación de Transporte (Inter-ministerial Transport Planning Secretariat)
SEFI	Servicios Especiales de Frecuencia Intensiva (Intensive Frequency Special Services)
SETRAVI	Secretaría de Transporte y Vialidad (Ministry of Transport and Traffic)
SIAUT	Sistema de Información y Atención al Usuario (Transantiago Information and attention to users system)
SMA	Secretaría del Medio Ambiente (Ministry of the Environment, Mexico City)
STC-Metro	Sistema de Transporte Colectivo-Metro (Collective Transport System-Metro)
STE	Servicio de Transportes Eléctricos (Electric Transport Service)
SUTAUR-100	Sindicato Unico de Trabajadores de Autotransportes Urbanos de Pasajeros-Ruta 100 (Unique Union of Urban Passenger Auto-transport-Route 100 workers)
UDI	Unión Democrática Independiente (Independent Democratic Union)
UF	Unidades de Fomento (Unit of account)
UP	Unidad Popular (Popular Union)
VKM	Vehicle-kilometer
WRI	World Resources Institute

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