SANTIAGO’S LAND-USE METROPOLITAN PLAN (PRIS): ANALYSIS AND EVALUATION OF TWO DECADES OF IMPLEMENTATION.

by

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Submitted to the Department of Urban Studies and Planning on May 25, 1990 in partial fulfillment of the requirements for the Degree of

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To Lucia, for her love (and patience).

To my mother, for her infinite faith,

and

to my father, for his unreasonable expectations.

These have been my driving forces...
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ABSTRACT

I have made an analysis of Santiago's Intercommunal Land-Use Plan, PRIS (1960), in a historical perspective; its style of implementation, as well as Chile's planning policy environment during the period 1960-1980, a period in Chile of considerable political change. My intention was to find common as well as diverse elements in the planning environments of the four political regimes that took place during this time frame that could have had an impact on PRIS' implementation. I examined the gaps between declared intentions and their actual implementation, and the effectiveness in reaching objectives. I tried to isolate the difficulties encountered by PRIS that happened because of the Chilean planning policy context of the 60s and 70s, from those that were constant to this urban planning approach (recognizing that both factors have strong interrelationships).

Thesis Advisor: Dr. Ralph Gakenheimer

Title: Professor of Urban Studies and Planning
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INTRODUCTION

"Those professions that do not look at their past might not have a future".

(Laurence C. Gerchens, AICP, Executive Secretary of The Society for American City and Regional Planning History, at the 1990 APA National Planning Conference in Denver)

Land-use metropolitan planning, seems to be returning in the western hemisphere following more than a decade of intellectual proscription. After being considered as the solution to urban equity and development during the 50s and 60s, general disenchantment with its results banned it almost completely during the 70s and 80s from the academic field (though not from practice). It was sustained that planners inclined to this type of approach in urban planning were subject to three unsurmountable flaws: they were biased toward physical planning, usually omitting social considerations, they inevitably failed in designing adequate implementation strategies, and they disregarded social participation, because they usually belonged to the tradition of top-down planning.

The reaction in the 70s in western developed countries, mainly in the U.S., was to implement only policies at both, the macro level (national planning), and at the base-level (community planning). The first was to create the overall framework for reaching national goals, and the latter would allow a more direct participation of the people in the decisions of affecting their habitat.

Chile, and Santiago (the capital city) were certainly not the exception to this process. Santiago’s Inter-municipal
Plan (PRIS), promulgated in 1960, was considered in its origins as the tool for planning a modern metropolis, and controlling its growth. And though an initial effort for implementation was made, put in a context of increasing social participation during the 60s and early 70s, it was seen by coming planners as insufficient for confronting the social conflicts that had emerged. Consequently the plan was much left aside.

During the military government (1973-1990), and following the trend described of pulling away from metropolitan planning, urban planning was restructured. This task was mainly accomplished by economists (many of whom had studied in U.S. universities), polarizing it into the two extreme levels pointed out: national urban planning, and municipal land-use planning. For the first level, planners created an indicative policy instrument, the National Policy of Urban Development (PNDU) which introduced market oriented policies to the field. And at the local level, most municipal land-use plans were reformulated in a five year period (1980-1985), making them consistent with the ideology of PNDU. As a corollary, transgressions to metropolitan plans like that of Santiago's ¹, subject of this study, were tacitly tolerated by the central authorities each time conflicts between both instances arose. As I shall point out later, this was facilitated by the fact that metropolitan plans had no support-institution to enforce their prescriptions. Municipalities in this new scheme were granted with greater financial resources, though their decision making power was greatly dimmed.

By the end of the 80s however, comprehensive planning seems

¹ Besides PRIS, two other metropolitan plans were coded in Chile: Concepcion (1965), and Valparaiso-Vina del Mar (1970).
to be coming back from its reclusion. Again international technical assistance agencies -- which were more on the line of an anti-state approach during the 70s and early 80s-- are encouraging comprehensive urban planning [Rivkin: 1983]. In the United States, several cases which were not in the mainstream of their times have shown impressive results in comprehensive planning: Miami, Nashville, Jacksonville, and Indianapolis [Patterson: 1988], while other cities have recently reformulated their own: Chicago, Boston, Denver, as well as Toronto in Canada. Washington D.C.'s National Capital Planning Commission - NCPC, is about to initiate studies to project the U.S. national capital in a comprehensive approach to the year 2050. Regarding institutional aspects, discussion is taking place whether Council of Governments (COGs) should be granted more resources and authority to enforce sub-state regional plans. Planners are also realizing that the crusade of protecting the environment, where territorial jurisdictions are clearly an obstacle, needs this more large-scale approach. We read in a recent edition of a Connecticut-based planning publication:

"Although (recent intense residential and commercial growth in Connecticut has) increased municipal tax bases, it has also caused inconsistent land use patterns, degradation or loss of regionally-significant natural and agricultural resources, overburdened intrastate roads and restricted access to affordable housing. In other words, growth often occurred without addressing regional economic and environmental impacts. Because of strong 'home rule' powers, however, municipalities in Connecticut are not legally obligated to address development impacts that transcend

established political boundaries". 

At this point I should make clear that by no means I am advocating through this study a revival of the traditional comprehensive land-use plan; that of static nature, and produced by a professional clique, with no built-in participatory structure, and of exclusive physical nature. What I will be promoting is the idea that a scale and scope like of this type of approach has not been replaced in current urban planning instruments, and is truly missing when dealing with problems like social equity, the environment, or infrastructure maintenance and service provision.

The general trend toward a more comprehensive approach in urban planning will surely hit Chile in the coming years, and an effort will have to be made to place it into a context of higher social participation and pluralism, which my country has adopted. I believe then that the time has come to start analyzing Chile's own experience in metropolitan planning, so to learn from the past what difficulties are likely to be encountered, and what, on the other hand, has proven to work well. The main purpose of this thesis is to study the specific case of Santiago and its 1960 Metropolitan Plan (PRIS 4) in relation to the socio-political context in which it operated; to analyze not only what failed or succeeded, but also to examine the policy context in which the plan was designed and implemented, and infer from there some of the possible causes for these failures and achievements.


4 "Plan Regulador Intercomunal de Santiago" - PRIS (1960).
The present context looks promising for reconciling national planning and municipal planning, and my hope is that studies like this will see increase their value in the near future.
I intend to make a historical analysis of Santiago's intercommunal regulador plan PRIS 5, its style of implementation, as well as Chile's planning policy environment during the period 1960-1980. This was the time-frame given by its authors as the period in which PRIS prescriptions should have been in full operation. The context for this study will be Chile's past four political regimes: Alessandri, Frei, Allende, and Pinochet (up to 1980), a context of considerable political change. I will try to find common as well as diverse elements during this time frame that could have had an impact on PRIS' implementation. I will examine the gaps between declared intentions and their actual implementation, and the effectiveness in reaching objectives. I will also attempt to identify which of the difficulties encountered by PRIS owe more to the chilean planning policy context of the 60s and 70s, and which instead owe just to the approach chosen, recognizing that both factors have strong interrelationships. Finally, based on all this, I will make some concluding remarks.

In the first chapter I will make a brief review of metropolitan planning literature and, and its actual standing so to put PRIS in a historical policy context. Chapter II will deal with a detailed analysis of PRIS' objectives, precepts, updates, and evaluation of results. Next, in chapter III, I will recount the policy environment during the succeeding governments between 1960 and 1980,

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5 Including the modification to the suburban land-use code introduced in 1979 (Supreme Decree No. 420, 1979).
trying to establish connections to the PRIS' objectives, precepts, updates, and results. Finally, in chapter IV I will make some concluding remarks and recommendations.
CHAPTER I: METROPOLITAN PLANNING SINCE 1950: A DISCUSSION

With this chapter I intend to make a conceptual framework for analysis of PRIS. I will review the experience that metropolitan land-use planning has showed in western countries in the past thirty years, at the light of Latin American comprehensive planning tradition. This is an unfinished story and not a happy one. However, much has been learned in the process.

COMPREHENSIVE PLANNING AND PLANNERS IN LATIN AMERICA BETWEEN 1950 AND 1980

Latin American planning in the 50s and 60s was deeply grounded on the Comtean tradition of the nineteenth century which states that scientific rationality is to guide of the human enterprise [Friedman: 1986]. According to this vision, a plan is nothing but the translation of an historic fate into pragmatic terms. To challenge a plan then, should be as difficult as to challenge the law of gravity.

Added to the above, two other elements have profoundly affected planning in Latin america. In the first place, the role that the state has traditionally had as a strong and centralized one, inheritance from the colonial period in which all major decisions were taken by the spanish crown. Once the new countries emerged in the early nineteeneth

6 Auguste Comte (1798-1857), french mathematician and philosopher.
century, the role of the crown was transferred to the new states formed. The second element is the impact that the ideas of the Enlightenment period had in the formation of these new countries, determining a hierarchical relation with the state, which establishes that the interests of the state are identical to those of the people, a concept that still endures [Friedman: 1986].

In the 50s and 60s, when long-range planning became increasingly a state activity in Latin America, the influence of this tradition, induced planners in the region to understand comprehensive plans as an expression of the public interests, that once legally coded, would provide a course in history. Planning, could not then be abandon to blind forces like the market or political interests, but instead, should be carried by experts, who, absent of personal political agendas, would obey only the national interests [Friedman: 1986].

Three significant events greatly influenced planners in Latin America in the 50s and 60s. The first was the success of the Marshall Plan (1947-52), which connected investment to planning, and thus established the identity "planning equals development", a paradigm that would influence an entire generation of planners in this continent [Friedman: 1986]. In the second place, the establishment of the French Planning Commissariat (beginning of the 50s) whose objectives were industrialization and modernization of the infrastructure under the concept of indicative planning 

Finally, the creation of ECLA (Economic Commission for Latin

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This is normally used to define a role for the state as one leading the private sector toward the development of target areas in accordance to a nation's interest. The instruments usually employed to pursue this objective are initial public investment, incentives and government action in general.
America), with its innovative techniques in investment programming, knowledge taught to several young planners in the region, and specially in Chile where ECLA had its headquarters. For ECLA, economic growth and national development goals were two sides of a same coin, and were to be reached through a rapid industrialization process based on the creation of protected markets, for which the state was the main actor.

By the end of the 60s however, there was general disappointment with long-term planning in Latin America. The impetus of the beginning of the decade was gone. Its principal objective: a more equitable distribution of resources amongst the population seemed to be even farther away than before. Also, planning was loosing the battle in incorporating social and economically the enormous masses of migrants to cities that had triggered in the developing world in the mid 40s. Lets not forget that, in absolute numbers, this flow of low-income persons to the urban areas in LDCs since World War II constituted one of the greatest migrations in human history.

"The vast stretches of make-shift dwellings surrounding virtually every city of the developing world, (in many cases constituting the majority of the population), are a visual manifestation of the general breakdown of conventional legal and administrative institutions when confronted with the sheer magnitudes of current levels of urbanization" [Doeble: 1975].

Beginning the 70s planning was under change. The informal sector was "discovered" (ILO 1972) and later on (ILO 1977) the satisfaction of basic needs was put into the planning agenda in most international planning institutions. World Bank, for example, started promoting plans aimed to the
self-improvement in urban housing and rural development. On the other hand, the apparent success of the Newly Industrialized Countries (NICs) switched the import substitution ideology to another which promoted industrial exports. Rational planning and linear growth put in this new context were losing their grounds. If planning was in a crisis in the late 60s, a decade later was in a complete disorder [Friedman: 1986]. Some countries in the region, like Chile and Uruguay, begun by then experimenting with neo-liberal policies and their application to urban planning.

By the late 70s in the United States and Western Europe the tendency was toward speeding up the plan-making process, to involve those affected, to integrate resource and development planning, to make planning more adaptable, less detailed; to make implementation more a matter of guiding growth, less a structure of legal control for what shall not be done [OECD, Ian Haywood: 1977]. Long-range comprehensive planning became under attack --both within and without the planning profession-- and is still today. Many specialist go as far as to believe that it is ineffective, unrealistic, lacking initiative, and even irrelevant [Patterson: 1983]. By the same token, the relatively short-term community development planning has been increasing since then, specially in the United States, and it is in this area where most of the planning investment goes, and where the greatest public interest is.

In most of Latin America however, this process was not entirely captured. In the first place because of different public policy-making traditions described. But primarily because most of these countries were at the time under military regimes, where top-down planning had found again its way. In Chile for instance, despite greater financial
resources granted to the local governments (municipalities) during the Pinochet regime, no greater decision-making power was --on a participatory basis-- tied up with this policy.

From the frustrated experience of the 60s and 70s, comprehensive planning theorists, and planners have gained more understanding of the political consequences of this approach. In the first place, planning is now seen as inseparable from politics; no such thing as neutral or scientific planning is possible; and no plans can succeed if no consideration is given to current political limitations [Friedman: 1986]. In the second place, the state is one among other actors in a society. It is neither totally autonomous nor totally an instrument of class domination. The state is not neutral, and has its own agenda, which at times is opposed to other legitimate actors [Friedman: 1986]. In the urban planning realm, much more consciousness exists among urban planners to recognize that urbanization creates new groupings of interests and centers of power and influence, each of which attempts to manipulate the legal/administrative system to its own ends [Doeble: 1975]; that land-use regulations are often drafted to protect these vested interests and to serve existing owners at the expense of new development [Courtney in Dunkerley: 1983], that local vested interests perpetuate status-quo situations (specifically social segregation) [Patterson: 1988].

MAIN FAILURES OF METROPOLITAN PLANS

In general, land-use metropolitan plans in LDCs have failed to achieve their goals. A desire of greater land-use efficiency and a more equitable distribution of urban resources (mainly land) have not been provided by this...
planning approach. Many reasons are usually given for this phenomena, but the most cited among the literature reviewed are:

**Over-ambitious objectives**

The objectives usually put forward in most metropolitan plans and in most land-use policies, specially within a context of rapid urban expansion (distinctiveness of most of Latin America's capital cities during the 60s and 70s) are: appropriate supply of urbanized land for housing, for recreational activities, for productive activities, and services; harmonious urban spatial patterns; greater equity in wealth income, including access by low-income families to adequate shelter; spatial distribution of population and activities at the regional and national levels consistent with general national priorities; etc, etc. These objectives not only overlap and raise the typical conflict between giving priority to efficiency or to equity, particularly in the short term; they are also too vague to be useful [Dunkerley: 1983]. "They do not define the concepts needed to determine operational priorities and to adjust these priorities to rapidly changing conditions. Desirable urban patterns are particularly difficult to define with precision; many value judgments are involved and must be made in ignorance of long-term effects and of changes that will occur over the long lifetime of what now is being built" [Dunkerley: 1983].

Another type of objective that has been a constant to most large-scale urban plans has been the aspiration of achieving "efficient" land-use patterns and urban growth. This traditionally has been understood as to mean "denser" urban development. The argument has been that the higher the
density of urban development, the lower the per capita cost in infrastructure. It is also said that another advantage of density is to avoid misuse, and protect (however indirectly), high valued agricultural land, as means of guaranteeing food provision for the city. Evidence provided by experts for inefficient land use is the 'leap-frog' style of development (bypassing vacant tracts). The strategy to address this problem during the 60s and 70s was to define strict urban limits around the built area of cities, i.e. a moratorium solution. But those types of limits implied a no-growth solution, un-implementable in the Latin American context of the time. Sooner than latter, not only developers and organized settlers advanced those limits, but the state as well, regardless the existence of a plan. Experience, has proven that metropolitan plans rarely alter urban density against economic forces [Patterson: 1988].

The creation of a greenbelt around cities was an inspiration taken from the London Greater Plan which was also typically adopted by metropolitan plans elsewhere. Agriculture land in the outskirts of the city would not only deserve protection from the production point of view, but also as a mean of assuring the existence of close-by open space to all citizens (again a social equity principle). In less developed countries this idea has rarely succeeded. However, this remains as a valid aspiration which still needs further study in economic terms.

Recent empirical studies in the United States for example, have shown that this objective can be accomplished within the rules of the market if regulations are well designed and include the existence of exurban districts. In those cases, the demand for exurban land shifts to exurban districts and not to farmland protected in a greenbelt; the price gradient of exurban land rises near the greenbelt area denoting that exurban land captures scenic and other benefits from the greenbelt; and if both types of districts are well defined, both types of activities can coexist. For further information see: Nelson, Arthur C., "An empirical note
Physical bias and absence of implementation and monitoring mechanisms

The physical orientation of Latin American urban planners, specially in the southern cone, has a strong inspiration in the British tradition, which consists in preparing extremely detailed plans for land-use, transportation, and density, which give official status to the pattern to be achieved. It is strongly influenced by architectural design concepts. This approach has failed in implementation due to disassociating public investment decisions with plan prescriptions, and also because insufficient and inadequate personnel usually operates the system. The rigidity of such approaches have contributed to the gap between plan and performance [Rivkin in Dunkerley: 1983].

The 'Plano Regulador' (traditional land-use instrument in Latin America) is structured as a final product instead as a first step in a continuing planning process. A process that should begin with the identification of problems to their solution through coordinated implementation measures. Rarely there has been left room for periodic revisions, with follow-up studies. Neither has been concern for reconsideration of objectives based on changing priorities among local interest groups. "When the same political leadership is retained over many years, the same rigid plan prevails. With a change in administration the entire plan can be tossed out" [Violich-Daughters: 1987].

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on how regional urban containment policy influences an interaction between greenbelt and exurban land markets", in Journal of the American Planning Association, Vol 54:2, Spring 1988. (An even more extended article can be found in JAPA Spring 1986).
In general, metropolitan planners have lacked of strategic thinking, they have tended to see strategy as large scale, and tactics as small scale. They have demonstrated good tactical ability, but poor strategic thinking, specially in two areas: unnecessary separation between formulation and implementation, and inability to see planning in the context of public management system, specifically paying attention to the process of allocation of resources (and in a broader sense than public finance). Implementation of physical plans based on location permit granting (according to established zoning regulations), is rather a crude mechanism confronted with indicative economic plans [OECD, Dekleva, et al: 1977].

In LDCs, where urban growth is rapid, and financial resources and infrastructure are invariably insufficient, metropolitan planning has become an isolated activity, often lacking of effective tools for implementation [Doeble: 1975]. Urban planning is still seen as physical planning, of static nature, lacking both investment priorities and effective land-use control policies. Almost no attention is paid to implementation, "to anticipating the reaction of market forces, and to assessing the cost of various government agencies and the economic effects on different income groups" [Courtney in Dunkerley: 1983]. During the past three decades of urban planning in Latin America planners have primarily emphasized the technical and physical aspects of planning instead of the policy-making function, physical development instead of a continuous participatory process. This narrow conception has left behind completely unsolved the most vital social and economic problems of the cities, physical improvements have normally been detrimental for the poor, and spatial segregation has deepen [Violich-Daughters: 1987].
Inappropriateness of land management systems

Starting the mid 70s the tendency in metropolitan planning in western countries was to reverse the tight control on urban expansion and to make the market control the incorporation of land to be urbanized. But the market has shown poor results in producing efficient land-use patterns. Without some standards for land subdivisions and building, market forces have often produced patterns of development that have increased the cost of providing public services, increases in costs that cannot be readily related or charged to individual actions that caused them [Dunkerley: 1983].

The leading role of public authorities in land management and in guiding growth seems to be over. As the Vancouver Habitat Congress of 1976 had stated in its final document:

"Land, because of its unique nature and the crucial role it plays in human settlements, cannot be treated as an ordinary asset, controlled by individuals and subject to the pressures and inefficiencies of the market. Private land is also a principal instrument of accumulation and concentration of wealth and therefore contributes to social injustice; if unchecked, it may become a major obstacle in the planning and implementation of development schemes. Social justice, urban renewal and development, the provision of decent dwellings and healthy conditions for the people can only be achieved if land is used in the interests of society as a whole"..."Land is a scarce resource whose management should be subject to public surveillance or control in the interest of the nation".

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The strategy in the United States and England has been a higher degrees of government involvement in land management with an active participation of interests groups. The state guides private developers representing the public interest and according to a well defined plan of priorities and incentives, normally leaving space for negotiations. Interest groups and individuals have a say in establishing zoning regulations in public meetings, and through lobbying the legislature; and if adversely affected have always the resort of acting through the judicial system. Ordinances and regulations are constantly revised according to changing conditions.

Control of land speculation and price is usually the result of a poor land management system. Powerful social and economic forces, like accelerated processes of urbanization and urban population growth, periods of low interest rates and or high inflation, capital markets poorly developed which makes land a secure investment, semi-monopolistic land ownership, etc., have gone beyond plans' control systems or of the responsible urban planning institutions. Ironically, in occasions land-use plans themselves have generated these types of phenomena; for example, by stating in advance which land is to-be-urbanized, frequently generates land speculation; in a market economy, insufficient stock of serviced land for development, as a result of a new plan, will definitely increase prices. Speculation also arises from weak enforcement and modification of regulations, which leads to escalation of land prices, excluding low-income households [Courtney in Dunkerley: 1983].

The other side of the story is that the high value of favorable decisions generates a climate of corruption in the public policy environment. Despite strong legal sanctions and enforcement agencies, for instance, it may not be
possible to implement density controls if the population is expanding rapidly but the supply of urbanized land is tightly constrained. Regulatory measures slow the rate at which urban land is supplied and hence increase pressures to subvert them [Dunkerley: 1983].

Rigidity of prescriptions and excessive extension of time frames

This rigidity of comprehensive land-use plans has been their worst enemy given their usual long-term strategy. Generally, they look at ten or fifteen years ahead with a ten year look at proposals for development. But the fact of the matter is that reality keeps demonstrating the near impossibility of any accurate forecast of the likely resource situation a decade in advance; specially in LDCs. Also, long-term planning has been commonly associated with inflexible controls mechanisms, which has made adjustment to rapid change extremely difficult. Moreover, the static nature of these regulations puts the public sector in a position of reaction and constraint, rather than initiation and promotion, and they may also have serious negative effects, causing delays and unproductive expenditures in the process of securing exceptions, or spurious conformity to the plans [Courtney in Dunkerley: 1983]. As a consequence comprehensive plans have had an appearance of unreality, or at least uncertainty [OECD, Murray Stewart: 1977].

Inappropriate way of working with instability

Metropolitan land-use plans in developing countries are even more rarely followed than in developed countries. "Incorrectly estimated growth patterns, political pressure
for change, and failure to provide the indicated public
services are common causes of this poor record" [Dunkerley: 1983]. Also political instability. Urban planners need to
find a way of dealing with instability. Political and
institutional instability has been the single most important
reason while metropolitan plans have not succeeded in Latin
America. Plans have lacked the political will and stability
needed to extend their usefulness over the period of one and
two decades for which they were projected. Greater political
continuity as well as institutional reforms are basic
prerequisites to long-range policy-making [Violich-
Daughters: 1987].

This brings about another related issue: working with
uncertainty. Planning systems which have left no room for
uncertain outcomes of their prescriptions, or for variables
for which they have no control, with the complexity of
uncertainty of decisions in which they are involved, have
had an uneasy performance, if not relinquished completely.
On the other hand, a sense of pragmatism has shown that
land-use plans, despite efforts to keep up with their
original design, are adapted quite regularly [OECD, Andreas
Faludi: 1977]. The case of PRIS is a good example: as I
shall describe later, after several years of implementing a
no-growth strategy, it became evident that the plan had
failed in anticipating the magnitude of population growth
for Santiago. Nevertheless, the plan had no alternative
prescriptions or a structured way of deciding alternative
solutions. Soon, PRIS planners, instead of using the
instrument for guiding and managing this diverting variable,
were only introducing the necessary changes on the plan so
it would fit with reality, i.e. drawing new urban limits.

This nearly obsessive need for accomplishing a complete
finished product, has made the periods of study plans and
design of metropolitan extremely lengthy. In LDCs this is aggravated by the lack of information and data. The duration of a research and design period for preparing a plan like this normally takes between three to five years, sometimes more \(^{10}\), which often makes them outdated before becoming operational [OECD Murray Stewart: 1977]. Besides, typically there has been absence of provision for regular short-term updating to keep up with changing circumstances, which makes them nearly impossible to coordinate with annual programming and budget decisions [OECD, Murray Stewart: 1977].

So, while mid and long-range planning have been the paradigm for urban planners (constantly praised in the field’s literature), the plans have usually failed under short term crisis, and thus, improvisation and adaptation have usually taken place in policy design, despite of these formal long-range plans [Friedman: 1986].

Lack of public participation

If a plan is imposed without considering the problems of implementation, feedback, and involvement of those affected (citizens, landowners, investors, industrialists) the plan is likely to be left aside [OECD, Ian Haywood: 1977]. One key reason why large-scale land-use plans tend to be left aside is that they tend to deny room for public participation.

In some countries’ efforts to overcome this problem through the organization of public meetings, before, during and after a metropolitan plan is coded. But experience has shown that still there is an unfortunate information and education

\(^{10}\) PRIS’ study took seven years.
gap between planners and the public, which needs to be closed before these meetings can be less than inconsequential. The most common deficiencies are: disorganized participation systems, unaware authorities of the usefulness of participation, unavailability of accurate information, no opportunities for everyone to speak up, ill-use of groups and people willing to get involved, no consensus on common agendas between politicians, technicians, and public, etc. The usual public meeting to discuss a new metropolitan plan to-be-coded goes more or less like this:

"...suddenly, someone is telling (ordinary people) to think about their future in relation to that of a city, about the future living-surroundings of their future children. And someone is telling them that in nice booklets. Or by way of official papers. Papers that otherwise one only gets from tax offices or police officers. And suddenly, while (they) are accustomed to silently walking on the shady side of the street, trying to be quiet, and avoiding trouble, (they) are invited to speak up to people who seem to be in a position to order major changes in city-life"..." Only that what (it is conveyed to them), in written and spoken words, is put in most difficult and official terms. A kind of sanskrit"..."They have to see alternative solutions, choose from them and see through this, to other problems that might emerge from their choice. They are expected to be able to talk about all this to people who clearly know better and are trained masters in discussion. Who is really informed? Who could really participate?"

In Latin American, where extreme inequalities exist among different areas of the cities, where national politics are above all public decisions, and where the state has traditionally played a strong role in deciding what is best for the public interest, a metropolitan level town meeting can be highly unproductive and confrontational. There, plans are generally considered to be more property of professional personnel, who are directly influenced by political power, than instruments for reflecting the will of a particular community [Violich-Daughters: 1987].

**PERSPECTIVES FOR THE 90s**

Nevertheless all these difficulties that comprehensive metropolitan planning has confronted in past decades, it still seems to be the level of urban planning where it is possible to extract the relevant issues of national policies --sectoral or comprehensive-- make a framework with interpretations that convey toward the systematic development of the metropolitan area, and to apply the decisions to areas of the city [Gakenheimer: 1971].

Metropolitan plans, though usually absent of legal enforcing powers and powerful backing institutions, have had in some cases success in promoting good ideas. Concepts which serve to smaller scale plans to work under a larger conceptual framework. Greenbelt, commercial corridors, water resource management, etc, are usual topics that local plans make reference to metropolitan plans, even if not forced to by law.

There seems to be indications of new attitudes toward land use planning and regulation which can make metropolitan plans more operational than in the past. The older types of
comprehensive land-use and master plans are giving way to a more flexible approach relating planning and implementation more closely at the metropolitan or regional level. Land-use planning in general, is now almost invariably seen as a continuous process, requiring periodic review of actual accomplishments and changing requirements and a pragmatic approach to meeting multiple objectives with the very limited means available -- not least, those for implementation and enforcement [Dunkerley: 1983].

For Latin America there is still a greater challenge. During the 80s, this continent has seen a new actor that rise: the anonymous poor masses; a growing sector with high levels of organization and capacity for action, which are challenging the old scheme of a bourgeoisie control of the state [Friedman: 1986]. Unless metropolitan planning becomes a process where this social sector is incorporated into a formal participatory land-use planning procedure, we are likely to see in the future a deepening differentiation of two types of cities: that where planning is structured and effective, and another -- where the majority lives -- where planning goes behind de facto land-use operations.
CHAPTER II: THE INTERCOMMUNAL PLAN OF SANTIAGO -- PRIS

INTRODUCTORY SYNOPSIS

Santiago's metropolitan land-use plan --PRIS-- 12, has already existed for thirty years. It was promulgated in 1960; and has undergone few changes since, remaining today as a legally recognized document. In 1979 substantial modifications were introduced to the so called "suburban area" through the Supreme Decree 420/79 13, transforming part of the original PRIS into a new plan.

The initial plan (1960) was prepared following a world trend on metropolitan master planning, influenced by the London Greater Plan (1944), and specially by the Plan d'Aménagement et d'Organisation Générale de la Région Parisien --PADOG-- (1958). It was elaborated within the Planning Department of the Ministry of Public Works, where a special office was designated for this purpose 14. (When the Ministry of Housing was created in 1965 these activities were transferred there, specifically to the Urban Development Division). Under the direction of Juan Honold (architect), a group of professionals, mainly architects and engineers, had been working in this plan since 1953, i.e., they took seven years to have it ready, and convince the executive power

12 Plan Regulador Intercommunal de Santiago, D.S. no 2387, MOP, 11-10-60.

13 Supreme Decree No 420; MINVU, 10-31-79.

14 "Departamento de Planos Reguladores".
(lobbying in terms of U.S. politics) to promulgate it. As a strategy for territorial coordination, they had consulted with planning officials of the seventeen municipalities that were to compromise what the plan denominated the "Metropolitan Area of Santiago". After its adoption PRIS' physical statutes became incorporated in the corresponding municipal development guidance maps as the mechanism for implementation.

PRIS was an advanced instrument for its time, mainly due to having features as industrial zoning and traffic network design. Nonetheless, many of its propositions failed, either by lack of implementation, or else by not being followed by the private sector, community and even state institutions. It was an imperative style of planning, where its norms were transferred to municipal guidance maps with no consultation with the public, and imposed by decree in the belief that the state accurately represents the public interest (Comtean tradition), and that passing a law was just enough for the plan to become a reality, a classic concept of Latin American planners [Violich-Daughters: 1987].

In spite of PRIS weaknesses as a policy instrument, some of its precepts did thrive: industrial relocation, road network, and up to some extent, inter-municipal coordination. But its moratorium on land annexation completely failed in two of its main --and related-- goals: increasing urban density, and controlling growth in fringe areas.

Almost twenty years later, in 1979, and in a completely different political context, the liberalization of the exurban land, carried forward through the supreme decree No 420/79, made significant modifications to what the PRIS had designated as "suburban areas". Moratorium was abandon and a
growth management style was introduced. While the norms for the internal urbanized area of Santiago were left almost intact to the original plan, outside the perimeter was created an "urban expansion area", eliminating in this zone most restrictions on subdivision ordinances. The ideology behind this new policy was to introduce market rules to Santiago's exurban land, and was done in order to make the plan consistent with the general ongoing economic principles of market deregulation policies at the national level. Only few restrictions would apply for urbanizing this surrounding land, as its authors believed that productive rural land should freely compete with urbanized land, and, in general, that market forces are the most efficient way of protecting the public interests [Lopez: 1981].

GENESIS

In 1953, using special prerogatives ("facultades extraordinarias") for legislative power, conferred by Congress to President Ibáñez, he promulgated a new Building and Urbanization Code, considered by chilean specialists as the first modern urban legislation in the country. This code established for the first time, and within a legal framework, the need for those cities which were conformed by multiple municipalities of intercommunal planning, basically understood as the need of having

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coordinated intercommunal land-use plans. It granted these to-be-made plans a higher rank or status than the existing municipal land-use plans. The latter were from then on to be subordinated to the intercommunal maps in urban areas where these were promulgated.

Endowed by this new legislative body, the Planning Department of the Ministry of Public Works and Transportation -- MOPT, without delay assembled a professional team to study an intercommunal regulador map for Santiago [Honold: 1985]. The team was integrated by a majority of architects and engineers, the professions that were believed at the time to be the best prepared for urban planning. After seven years of analysis and of policy design, in November 1960, and being the President by then Jorge Alessandri 18, it was finally promulgated the Intercommunal Plan Regulador of Santiago - PRIS 19.

Usually, to conceive and code a metropolitan land-use plan takes between two and three years. PRIS took seven, probably owed to the fact that its authors lacked of the necessary expertise, experience and data. It was one of the first metropolitan plans Latin America, and the majority of its professionals had recently graduated from the university.

The plan basically defined the urban, suburban, and rural areas for the seventeen municipalities that conformed what denominated "The Metropolitan Area of Santiago". The area had 1,900,000 residents, and the plan envisioned 5,000,000 in the next twenty years (1960-1980) [Honold-Poblete: 1966]. It also designed a new traffic network; zoned industry,

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19 Supreme Decree No. 2387, MOPT; November 10, 1960.
green and open spaces, and areas restricted to residential use; all of this with an intercommunal perspective. Most of its precepts, although not explicitly stated in the plan, were to be reached in a time span of twenty years (1960-1980) [Honold-Poblete: 1966].

PRIS included in its jurisdiction the territories of the seventeen municipalities that conformed then the urbanized area of Santiago: Santiago, the central commune with a population of 646,000, San Miguel (244,000), Núñoa (206,000), Conchali (159,000), La Cisterna (154,000), Quinta Normal (150,000), Las Condes (86,000), Providencia (83,000), Pudahuel (78,000), San Bernardo (71,000), La Granja (68,000), Renca (53,000), Maipu (51,000), Puente Alto (51,000), La Florida (18,000), Quilicura (6,000), and Pirque.

Complementary to PRIS was a Regional Plan, also elaborated by the same professional team at the Planning Department of MOPT, which considered mainly aspects related to industrial relocation (due to economic or environmental impacts).

PRIS is not explicit either in its agenda (time schedule and priorities) nor in the sharing of implementation responsibilities. This was supposedly to be in hands of the planning departments of the ministries and municipalities, at least until a Metropolitan Government of Santiago was created. But unfortunately this never happened.

Strictly speaking, PRIS is a legally standing planning instrument today, having only once been significantly updated. This occurred in 1979 when Santiago’s suburban area was subject to land-use liberalization under President’s
Pinochet regime.

STRUCTURE OF METROPOLITAN PLANNING IN CHILE

Metropolitan urban planning in Chile, within the period of this analysis, used mainly the tools, instruments and control mechanisms of land-use planning. During 1960-1980, it was also a restrictive method where the state retained urban planning as a monopolistic activity based on land-use regulations. These are: zoning, subdivision regulations, building regulations, and approval by local governments (municipalities).

The hierarchy of urban land-use plans has been the following: above all, if existing, a metropolitan land-use plan ("Plan Regulador Intercomunal"); at the local or municipal level, a municipal land-use plan ("Plan Regulador Comunal"), and for special situations master or structure plans ("Plan Seccional")\(^\text{21}\). These three instruments use basically the same types of land-use control mechanisms: zoning, subdivision regulations, and building regulations, providing a hierarchy of regulatory techniques covering different sizes of land area and levels of detail, from the whole city (metropolitan plans) to a plot scale (local building regulations). The three instruments were usually used in conjunction and often including elements of one another. Metropolitan plans were over local plans, and the latter could be more restrictive. Both types of plans were

\(^{20}\) Supreme Decree No. 420, MINVU; October 31, 1979.

\(^{21}\) Since 1979, and according to the National Policy of Urban Development (PNDU), above all these instruments should be a "Regional Regulador Plan". However, these have not been formulated for any region in accordance to this policy (see Annex 1).
determined by different groups of decision-makers: planners from the Ministry of Housing and of the municipalities respectively, fact which often produced lack of coordination.

Starting in 1980, land-use regulations were subject to reform and a system of management-improvements was imposed: most barriers were removed to use incentives and restrictions on land annexation through market forces. In Santiago, PRIS was revised in relation to the exurban areas, and local plans only had to comply with the National Policy of Urban Development (PNDU), a document that applied the principles of a free market to urban planning.\(^{22}\)

This strategy however, failed in creating a system consistent with its principles; providing well defined mechanisms of incentives for private developers, a system where the government could use financial resources and power to organize land-use development. The concept of a subsidiary state was considered mostly as a "hands-off state" (see chapter III, Public Development Policy during the Pinochet Regime).

OBJECTIVES OF PRIS

City growth and socio-demographic considerations

According to the 1952 Census, Santiago’s population had doubled in the previous twenty two years (1930-1952): from

\(^{22}\) Starting in 1980 also, local land-use plans were subcontracted to certified private consultant firms. The directive was: "make them as flexible as possible". 

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696,231 to 1,384,285 inhabitants. Contemporary forecasts were estimating 5,000,000 for 1985, i.e., four times the 1952 population [Honold: 1985]. The population rate of growth had been 3.1 between 1940 and 1952, and 4.7 between 1952 and 1960, while for the rest of the country had only been 1.39 and 2.75 respectively [Violich-Daughters: 1987]. This was in total contradiction with the million inhabitants that Karl Brunner 23 forecasted in the early thirties and to be reached by 1960. On Brunner's forecast was based Santiago's central commune's Regulador Plan (land-use plan), and most of chilean city planners beliefs prior to 1950.

In addition all this, the process of urbanization and concentration in Santiago --mainly originated by the state in the late 30s with a state-guided industrialization policy-- had concentrated in Santiago by 1960, 32% of the national population, being the migratory process responsible for almost a third of this growth between 1952 and 1960 24. What seemed more alarming, was that the levels of investment --specially in infrastructure-- had not significantly increased within the same period, process known as "uncapitalized urbanization". As a result of this situation, huge slums or shanty towns had sprung in the periphery of

23 Austrian city planner hired by the Chilean government to design Santiago's commune first regulador plan (1929).

24 Raczynski, D., Estudios CIEPLAN No. 29.
POPULATION OF SANTIAGO & CHILE 1920–85
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- □ Santiago
- + Chile
Santiago ("misery belts" in the rhetoric of the 50s), and vast tracts of agricultural soil had yielded to urbanization.

Each of the municipalities that conformed Santiago, and which already had a Regulador Plan (7 out of 17), was making ample provisions of land from the exurban area, and reserving it for residential use. In this way they could attract and increase their population, and consequently, gain leverage in their petitions to the central government [Honold: 1985]. No legal instrument checked the occupation of this land, which, if occurred, would have signified a four-fold of the city's area, i.e., 60,000 hectares (150,000 acres) [Honold: 1985]. What PRIS planners were concerned with, was that the majority of this land was rich agriculture soil, devoted to food production for Santiago's supply. They saw then the need for establishing a mechanism for protection.

Zoning and traffic considerations

Industrial location in Santiago was considered as totally anarchic by PRIS' team. Each municipality provided land to have its own industrial park, giving little or no consideration to impacts on the rest of the city of factors such as contamination, security, or traffic congestion. The central commune concentrated by 1960 around 50% of Santiago's industry, and more or less 25% of the country's, most of which was labor-intensive. Relocation seemed inevitable [Honold-Poblete: 1966].

Most of Santiago's communes were poor and lacked of public services. It seemed as a contradiction that cities with a fourth of the population of some of the communes of the
metropolitan area of Santiago, had instead much better communal services [Honold-Poblete: 1966]. This situation increased the use of the central commune's service system, already overloaded, but by far the best equipped. Equity considerations guided PRIS planners to propose a decentralized service system.

Another consideration was that Santiago's traffic network seemed obsolete. The city had had up to then an aggregative style of physical growth, and the main avenues of Santiago were of radial nature, overlaying the colonial period access-roads to the city. This, in combination with the already mentioned lack of public services and retail stores in most communes, produced enormous daily backups in the downtown area. A new traffic network looked like the solution.

With respect to green areas, Santiago's municipalities had not taken well care of this need, mainly due to the speed of growth of the metropolitan area. Not enough land had been zoned as green areas, and less had been implemented. Most of the parks citizens used, belonged to the central commune, and had been created in the nineteenth or early twentieth century. Some of the ones located in the peripheral communes were in private hands. Open space in the outskirts of the city seemed to be the only means of contact with nature, but rather inaccessible to the majority of the population.

**Decision-making processes**

To coordinate the decision-making process was a key target of the intercommunal planning scheme considered in the new Building and Urbanization code of 1953. Until 1960, when PRIS was promulgated, each municipality was completely
sovereign in its land-use planning and zoning-code's decisions. No coordination or legal framework for urban planning between the Santiago's seventeen municipalities, nor these with the central government existed.

On the other hand, and regarding infrastructure and facility-provision, the situation was the opposite, but ironically, with no better results. The state had centralized this function, but had located these activities in different national agencies, creating again a problem of coordination. In the Ministry of Public Works (MOPT) were located: the Urban Pavement agency, the Sanitary Works agency, the housing agency (CORVI), the Santiago Water Company, and the state Architecture agency in charge of building community development facilities. In the Ministry of Education was the agency that constructed public schools in urban areas, "Sociedad Constructora de Establecimientos Educacionales". In the Ministry of Public Health was the equivalent "Sociedad Constructora de Establecimientos Educacionales". In the Ministry of Interior was the Electric and Gas Service agency, in charge of regulating the provision of electricity and gas to the urban areas [Cleaves: 1974]. Also, The Central Savings and Loan Fund, "Caja Central de Ahorros y Prestamos", in charge of auditing, regulating and promoting the private system of savings and loans associations for housing loans, was under the supervision of the Ministry of Finance [Cleaves: 1974]. By the same token, there was no integrated planning between the urban areas of Santiago, and the surrounding rural areas, task that corresponded to the Ministry of Agriculture.

For the coordination of all these state agencies the authors of PRIS were expecting the soon creation of a metropolitan planning agency that would serve as an integrating entity.
between national and metropolitan planning [Honold-Poblete: 1966]. Though much literature was written on this topic in the late 60s and early 70s, the idea was never fully materialized, and to that owes in great extent the failure of PRIS implementation. 

**PRIS' PRECEPTS**

**Zoning and city limits**

PRIS zoned three basic types of areas: urban, suburban, and rural; separated by urban and suburban limits respectively. These were basically defined by their land-use regime.

In the urban area PRIS prescribed residential use, commercial use, industrial use, communal services, and green areas. Building in these areas had to be in agreement with PRIS zoning code as well with those determined by the corresponding municipal land-use plans, codes and ordinances.

For the suburban area, four possible uses were coded and zoned: rural-residential subdivisions ("parcelas agrícolas-residenciales"), with a minimum size between 5,000 and

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25. During the Pinochet regime it was created the "Intendencia Metropolitana", a sort of sub-state regional government; but because of its hierarchal relation to the central government (dependent on the Ministry of Interior), it was more devoted to housing programs than to urban planning, activity which reported greater political rewarding (see chapter III: Metropolitan planning).
15,000 square meters (1.25 - 3.75 acres), and with a floor area ratio between 8 and 3% respectively; the quantity and quality of urbanization and infrastructure of this area was to be determined by the Urban Pavement Division, and the Sanitary Works Division, both belonging as well with PRIS' office to MOPT; a second area for forest preservation, a third for agriculture preservation, and a fourth for special uses (airports, military camps, hospitals, tourist, historical sites, cemeteries, etc.). The suburban area was thought as the city's land stock for future development, not to be urbanized for twenty years (1960-80). In the meanwhile it would serve as a city resort area, a sort of "greenbelt" as that of the Greater London Plan [Honold: 1985]. Though the rural-residential use was an acknowledgement of the fact that to preserve a greenbelt there is a need for regulating exurban districts (see chapter I), the minimum size of the lots allowed corresponded more to U.S. standards than to chilean, and thus its residential use became highly restrictive. This land was also the target for land-taking, as well as for massive state-built housing projects. All three types of actions against, and despite, PRIS regulations.

Finally the rural area --that outside the suburban limits but within the municipalities' jurisdiction -- was reserved only for agricultural use, and coded by specific pre-existing laws 26. PRIS subdivision regulations stipulated land tracts not inferior to 15,000 hectares (37,000 acres). An agricultural development plan for this area to compete in economic terms with the suburban and urban areas was not provided by this plan. It was believed that just by defining these limits would encourage the state and the private

26 Law No. 7747, and by the "Reglamento de Parcelaciones Agricolas" (decree No. 319, May 25, 1954).
sector to invest on irrigation infrastructure; an indicative style of planning.

Within the urban area, PRIS zoned four uses: industrial, residential, public facilities (commune centers), and green areas. The industrial areas were classified into three categories: hazardous ("peligrosas"), bothersome ("molestas"), and inoffensive ("inofensivas"). This classification enabled PRIS to zone three distinct types of industrial urban districts in Santiago, none of which could include hazardous industry:

- Twelve zones restricted to industry with an intercommunal character.

- Sixteen zones for bothersome industry mixed with inoffensive industry, with a prohibition for new bothersome industry to establish. Bothersome factories could expand but no new industry would be allowed. Eventually, in a non-stipulated time-frame, these industries would be eradicated to the intercommunal zones.

- Zones of inoffensive industry mixed with residential use to be regulated by local the planning codes.

The objectives of the industrial zoning were: to create industrial parks with location based solely on accessibility and air pollution factors; to move out of the urban area the hazardous industry; to decentralize the heavy industry locating it far away from Santiago (a national policy objective); to protect residential land value by eliminating the uncertainty factor of future installation of bothersome industry in these zones; and to create economies of
agglomeration by grouping industry into industrial parks [Honold-Poblete: 1966].

PRIS gave some norms and precepts for the application of this industry code: those industries which already existed but were located in the wrong zone could relocate within the same zone; creation of a special zone was according to the dominant winds for industries classified by the sanitary code as "smoke-propagators"; no restrictions on location for artisans' workshops; consideration of special cases (a list of 157 bothersome industries provided by PRIS, that had been elaborated by the Department of Industrial Hygiene of the Ministry of Public Health, was merely "informative" and an industry could be subject to special consideration by that bureau). Anticipating disputes over location of the bothersome industry between the municipalities and the Ministry of Public Health, the Department of Planning of MOPT --office of PRIS-- was instituted as the arbitrator in these matters. This was one of the few PRIS precepts that had a recursive style of planning, as well as integrative with another state agency in the process, and also a mechanism for dispute resolution.

With respect to open space and green areas, PRIS normed seven different classes: rural-forest reserves; suburban agriculture and suburban-forests reserves; metropolitan parks; local parks; special areas (stadiums, and private parks); park-avenues; and tourism roads. In general, it was only defined their limits and building restrictions, but no indications over implementation, maintenance, or preservation were made.

The main objectives of zoning green areas were to create a balanced distribution of green areas in the city, and to protect these areas from other uses by giving them a legal
status as such [Honold-Poblete: 1966] This because in Chile it results extremely difficult to change land entailments 27, and though the authors knew that many of the parks defined would take long to be implemented or even never be realized, they thought they could at least preserve the sites from other uses and preserve them as open spaces [Honold: 1985].

With respect to residential areas four types were coded and zoned: for low-cost housing, for self-construction housing, for housing mixed with industry, and for plain residential.

Low cost housing was seen since the early 50s as a responsibility of the state, and several large scale projects were built in fringe areas of the city. PRIS planners wanted to propose which sites could be used for this purpose in the future. Self-construction on the other hand, was a "hot-issue" in Chile in the 50s. Several low-cost housing projects had been built in this fashion 28, and it was believed as of great potential for contending the housing deficit of 25,000 units. This approach though, was never fully pursued by future governments, and thus, the classification of these areas was never seriously considered.

In PRIS' map on the other hand, there is zoning for to two other categories of areas: for housing settlements to-be-improved, and for downtown renewal. The authors estimated the housing capacity for Santiago considering a land occupational density of 144 persons/hectare (58 persons/acre) for the urban area, and 10 persons/hectare (4

27 In spanish: "desafectacion".

28 "Poblacion Santa Anita" is an example.
persons/acre) for the suburban area, plus higher densities in zones to be renewed: 500 persons/hectare (200 persons/acre). Considering the 21,600 hectares (53,000 acres) of the then urban area, plus the 17,000 hectares (42,000 acres) reserved by PRIS as suburban area, they calculated that the city could easily accommodate 5 million during the next twenty years (1960-1980) [Honold-Poblete: 1966]. That is where this figure comes from.

Precise sites were defined for the low-cost housing and self-construction housing categories, in lots that already belonged to the state, mainly to the housing agency - CORVI. Over five hundred hectares (1,200 acres) were classified as for self-construction, which if occupied with the density proposed (144 persons/hectare) could settle around 75,000 people. The total acreage of the area reserved is by all means modest given the existent rate of population growth for Santiago in the early 60s (65,000 people/year), unless it was believed that the state low-cost-housing-programs, to be settled in other sites, would take care of the rest. Another observation one might make is that the absolute majority of the sites reserved for these purposes were located in territories belonging to the poorest municipalities of Santiago, sanctioning and encouraging thus the existing physical social segregation.

**Traffic network, infrastructure, and services**

The major goal of the new road-network design proposed by PRIS was to reduce traffic congestion from Santiago´s downtown area, or central commune. It was almost impossible then to commute between two non-adjacent communes without converging to the central one [Honold: 1985]. According to PRIS´s director, traffic congestion problems in Santiago´s
principla avenue (Alameda) were worse in 1960 than in 1980 [Honold: 1985]. Each local regulador plan had its own road system, and in some cases these classifications were contradictory between two adjacent communes.

For this purpose the plan established five types or hierarchies of roads: Greater Santiago's access roads (six defined), outer-ring road (circunvalacion) in the peripheral communes, mid-inner distribution system (four new avenues defined), radial intercommunal roads (definite routes to downtown area defined), and central distribution system (left for the municipality of the central commune to define according to its new Plan Regulador 29). All new roads and avenues had specified widths.

With respect to the outer-ring road, probably the most significant proposition in matter of transit network for Santiago, it was not placed across density-homogeneous areas. Parts of it were even located on the plans' suburban area, with the possible intention of guiding city development toward areas known for having a poor agricultural soil (indicative planning).

Regarding services, PRIS outlines sixteen communal centers (one for each commune, except for Pirque which was rural), to serve as indicative of where the municipalities and the central government should locate their investments on service facilities; and also indicative to the private sector, specially to merchandisers. All of these centers were defined on pre-existing communal centers and commercial concentrations, and thus represented a re-enforcement action. Those chosen were located considering proximity to an intercommunal road (in PRIS' classification), so to

29 To be promulgated only this year (1990).
guarantee accessibility. This strategy was complementary to the general objective of dispersing activities from the downtown area.

Growth control and densification

As stated, one of the main objectives of PRIS was to increase residential density in the Greater Santiago urban area, with a special emphasis in the central commune, which had begun by then a process of decay and deterioration. This was pursued through two main strategies: land annexation moratorium, with strict urban limits drawn on the border of the existing built area (plus a "reasonable acreage to contain demographic growth for the next twenty years"); and a "proposition" for urban renewal in the central commune, estimating a final density in this area of the order of magnitude of 500 persons/hectare [Honold-Poblete: 1966] **30**. No state initiative was designed to incentive development and urban renewal in this area. No special zones were drawn. No funding or loans were provided. Just a proposition.

Economic Strategy

Four basic aspects are directly faced by PRIS regarding general economic policy. The first was to increase urban density as a mean of reducing state expenditure in infrastructure that resulted from the city's constant extension ("urban sprawl"). Efficiency was believed as denser development, and thus a no-growth strategy was designed.

**30** This commune at the time had approximately 140 inhabitants per acre.
A second economic objective was to protect the surrounding agriculture land from the city's growth as a proximal source of food supply for Santiago. It was believed that once this area had a "legal" rural status, would encourage sectoral investment in agriculture, and thus the benefits of development would be extended to it. No special programs though, were drawn with the Ministry of Agriculture or with local farmer's associations. (I personally doubt whether this policy was even known outside the building of the Ministry of Housing).

A third one was to improve industrial efficiency through economies of agglomeration and enhanced accessibility. Thus, industrial parks were designed to be next to Santiago's access roads (also determined by PRIS). At the same time, but with a more regional or national perspective, a complementary regional plan to PRIS prohibited new heavy industry to locate closer to 100 kilometers (62 miles) from Santiago, with the purpose of developing nearby regions and deviating migrations otherwise coming to the capital city, a national objective applied to a metropolitan plan.

Finally, a fourth economic issue included was the recognition that the inoffensive industry and artisans' activities should be mixed with residential activity ("mixed areas"). This concept, rather obvious today, was not in the 50s and 60s, when the urban theory, influenced by CIAM postulates, proclaimed a total physical separation between residential and labor activities. If this postulate would have been followed by PRIS planners, many of them recent

31 "Plan de Desarrollo Regional", MOPT.
32 International Congress of Modern Architecture.
graduates from architect's schools, would have produced a harmful dissociation between small industry and the owner's or workers' residential areas. This, particularly in a third world economy like Chile, would have implied something in between the destruction of this sector, and the inapplicability of the plan.

PRIS' UPDATES

1976

In March 1976, PRIS was modified by its original director (Juan Honold). The subway system's layout (Metro) -- according to the "Plan Regulador of Santiago's Metropolitan Transport" -- was incorporated to PRIS, as well as some minor changes in the hierarchy of the transit-network design. Also, it was eliminated from the zoning code the "low-cost housing areas", and the "self-construction housing areas", mostly due to its obsolescence. The urban limits were also updated. In general, no new urban planning knowledge was introduced with this revision, and only were incorporated changes that had taken place despite this plan.

The fact that again its original director was in charge of this revision probably owes to the government --under Pinochet since 1973-- being in a period of defining its own urban ideology, and Juan Honold represented for the meanwhile a physical planning style neutral and inoffensive for a conservative regime. It also owes to a typical phenomenon of Latin America, where plans are considered more

33 Prepared in 1968 by the Department of Planning and Urban Planning of MOPT, under the direction of Juan Parrochia.
property of a professional personnel than instruments of a community [Violich-Daughters: 1987]. Juan Honold is still consulted whenever a minor revision to PRIS is contemplated.

It is this version of PRIS that is still valid today for the urban area, with the only exception of the mixed areas (inoffensive industry and residential use), which were deregulated in the 1979 update.

1979

In October 1979, following a governmental decision to apply nation-wide economic liberalization to urban land markets, PRIS is subject to its most radical adjustment with the Supreme Decree 420/79 

". After almost twenty years (1960-79) of continuity in the preservation of PRIS' urban limits (at least as a concept), these are abolished, and the "suburban area" became the "area of urban expansion". This land could be urbanized according to a set of minimum and "flexible" norms, requiring the approval the regional branch of MINVU for Santiago, the Secretaria Regional Ministerial of Santiago -- SEREMI-M. The state however, would not finance extensions of urban infrastructure.

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* Legal instrument which updated PRIS.
ESTUDIO DE ÁREA DE EXPANSIÓN DE SANTIAGO (MINVU 1979)

CUADRO RESUMEN

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[Diagram and table contents]
With the objective of leaving in hands of the private sector the initiative of Santiago's urban development, the Supreme Decree 420/79 revokes Santiago's urban limits, at least in the way these were understood until then. The newly defined urban expansion area was subject to norms for urbanization based on a previous study held by SEREMI-M on "developmental potentiality" of different subareas. A compounded coefficient of growth potential was elaborated in SEREMI-M, grounded on three components: environment, population, and organization. Within the latter, and following general governmental economic principles, land price was considered to be a positive indicator of private sector's interest for development, and thus the norms for areas with higher land values, were more tolerant and flexible so to "guide the private initiative to invest on them".

PRIS 1979 modifications were done under the general framework of the Urban Development National Policy (PNDU) of 1979, where it was hypothesize that the urban land-price gradient was negatively altered by the existence of urban limits, increasing erroneously the price of urban land, specially in the proximity to these limits. This high value was produced by "a false shortage of urban land stock", factor which excluded many people from owning a house, due to having to bare in the price the high cost of urban land [Lopez: 1981]. The state then, inspired by the protection of the public interest ("bien comun"), had to remove one of the causes of the housing deficit.

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35 SEREMI-M, MINVU, "Objetivos generales del estudio de la posible expansion del Area Metropolitana de Santiago y de la proposicion de modificacion al PRIS"; Santiago, April, 1979.

36 For a more detailed explanation of the 1979 PNDU see Annex 1.
SIMULACION DEL PERFIL ACTUAL DE LOS VALORES DEL SUELO

SIMULACION DEL PERFIL CORREGIDO DE LOS VALORES DEL SUELO
EVALUATION OF PRIS FAILURES AND ACHIEVEMENTS

I believe that PRIS greatest achievements have clearly been the industrial zoning and relocation; the creation of an adequate traffic network; and, up to some extent, inter-municipal planning coordination. Also, it has been partially responsible for the development of communal centers. On the other hand, I think it totally failed in three related issues: retardation of the urban sprawl, at least up to 1979 when that was its intention; increasing urban density; and effectively protecting the surrounding cultivated land from urbanization. Scarce results in my understanding, has had in promoting urban renewal in the central commune, as well as in the creation of new green areas. A more detailed analysis of some of these issues follows.

Industrial zoning and relocation

The industry classified by PRIS as either hazardous or bothersome, had been in 1980 almost entirely relocated from areas proscribed by PRIS. This had been especially effective in the central commune. On the other hand, the largest industrial park defined by PRIS (intercommunal industry area Quilicura-Renca-Conchali) has been a recognized success, accommodating in the past thirty years numerous new industry which was attracted by the area's excellent accessibility; and it is located in an area where the dominant winds do not blow to the rest of Santiago's populated areas.

The only factor hindering the PRIS industrial zoning has been the liberalization of local land-use plans since 1979. Through these, the proclivity of municipalities for locating industry in their territories, despite inter-municipal ordinance, has again emerged. In Maipu for instance, its
industrial park --regulated by the local land-use plan-- allows the installation of industry classified by PRIS as smoke-propagator industry, though it was banned from that sector of Santiago by this plan due to the dominant winds heading toward the downtown area. Despite the fact that communal ordinance cannot be less restrictive than PRIS, the agencies responsible for intercommunal planning (DDU at MINVU, and SEREMI-M) have been permissive on this matter.

Traffic network

After thirty years, almost all of PRIS-designed network is in place. The radial-concentric road system has allowed Santiago's motor park to rise from 15,000 (1960) to over 200,000 (1980) vehicles 37 without having major traffic congestion problems. The most remarkable project designed by PRIS has been the outer-ring road ("Circunvalacion America Vespucio"), which has connected all the peripheral communes, being in this way an effective reducer of traffic congestion.

It is clear that imperial plans lend themselves for traffic planning, being this the reason why advocates of this type of planning have traditionally been traffic engineers. It is a task that does not leave much space for a non-specialized public participation, its design requires intense professional skills and knowledge, and updating is done after long periods of time (e.g. every ten years).

37 Figures taken from INE.
Inter-municipal planning coordination

At a physical level, and in a very simplistic manner -- by just imposing its precepts to the local planning instruments -- PRIS did accomplish what its authors had in mind regarding coordination between local governments. Specifically, with respect to industrial zoning and traffic infrastructure.

In a reversal of municipal prerogatives, since 1979, growth control of the suburban area for all the Greater Santiago has been centralized in SEREMI-M, with no intervention at all from the local Public Works Departments -- DOMs, or planning boards. No coordination has been necessary then in this centralized system for exurban land development.

Growth control

Between 1960 and 1979 Santiago consumed nearly 23,000 hectares (57,000 acres), i.e., two folded its surface in this period. At the same time, density barely increased from 90 persons/hectare to 97 persons/hectare (36 to 39 persons/acre) \(^{38}\), and even decreased in the central commune (where the plan considered a strong densification). This commune reduced its density from 137 to 90 persons/hectare (55 to 36 persons/acre). PRIS had specified for this commune an increase in density up to 500 persons/hectare (200 persons/acre). With respect to the protection of the suburban cultivated area, between 1955 and 1975 Santiago urbanized nearly 21,000 hectares (52,000 acres) of irrigated

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land, and about 850 (2,000 acres) of rain-fed land 39.

If PRIS authors were concerned in 1960 with the possible occupation of 60,000 hectares (148,000 acres) of exurban land as they stated later in a specialized journal, the situation in 1980 shows a satisfactory result: only a third of that land was actually urbanized in the following twenty years. But their real objective was to contain completely Santiago within PRIS limits as we can infer from their calculations of Santiago’s population containment-capacity, in the same article [Honold-Poblete: 1966].

Reality has shown how naive was the concept of growth control solely based on the creation of "legal" city barriers. These were disregarded in the first place by the state housing agencies (CORVI and CORHABIT), who used this cheaper land to reduce direct investment costs 40 (the lots were generally state-owned rural land, either in-stock or obtained through eminent domain). It also facilitated the process of illegal land take-overs that occurred during the late 60s and early 70s, by signaling the jurisdiction of the city police: out of the urban limits, the use of police force to end a land take-overs required a more cumbersome legal procedure for the government.

The latter made PRIS urban limits extremely vulnerable. For the government (specially for Allende’s given its constituency) the political cost of repressing these actions was too high, and once occurred it was also difficult to reject a minimal urbanization. (Only the military government

39 Mewes, Felisa, "Evaluacion de la superficie de riego perdida por crecimiento del Gran Santiago", Faculty of Agronomy, Universidad de Chile. Santiago, n/date.

40 Called in Chile "loteos brujos" (bewitched parcels).
was able to repress these land take-overs for some years (1973-83)).

From the agriculture's point of view, the likelihood of urbanization of the suburban area made this land financially risky for investment, backfiring one of the purposes of the urban limits, which was to develop this land so to assure Santiago with a cheap source of food supply.

In 1979 the no-growth objective was changed. The protection of the common good no longer meant direct efforts to preserve surrounding agricultural land, or promoting urban densification, but instead making land markets operate freely, believing that a free market rule is the best arbitrator in conflicts regarding the public interest, and in this case land-use.

In urban planning, the introduction of market rules aimed also at reducing land prices by increasing the stock of land that could be subject to urbanization. The argument was very simple: if land supply increases, prices must necessarily drop. However, it proved mistaken after some years (period 1979-81): supply of land with potential for urbanization increased, but because of a semi-monopolistic land tenure in suburban Santiago, land-owners expectancy and ability to hold land off supply determined that the supply increments went always behind demand expansion. So, land shortage persisted (sufficiently to keep prices high), although the supply of land zoned as for urban use had increased [Sabatini: 1982?].
Creation and improvement of accessibility to green areas

Santiago has a semi-desert type of climate, which makes the maintenance of parks and new plantations very expensive. Normally, parks must have their own irrigation infrastructure to survive the periods of no-rain (October-March). The investment and maintenance costs implied require that their implementation, as well as their administration must be given substantial consideration before any action is taken. This was not the case in PRIS, where the green areas were just defined, drawn on a map, and decreed. No plan was designed; no designation of an agency or institution to implement, finance, or maintain these areas was conceived.

Although the authors' intentions in avoiding a misuse of these spaces by local governments was essentially fulfilled, it was not enough to stop other central government agencies (many of them were used for state housing projects [Violich-Daughters: 1987]), or to contain the pressure from the land take-overs of the 60s and 70s.

A more detailed analysis of what happened until 1980 (time-frame of PRIS) in the implementation of these areas is revealing. Of the four rural-forest-reserve areas proposed, none had been implemented. (An ambitious proposal was one that envisaged the re-forestation of the foothills of the Andes in all the city's extension). Of the nine suburban-forest-reserve areas, only one began its implementation in the mid 80s (La Reina). Of the nine intercommunal parks proposed, five already existed by 1960; of the other four, only one had been implemented (La Castrina). Of the thirty-five municipal parks proposed, one already existed (Lo Franco), and only five had been implemented (El Progreso, Las Mercedes, Antonio Varas, and Los Saldes). Of the eight "special areas" (stadiums, and private parks) defined by...
PRIS, five already existed in 1960, and none of the other three had been implemented as parks (National Stadium park, Colo-Colo Stadium park, and Lo Hermida). Of the twelve park-avenues proposed, two were totally finished (Llano Subercaseaux, replanted, and Manquehue Avenue), and three were only at a partial stage of implementation (Isabel Riquelme, Tobalaba, and the extension of Bustamante). Finally, the development of a "green belt" for Santiago needs no further analysis due to the utilization within this period of most of the suburban area by urbanization (only the area west to Santiago, Maipu, was unaltered until the mid 70s).

Again we find here the typical flaw that affects physical planners: in relation to implementation of green areas and open spaces no plan was made for carrying out these prescriptions. It was supposed that municipalities would eventually produce them, due to the fact that these were in their territorial jurisdiction and that they could not be legally subject to any other use. That is to say, the plan acted in the usual restrictive way, instead of promoting the need and creation of these areas. More on the line of "what cannot be done", instead of "what should be done".
CHAPTER III: PLANNING POLICY IN CHILE BETWEEN 1960 AND 1980

Summary

Chile, between 1960 and 1980, was subject to one of the most dramatic political changes that a country can undergo in such a brief span of time. In just two decades the role of the state as well as the economic system, were several times redefined. From a "hands-off" state, to a state leading the private sector, to a central planning state, to a subsidiary state. From increasing state ownership of the means of production to privatization policies. From foreign ownership of basic mining resources and finance to nationalization. From "communitarism", to "collectivism", to a renewed faith in private property. Surprisingly, during the whole period, PRIS, as the land management plan for Santiago, was in place. Such an ideologized subject as urban land, in a context as that of Chile's in this period, should have implied several revisions or even the abolishment of a plan like PRIS. However, this was not the case. But, as I have shown in chapter II, the fact that the plan remained all this period not necessarily denotes that it was an effective planning tool.

The purpose of this chapter is to extract from the Chilean planning policy environment during the period 1960-1980 -- time-frame of PRIS-- possible causes that could explain why this plan, though it managed to survive all that time, was permanently relinquished by succeeding state planners.
I have already discussed in chapter I general problems faced by most metropolitan plans, typically, lack of implementation strategies, physically-oriented, static nature, etc. PRIS was not an exception. In this chapter I intend to examine more closely the historic process that took place in the planning environment in Chile, and Santiago's specifically, while PRIS was in full effect.

Find here some causes that could further explain its gradual abandonment as an effective planning tool.

My hypothesis is that top-down physically-oriented urban planning, absent of social planning, or of a state actively involved in land-use management, suited well with the requirements of the urban planning style in Chile of the early 60s. A period when government was in a line of a "hands-off state", and long-range planning was a fairly new activity for governments, basically encouraged by multilateral lending institutions. But, eventually, during the late 60s and early 70s, as the socio-political process became highly active (even volatile), and succeeding governments took more and more active roles in planning, static physical prescriptions for urban growth like of this plan, were overpowered by a social dynamic process of participation, and by rapid urban growth. Planners, who were beginning by then to lay hands on social science and economics, needed to adapt planning and to make it more comprehensive. Also more participatory and short-ranged.

PRIS had no built-in mechanism, neither an institutional framework, that would allow its adaptation to this process. Consequently, it was gradually left aside, while other types of urban planning instruments and planning scales were introduced. Nonetheless, this does not necessarily imply

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4 As I have pointed out in chapter II, technically, PRIS is still in effect. But in 1979 its growth control strategy was drastically substituted.
that other types of plans could have effectively replaced PRIS in its growth management function. Frankly, no plan would have been too effective in controlling city growth in the hey-days of the late 60s and early 70s.

After 1973, and during the first years of Pinochet when public participation was not a primary governmental policy goal, PRIS top-down physical planning style again seemed to have a chance. As stated in chapter II, this plan was updated by then (1976). But soon, economists belonging to the neo-liberal school of thought, and based in the national planning office --ODEPLAN, established an hegemony over urban planning. Land market --not PRIS-- would eventually grow in charge of land-use planning in Santiago (at least in the formal economy) and PRIS growth control strategy would become obsolete after 1980.

INTRODUCTION

The four administrations that held power starting in 1958 (Alessandri, Frei, Allende, and Pinochet) faced in different ways persistent economic and social problems that were hindering chilean development since the mid 1950s: constant inflation, decreasing rates of growth, dependency on single export (copper), increased centralization, increasing housing deficit, and higher rates of urbanization than of investment. All four governments were determined to produce structural changes in Chile's economy. For the governments that held power between 1958 and 1973 this intent of transformation was inspired on the structuralist theory, mostly encouraged by ECLA and the Alliance for Progress during the 60s, which demanded for social planning and change. For Pinochet's government (1973-1990) instead, the
target was a redefinition of the role of the state: a state that would become subsidiary to private initiative, instead of having a protagonist role as it had been in the past forty years.

At the same time, these four governments put into practice diverse theories of economic and social development, having had the chance to implement them consecutively; the first three democratically elected, and the last after a military coup. All four enjoyed within the first years of holding office sufficient degree of legitimacy to pursue these structural changes [Cleaves: 1974] 42. But in each case, social (or military) forces opposing those changes became powerful enough to frustrate, or even reverse them. Initial lack of data to pursue their structural reforms made them lose the initial political support needed for change. Thus, when enough data was available, pragmatism replaced ideology as the driving force for governmental action, but the political power of the initial stages was usually lost by then. Eventually, contingency planning would be the only possible course. The exception to this was the military government, which, having taken power abruptly, required over five years to structure a coherent political program. Thus, its action became gradually more ideologized in the period 1973-1980, but counting with the necessary power to put it into effect.

The above situation created the need for those governments in office before 1973, to put in place any significant plan during the first half of the presidential term, while legitimacy for reform still endured. In the case of Pinochet's, the situation was reversed, and most plans of

42 Peter Cleaves sustains this for Alessandri, Frei, and Allende. I have included Pinochet.
importance were introduced after several years in office (1979-81).

During the period 1960-1973, a social process of increasing levels of participation was taking place in Chile. The electoral base grew at an impressive rate, while a process of migrations urbanized large sectors of the population, population that began demanding greater degrees of participation in the political structure and institutions. Planning in these years became the tool for social reform and economic development [Dominguez: 1981], and urban planning was to address the main conflicts derived from cities' spectacular growth [Violich-Daughters: 1987]. Nonetheless this participatory environment, PRIS offered no implementation strategy that could channel this need.

Several planning institutions were added to the existing in the mid 60s: Ministry of Housing and Urbanism (MINVU), Development Corporations with specific housing and urban planning tasks (CORMU, CORHABIT, COU. etc.), and a national planning office (ODEPLAN); all of which made state planning more specific and at the same time created more planning teams that had responsibilities in urban planning at the level of the central government. Thus, during this period 1960-1973, coordination between planning institutions, and broadening and channelling community participation became the key issue for state planners.

After 1973, during Pinochet's regime, city planning gradually became subordinated to policies of economic growth and development, while market rules were proclaimed to eventually replace community participation as a means for the population to satisfy their needs in housing, health and education. The state would only intervene when private initiative operating in a free market would fail to provide
these "commodities".

With respect to social planning, by the time of PRIS promulgation Chile had already a long tradition in this matter. It had started in the 1920s when a pioneer system of social security and low-cost housing was founded. The social concern of subsequent governments peaked during Frei's and Allende's, when community participation began to be incorporated into the decision-making structure of local and central governments, and social expenditure rose over 20%.

Planners during the first three of these administrations were subject to a constant tension between wanting to pursue plans with long-term goals, and having at the same to adapt them to decisions taken in the political domain, where plans are evaluated on the basis of short-term electoral goals [Dominguez: 1981]. Chilean state planners --usually with an inclination for comprehensive planning [Violich-Daughters: 1987]-- were increasingly in the role of advocacy planning until 1973. Their primary concern began to be issues of poverty, basic needs, and community organization, rather than harmonious urban patterns, inner-city spatial distribution, open space, etc.

In Pinochet's era the situation was different. The government gained nearly total political control and banned all community organizations from pressing the state. The government had the power that enabled its planners to apply public policies with no substantial opposition. This situation facilitated a return to a top-down planning style. Nevertheless, city planners in this regime took almost five years (1973-79) to make operational a consistent urban theory: the adaptation of the subsidiary state concept and the liberalization to land management.
PRIS, as said, remained during the entire period 1960-1980 as the metropolitan land-use plan for the greater Santiago area, but deserving diverse degrees of attention by the planning professionals of succeeding governments. The city in the meanwhile was subject to dramatic physical and social transformations --mainly growth and social segregation-- that took place, on behalf and despite, the existence of this planning instrument.

To understand the planning policy environment in this period (1960-1980) it becomes essential a more detailed review of the plans and institutions during the four political regimes that took place in Chile within those years.

PLANNING POLICY DURING THE ALESSANDRI REGIME (1958-1964)

National planning

Alessandri's government was in office when PRIS was promulgated in 1960. Its political program had as a basic premise that the private sector was to have a leading role in Chile's development, called accordingly the "dynamic force". It was a government that tried to impose a "hands-off" style, but economic, political, international, and natural forces pushed it to do national and long-range planning. Though constantly declaring independence, had its constituency in the conservative parties (Conservative and Liberal) and the large business associations (SOFOFA and CCHC).

Alessandri's planning style had a managerial approach to public policy [Faundez: 1988], trying to face problems in a technical way rather than with political compromise. In
general, it was an administration reluctant to planning, but forced to do so under pressure of the Alliance for Progress program, and of a natural disaster -- the 1960 earthquake [Dominguez: 1981].

CORFO, Chile’s then leading planning institution, was transformed in this context from an originator of new investment projects (as it had been during the previous Radical governments 

43 into a provider of credits for the private sector [Faundez: 1988].

Priority was given to stop inflation and stabilize macro-economic variables: balancing national accounts, specifically trade and balance of payments; and to increase the rate of investment. Despite intentions, the rate of investment in the period decreased and the government was pushed to borrow from abroad. This gave the opportunity to bilateral lending institutions to force Alessandri’s government to planning, all of which were on the line of encouraging government planning. In 1959 the government had approved a ten year national plan, "Plan Nacional de Desarrollo Economico", which included among other topics, a national housing plan (Programa Nacional de la Vivienda). This plan however, was later considered by the World Bank, and by the Committee of Nine ** as lacking of many social considerations, specifically, agrarian reform, income redistribution, and employment plans, and hence it was revised in order to obtain loans from USAID and IDB [Dominguez: 1981].

** 1938-1952.

*** Task force of the Alliance for Progress.
Alessandri's lost battle to contain inflation greatly strengthened the labor movement and of grassroots organizations. The number of annual number of strikes increased from 260 in 1960 to 564 in 1964 [Faundez: 1988], expanding also the trade-union militancy, and strengthening the confederation of unions --CUT-- recently created (1953). These groups were to become the supporters of the next two governments.

Housing Policies

Alessandri's regime was devoted to housing construction, what has been called the "viviendista" approach, an approach often considered in Chile as competitive with comprehensive urban planning. The housing deficit by then was 25,000 units (1960), and CORVI, the housing agency was devoted to confront this problem. The most significant policy instrument in this matter was the DFL2, a law passed by the executive that gave exceptional tax exemptions to affordable housing. This prompted the impressive figure of more than 30,000 units built annually only in public housing projects as the average of Alessandri's term.

Planning education and planning institutions and professions

Until the 60s there was no planning education in Chile, exercising this task abroad-trained or self-trained engineers, architects, agronomists, and economists. These professions by the time were trying to have the supremacy in the emerging planning field, and worked on it by monopolizing the planning jobs in different departments of public planning agencies: in CORFO the engineers (which had
some backing from President Alessandri, being himself an engineer); in the Division of Architecture of the Ministry of Public Works (MOPT), and where PRIS was developed, the architects; in the Ministry of Agriculture the agronomists; and in the Office of Budget the economists. To avoid conflicts, Alessandri shared planning responsibilities among these institutions [Dominguez: 1981]. But this created a sense of planning boundaries, instead of a multi-disciplinary planning environment. PRIS would always be considered the plan of the architects.

At the time of the 1960 earthquake on the southern part of the country, two public agencies demonstrated real capacity for strategic planning: CORFO, and the Division of Architecture of MOPT [Dominguez: 1981], which probably gave momentum to PRIS, promulgated only months later. However, the connection between economic and land-use planning, almost non-existent until this natural disaster, was not assimilated yet by PRIS planners.

It was also evident after this natural disaster the need for regional planning, task in which the next three governments would strongly pursue.

At the level Santiago's municipalities, which became responsible for the implementation of PRIS, most of the planners had little preparation as such, and were so outdated from the evolution of the planning profession, that many still were in the tradition of the "city-beautiful" movement of the beginning of the century, with little concern for social or economic problems [Dominguez: 1981].
Political program

Frei's program was named "Revolution in Liberty", implicating the need for political change at the light of the social doctrine of the catholic church ("communitarism", as opposed to marxism). The program was a serious attempt to combine both, economic growth with social justice, based on a combination of economic and social reform, with major changes to the political system [Faundez: 1988], and conceived as to last for at least three decades (1964-94). The program considered planning as a necessary tool for social reform and economic development, which coincided with the Alliance for Progress prerequisites for providing financial assistance [Domínguez: 1981]. Frei's government began with a solid legitimacy for reform given its 56% in the ballot, the highest in Chilean democratic history. Also contributed to this fact that the rest of the electorate was in a position of even more radical changes (Allende supporters).

The three key elements of this program were agrarian reform, control of copper production (Chile's main export), and "popular promotion" (promoción popular). The latter was an effort to broaden public participation and representation on the political system through lending power to grassroots

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45 A concept never well defined, but supposed to replace capitalist property relations in an alternative to socialist collectivism.
organizations. This was an attempt to overcome the over-representation that trade-unions and business associations had in the existing institutional structure had gain in the Alessandri period. Also were part of Frei's platform, an educational reform (mandatory primary education), massive construction of low-income housing (360,000 in six years), and income redistribution through a tax reform [Domínguez: 1981].

The political reforms of the CDP government were to be carried out through three main channels [Faundez: 1988]:

1. Popular promotion, aimed at the urban poor ("marginales")

2. Trade-union reform, aimed at the same time to promote unionization, but freeing it from the control of political parties, and

3. Constitutional amendments to increase the executive branch's power to legislate on key aspects of economic policy.

The informal sector

The Christian Democrat Party set in motion a broad policy for the organization and integration of two social actors until then almost totally excluded from the political and economic systems: the urban poor, and the peasants. While the latter benefitted from an agrarian reform, as well as

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*See Ahumada, Jorge: "En vez de la miseria", work on which much of the CDPs ideology is based. This book blends theory and practice.*
from a new law for unionization, for the urban poor Frei's program considered the stimulation and creation of a large network of community organizations, backed by the "Consejeria Nacional de Promocion Popular". A salient feature at the territorial level was giving legal status to neighborhood associations ("Juntas de Vecinos"), which existed since the 1930s but with no link to governmental action. In the new setting they were incorporated to the municipal decision structure. Also women were organized in Centros de Madres (mother's associations). During Frei's term, 3,487 neighborhood associations were created, and 9,000 mother's association 47.

Frei's popular promotion concept, which, suggestively, called the poorest "los marginados" (non-integrated), focused the problem within these groups, i.e. they were seen as structurally incapable of overcoming their marginality by themselves. Thus, it was necessary an outside agent, namely the state, to assume the responsibility in organizing and empowering these groups so they could integrate actively (through the decision-making process), and passively (through the distribution of goods and services 48). In other words, it was a mid-point between top-down social planning and a the restructuring of the state (which Allende would try later).

47 Presidential Address to the Nation, 1970. (Cited in: Rodriguez, Alfredo, "Como gobernar las ciudades o principados que se regian por propias leyes antes de ser ocupados", in Revista Interamericana de Planificacion, No. 65, March 1983).

48 See: Alvarado, Luis; Cheetham, Rosemond; Rojas, Gaston, "Movilización en torno al problema de la vivienda", in Revista EURE, no. 7; Santiago, April, 1973.
This policy was carried out through promoting social organization, and by broadening the traditional scope of state-built housing projects, stimulating self-construction techniques, sites and services programs, and creating a new special loan system called "Planes de Ahorro Popular" (PAP), aimed at the very poor. Social expenditure raised within this period from 16% to nearly 20% \(^9\), an impressive figure for a non-developed economy.

The program of popular promotion included the strengthening of the local decision-making process by giving legal status to the Juntas de Vecinos (communal neighborhood betterment groups), incorporating them into the formal municipal decision structure \(^{50}\). These organizations were particularly efficient in exercising pressure to the local and central government for providing services to settlements resulting from land take-overs --a growing practice in the last years of Frei.

Despite this social concern a sense of "spill-over effect" began to take place starting in 1967, when massive land take-overs by homeless people began in Santiago. These groups were showing great capacity for organization and for challenging the state. The creation of community organizations (Juntas de Vecinos) which followed these actions, became highly politicized, and eventually controlled by the left parties. These organizations would press the central government for tenure and definite housing solutions, as well as municipalities for service provision.

\(^9\) Arellano, Jose P., "Las politicas sociales en Chile: breve revision historica", in Revista Interamericana de Planificacion, no. 68, December, 1983.

\(^{50}\) Law No. 18880.
According to Castells\textsuperscript{51}, Frei's contradiction was that these redistributive policies were not complemented by a significant change in the production structure, thus, the generation of a social mobilization in these conditions could only backfire.

The style of land management inherent to PRIS could certainly not be useful in this context. Complete moratorium on land annexation was not possible and PRIS did not offer the tools for land acquisition (via eminent domain, compensation, etc.) to give this process some formality.

\textbf{Planning scope}

With respect to urban planning, Frei's administration was focused mainly on planning at a regional level. This was based on the theory of growth poles. Centralization was to be reversed by investing and developing few urban centers distributed in the national territory (medium size cities), in the hope that its development would spread to the surrounding region, and at the same time reduce the migrations to the capital city. The city of Santiago in this way, was not the central focus of attention for Frei's urban planners.

At the communal level, between 1965 and 1969, and under the auspices of USAID, a series of comprehensive studies called pre-investment studies ("Preinversionales") were undertaken in several locations in the country. The program was made to encouraged and strengthen the municipal level planning,

\textsuperscript{51} Castells, Manuel; Et Al, (Equipo de Estudios Poblacionales - CIDU), "Reivindicacion urbana y lucha politica: los campamentos de pobladores en Santiago de Chile", in EURE no 6, November 1972.
requiring local participation in the making of these studies [Violich-Daughters: 1987]. They were done by private consultants under the coordination of the Urban Development Division (DDU) of MINVU, in accordance to the new regional planning strategy of Frei’s government encouraged by ODEPLAN and based on the theory of growth poles. Between 1965 and 1970, twenty six preinversional studies are made for different cities and "micro-regions" 52. It was in these studies, where many urban planners focused their attention during this period. Though it was a first intent to introduce comprehensive planning at the local territorial level, these studies were never made operational. Its complementation with metropolitan plans like PRIS would have signified a comprehensive approach to city planning not yet accomplished.

Planning institutions and implementation of programs

The strong popular support was instrumental for Frei to request Congress special prerogatives ("facultades extraordinarias") for effecting a profound administrative reform. On behalf of these, it created the first housing and urban planning ministry in Latin America (Ministerio de Vivienda y Urbanismo - MINVU), together with specialized and semi-autonomous corporations to deal with specific housing and urban issues (Corporation of Urban Improvements - CORMU, and Corporation of Urban Services - COU), and incorporating the Ibanez housing agency (CORVI), to the new institutional

setting under the coordination of MINVU.

Most of the existing urban planning agencies came from the Ministry of Public Works. The original plan was to split this Ministry between MINVU and a new Ministry of Transport, giving in this way consistency to housing and urban planning investment programs. However, a delay in getting approval from legislature (still needed by Frei if dissolving an existing ministry) allowed the formation of resistance among public officials within MOPT, even though these were members of the new government [Cleaves: 1974]. The result was that MOPT survived, remaining within its departments some duplicate functions with MINVU, factor that would contribute to the weakness of PRIS.

The intention in creating the corporations was to originate semi-public agencies under the Chilean law affecting private parties ("Ley de derecho privado"), which allows an individual or an organization to "do anything not explicitly prohibited". In the law affecting public parties, it is exactly the opposite: the only actions that can be performed are those explicitly stated by law [Cleaves: 1974]. This gave the corporations enhanced efficiency, but also, a great potential for expanding their functions, and duplicating activities. Without becoming illegal, CORMU, CORHABIT and CORVI, could all buy, expropriate, renovate, construct, and sell property. Due to this reason, a lack of coordination was a constant during the years of Frei's regime among these planning agencies. After a while specificity of functions was abandoned, and all of them were carrying out the same planning, design, and construction activities ("mania for construction" [Cleaves: 1974]) This was a way of increasing their participation on economic and political resources and thus becoming more powerful. Personality characteristics, planning methodology (absence of link between theory and
practice), and political factors were also among the reasons for this phenomena [Cleaves: 1974].

During this period it was also created ODEPLAN, an advisory agency focused on national planning issues. Plans proposed by ODEPLAN were treated as technical advice for the traditional decision-making process located in the different ministries [Violich-Daughters: 1987]. At the regional level, eight territories were defined, each under a regional planning unit (ORPLAN) coordinated by ODEPLAN. The main constraint of ODEPLAN was its advisory status, which was an impediment for investment decisions, being these task of the corresponding ministries.

In the administrative reform, the urban planning function (as well as CORVI) was removed from the Ministry of Public Works and placed in MINVU, carrying the Intercommunal Office (office of PRIS) with it. A new planning and budgeting office ("Division General de Planificacion y Presupuesto") was responsible for preparing national plans for urban development and housing to be incorporated to the national budget. This new scheme could have been a major opportunity for interrelating housing programs and urban development programs due to MINVU's planning and executive functions (legislative capacity) [Violich-Daughters: 1987], a chance to make PRIS work as an instrument of urban development. However, the mentioned independence of the development corporations greatly frustrated this objective, because each of them was involved in planning and building housing projects.

5 Santiago's ORPLAN only came to existence in 1971.
At MINVU, DDU became involved mainly with two interrelated activities at the local or municipal level of planning: technical assistance to municipalities (encouragement of local initiative, elevation of technical standards of municipal administration, improvement of local land-use plans), and the pre-investment studies, conducted by foreign and national consultants. The latter were performed mainly on medium size cities. This had the effect of deviating MINVU's planning away from Santiago [Cleaves: 1974]. It also increased MINVU's lack of coordination with the corporations due to these studies lacking from a general urban policy framework for Chile. This would have served as guideline principles for the corporations' activities in, for example, increasing urban density, and in urban renewal; both proposed by PRIS. As Cleaves points out, DDU failed to provide a methodology that would have had a saying in CORMU's controversial urban renewal scheme (like the one experimented in a giant urban renewal project in a downtown area 54) and CORHABIT's "viviendista" approach. This agency had started to construct giant housing projects for low-income groups in the peripheral areas of Santiago, in contradiction to PRIS regulations.

Municipal planning

In 1967 three Municipalities (Las Condes, Providencia, and La Reina) created an Association of Majors ("Junta de Alcaldes") based on the recent law that had modified the one that regulated these government bodies 55. The new law allowed Municipalities to contract, in coordination,

54 Project "Remodelacion San Borja".
55 Article No. 56, law 16,627; May 13, 1967.
services and public works and also to hire credits with CORFO, private banks, and IDB \textsuperscript{56}. This experience could have represented a major breakthrough in intercommunal planning. Nevertheless, it missed a permanent and structured technical organization to promote a comprehensive development strategy, limiting its action to infrastructure, transit, parks, and health and education services [Chellew, et al: 1970].

PLANNING POLICY DURING THE ALLENDE REGIME (1970-1973)

Structural change without political strength

Essentially, Allende's regime can be described as one that tried to deepen structural reform (calling Frei's program "reformism"), but without solving its insufficient political power (36\% of the ballot). Implementation of planning policy in this environment became increasingly disconnected from theory, due to the government's need to focus mainly on contingency planning.

Despite having a radical final objective, the UP was committed to pursue its program through the "rules and principles of the prevailing order", i.e., act within the constitution. Allende sustained that the armed struggle (proposed by the extreme left) was in a way redundant with the Popular Unity government, due to this government already reversing the capitalist order. The government knew however, that holding the executive branch of the state was by no means enough to transfer power from the dominant class to

\textsuperscript{56} Up to 23,000,000 Escudos, approximately US $2.5 million (1967=100).
the workers and bring about a socialist order, but on the other hand --due to the prominent role of the presidency in Chile--it knew that it was instrumental to start reducing the power of these opposing forces of capitalism. By strengthening and transferring political power to existing and to-be-created grassroots organizations (representing basically the proletariat, peasants, urban poor, and sectors of the middle class), and, accordingly, creating a socially-based pressure, the UP government sought to neutralize an adverse Congress and Judiciary, and the conservative political parties. The CDP concept of "popular promotion" was changed then to the creation of "popular power" as a mean of conquering the state-power.

Whether the UP could have succeeded in structural reform had the coup not taken place in 1973 is something that political scientists have not yet agreed. Regardless of this discussion, what matters here is that counting with only a third of the votes made the UP government highly committed to the expansion of its electoral base, creating in state planners a permanent conflict between the government's short term requirements and the structural theory long-term policies requirement [Dominguez: 1981].

Obviously PRIS was incompatible in this planning environment: it did not encourage public participation, and its goals were all of long-term nature.

**Planning institutions and implementation of programs**

At the executive level, according to an agreed formula of insuring participation to all coalition parties, the appointments to the ministries was done proportionally,
holding most of the cabinets, members of the three main parties of the coalition: Communists, Socialists, and Radical. As a way of counter-balance, all ministries had always an Under-Secretary from a different party. In the area of planning, the Socialist party held MINVU, the Ministry of Economy, and ODEPLAN; and the communist MOPT. The decision making process was governed by the principle of unanimity, which soon proved inefficient due to each party voicing their disagreements over state policy [Faundez: 1988]. Final decisions were often poorly-structured compromises, transferring policy disagreements from the level of formulation to the level of implementation [Faundez: 1988].

However, the UPs sectoral policies on education, health and housing were consistent with the overall objective of bringing about a more equitable distribution of resources and augmenting the levels of social participation [Faundez: 1988].

**Housing policies and urban consequences**

In the housing area, the government's guiding principle was that "housing is an unalienable right and an obligation for the state to provide it to its people", and that a house "cannot be treated as a profitable commodity, and thus is not to be guided by economic rules, but by social conditions". The program proposed increased expenditure on public housing, to be carried out mainly through CORHABIT. In this sector, the government was devoted to increase owner and community participation. As said, public spending on housing expanded (to almost 3% of GDP), provoking a raise in the housing starts up to 86,972 [Haramoto: 1983] in its first year (1971). But in the next two, this figure dropped
to the annual 30,000 starts of Frei's and Alessandri's regimes, in middle of a housing industry crisis, unable to satisfy such high levels of construction.

The informal sector

According to Dominguez, state planners were devoted in this period to increasing the levels of participation of workers in the decision-making process, and adapting the state to work in partnership with their organizations, making this process unified and integrated nation-wide. The social-based planning style began by Frei, would become increasingly exercised during the Allende government. By 1973, and after three years of in office, more than 400,000 people were living in "campamentos" as result of land take-overs. During this period these actions would have the support of the Ministry of Housing, agency which was then favorable to attend their petitions to the state. The supposed "marginals" were in a way gaining control of the city [Rodriguez: 1983]. Legitimacy of private land ownership was challenged as social mobilization was becoming a powerful force in public policy.

In Allende's period public social expenditure raised over 30% of GDP, but with no increase in tax revenues, which obviously prompted hyperinflation.

Despite multiple social organizations created within Allende's term, stimulated by the government, or political parties, with revindicatory purposes: "Comites de Vivienda", "Comites de Salud", "Comites de Recreacion", "Juntas de Abastecimientos y Control de Predios", "Comandos Comunales", "Comites de Autodefensa", etc., this government was unable to channel this organizational capacity beyond the meeting
of basic needs [Violich-Daughters: 1987].

Metropolitan planning in the traditional method of PRIS, resulted nearly impossible in these conditions. Its style of land management could certainly not be useful. As Ignacio Santamaria, a well known and respected planning professor in Chile, who started believing that urban science had lost track to chilean reality, stated in 1972:

"... neither the existing regional development strategies of ODEPLAN, nor the local or intercommunal plans --made for urban structures with controlled growth, and with extremely slow legal and bureaucratic procedures-- have the flexibility, opportunity, and even language to respond creatively to these new social forces which are making the city".

With respect to central government planning, he affirms that, despite having greater financial resources and expropriation attributions than of the Municipalities, it is "only capable of maneuvering behind the spontaneous initiatives of the 'campamentos', giving in each case partial and ad-hoc solutions, which generally oppose its own ministerial plans and those of ODEPLAN". These solutions were called "operacion campamento" (settlement operation), as part of a housing emergency plan carried out by CORHABIT. According to Santamaria the lack of some institutional form of this phenomena, jointly with an absence of an appropriate urban theory, reduced the solution to a merely housing approach, reinforcing the disproportionate growth of Santiago in relation to its productive employment generation. Again a renewed "viviendista" approach to city planning.
In the forefront of granting decision power to community-based organizations was MIR, a radical leftist group who did not belong to the government coalition and whose main support came from disperse groups in the shanty-town areas in Santiago [Faundez: 1988]. MIR had been organizing urban (as well as rural) land seizure since the late 60s. Soon after Allende took office, it started organizing "comandos comunales" (communal councils), at the level of municipal territories in order to establish popular-based pressure on state institutions. The most known case in this strategy was the "Campamento Nueva Habana", located in the south-east of Santiago. This experimental MIR-project was a self-directed layout of parcels that accommodated 1,500 families, having a strict social organization that grouped blocks under the authority of a block-chief. The latter in turn, formed a representative assembly that oversaw Task Forces (Frentes de Trabajo) on different basic-needs areas (policy, health, culture, recreation, protection, construction, and distribution) [Violich-Daughters: 1987]. These Task Forces would press the local and central state agencies for street paving, water supply, garbage collection, and police protection. Members of the Task Forces, composed by workers and professionals, would all receive an equal wage for their job.

MIR's strategy of land take-overs presented the government with the dilemma whether to enforce or not legality [O'Brien: 1976]. If law was not enforced the political opposition (and eventually the military) had a justification for accusing the government of breaking the constitutional order. On the other hand, using the police to enforce the law could create sharper divisions among the left and increase the contradictions in the decision-making process.
The problem for Allende (which up to certain extent also occurred to Frei) was how to channel this community energy that resulted from the land take-overs, which up to 1972 totalized 275 in Santiago, beyond the meeting of basic needs, and to gain sustained participation on the broad social areas of child care, medical attention, recreation and schools [Violich-Daughters: 1987].

Urban planning

As Frei's government, Allende's focused more in regional planning than city planning. Although agreeing in general terms with the regionalization issue, Allende's planners were critical of the growth poles approach of Frei's. The new government believed that concentrating investment and incentives in only a few designated centers unnecessarily weakened the growth of urban and rural areas outside these poles. It proposed instead a regional system of integrated areas (Sistema Regional de Centros Poblados -- SRCP) whereby the local resources of an area, both urban and rural, would become the basis for a region's development 57.

The major critique to the growth pole theory by Allende's planners was that with its application the centers with greater potential for growth tended to concentrate the largest amount of investment, increasing not only the intra-

57 In 1972 the government decided that a new definition of the structure of the national planning system was needed, and thus representatives of ODEPLAN, DPDU (of the Ministry of Housing), MOPT, CORFO, and several academic institutions began a study of a new strategy of spatial development for the long run. The results of this study were to be discussed on a broad participatory basis "with the workers country-wide" fulfilling the government postulate of popular participation in national planning [Bedrack]. However, this work was interrupted by the 1973 military coup.
regional disequilibriums, but also those within a region. The paradox in this logic was that instead of distributing population and resources, Frei's policy created greater levels of concentration. It was sustained then that it resulted mandatory to change first the socio-economic system that generated the problem [Bedrack: 1972].

The SRCP were defined not as a group of urban centers of different sizes located in a given territory, but as a group of centers hierarchal and functionally related among each others, with complementary and at the same time specialized characteristics, and having intense and active inter-dependencies [Bedrack: 1972]. The time span given for developing such a system was thirty years. Nevertheless, this plan was left at a very early stage of design, and no substantial changes were introduced to the pre-existing regional planning system [Violich-Daughters: 1987].

With respect to Santiago, the SRCP structure was to eliminate in a certain degree, dependency of the peripheral areas on the central structure. These areas were to be integrated to the centers proposed in the strategy [Bedrack: 1972]. The productive activities as well as services of the "national center" were to suffer a "gradual process of deconcentration" toward the regions [Bedrack: 1972].

The updating of the metropolitan plan (PRIS) had been delayed during the Frei period due to the pre-investment studies. By 1970 Santiago's preinversionales studies were complete and gave ample data to work on PRIS. Also, in the late 60s the Ford Foundation had done a special study to develop a comprehensive methodology on Santiago's planning, work that had not led to a new metropolitan plan. In 1970, MINVU assigned the Office of Intercommunal Planning with the task of making use of this new data, updating and broadening
the scope of PRIS. Nevertheless, political problems faced by this administration, which made it focus less on long-range planning and more on housing needs [Violich-Daughters: 1987], left this work unfinished.

**Metropolitan government**

Since the late 60s the notion of having a Metropolitan Government for Santiago had been under discussion in several planning and academic institutions. The need of a government that would provide services and serve as well for guiding policies and programs in land-use control, act as an arbitrator over the economic burden implied in this control function, and enhance citizen control over metropolitan policy. In 1972 the Center of interdisciplinary urban studies - CIDU, at the Catholic University, had made a study in which proposed three possible strategies for its implementation:

1. Voluntary association of Municipalities using the existing constitution (article 101).

2. Obligatory federation of Municipalities through a modification of their law (No. 11,860).

3. Constitutional amendment to create a metropolitan agency at level of central government.

In all cases the proposition established the need for integrating metropolitan planning with national planning,

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and at the same time, preserving the traditional municipal governments due to its democratic generation, installed capacity, and links with grassroots organizations. The argument for justifying a metropolitan government in CIDU's study, was that the loss efficiency of Santiago, due to its explosive growth, affected not only this city, but the entire country, which is its area of influence. According to this study, the state had acknowledged this issue in the past by becoming increasingly involved in Santiago's planning and management with central government agencies. But these institutions were not well suited for these functions, specially regarding responsiveness to diversified demands, and inter-sectoral coordination. On the other hand, local governments were incapable to deal with the scale and magnitude of Santiago's problems.

The study however, warned of two potential risks in creating an agency of this kind: municipalities with greater financial resources could have dominated this organism, and that this it would respond more to metropolitan pressures than to national interest, when both were in conflict.

Because implementing the propositions in this study were over the political capacity of Allende's government, no actions in this direction were ever taken. However, it could have been the perfect backup agency for implementing a comprehensive land-use plan like PRIS.
Redefinition of role of the State

Pinochet's government represents the major change in the orientation of the role of the state in the preceding 40 years of Chile's history. After two years of political consolidation (1973-1975) the economic model of import substitution, in place since the late 30s, was abandoned and changed to another inspired in free market and monetarism. The state was to become subsidiary to private initiative, and the market, on the eyes of the government, would be the most efficient allocator of resources. Again, as in the Alessandri government, the accent was to be laid on economic growth over social development. With the support of IMF, and bilateral lending institutions like World Bank, and inspired on the "Chicago model" of economic growth, deregulation and privatization policies become the key concepts in all sectors of the economy.

The informal sector

The military regime began reversing the participatory role that poor social groups had acquired in the political system during the past two governments. Again top-down planning was introduced, while in the economy the state role was believed as subsidiary to private initiative. The new goal is to incorporate people as individuals to the market, which is considered as the most efficient and equitable allocator of resources. Focussing more on the market and consumption

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Pinochet's rule continued until 1990, but the time-frame of this analysis is until 1980.
instead of an organized community. While economic freedom was pursued, community participation was repressed.

The emphasis was laid more in the consumer, as opposed to the organized community, as it had been in past regimes. The authoritarian model did not stimulate social-based organizations, and instead required their atomization, distancing itself from what had been the tradition in Chilean governments since the 1920s.

For this government the city space was the space of discipline. A discipline that is mandated by market forces, forces that translate a "natural" growth and location. In consequence, radication policies, which were carried forward during 1975-1983, reestablished the "social order": social classes living in their own spaces [Rodriguez: 1983]. Participation was to be only possible through market channels, i.e., individually-based. Those community organizations which remained (Neighborhood Associations, Mother's Associations, Sport Clubs) were allowed to do so because they were instrumental for control of the population and of their support. They were to serve as a channel of communication (on a territorial basis) between the people and the authorities over aspects dealing with their neighborhood exclusively, and with delegates designated by designated majors. However, they were strictly regulated. Majors were subordinated to the Ministry of Interior. Also, a legislative body at the level of municipalities (Regidores) was eliminated. A vertical hierarchy of power was instead imposed.

From 1975 onward, municipalities became agents of social development, understood as closely linked with the interior
security of the state 60. From local administration (service provision), to redistributive functions: health, housing, employment. This policy had a decentralization rhetoric, but due to the fact of the vertical authoritarian structure, it was in fact highly centralized.

"Rearranging the social space of the city, establishing a vertical order, and, on the other hand, dispersing the population through punishment and repression, it has been intended to rearrange the city, in a way that it allows the individual and private appropriation of the urban goods" [Rodriguez: 1983].

During the first seven years of Pinochet, social public expenditure dropped for the first time in more than fifty years, from 20% to 16% of GDP. This owing to two complementary policies: reduction of public expenditures to reduce inflation, and a neo-liberal conception of a subsidiary state that transferred responsibilities to the private sector, and which this did not assume.

Planning institutions

While Pinochet's government operated basically with the same planning institutions that had been set up by Frei's regime [Violich-Daughters: 1987], substantial restructuring within these took place. Under the new "National Planning System", ODEPLAN gained a pivotal role, expanding from a role of merely advisory to the President, to one leading the coordination of all planning activities in the different ministries (including those of MINVU). It was to act as a clearinghouse institution for the production of a "National

60 See new law for municipalities no. 573 july 12, 1974
Indicative Plan", the first of which was adopted in 1976. The executive director of ODEPLAN gained status of secretary of state ("rango de ministro"). From then on it was ODEPLAN, and not each Ministry, that had the task of determining objectives and targets, and to coordinate sectoral objectives into the National Indicative Plan [Violich-Daughters: 1987]. Counting with the Finance Ministry's approval and having being decreed, the ministries had to execute their respective sectoral directives.

A national commission for administrative reform - CONARA was established to resolve conflicts among competing and overlapping state institutions. In some cases (e.g. transit) inter-ministerial commissions were created for a more comprehensive approach.

Regional planning

Regionalization remains as primary issue, and a new regionalization design is enacted 61. Thirteen regions were considered instead of the eight defined under Frei, each with a governor (intendente) appointed by the President, and with activities controlled by the Ministry of Interior. Santiago became part of a thirteenth region called Metropolitan Region.

Every region had from then on a duplicate of the central executive layout, Regional ministries (SEREMIs) under a planning and investment plan coordinated by a regional ODEPLAN (SERPLACs). The latter was to define regional development goals to be approved by ODEPLAN and thus incorporated to the National Indicative Plan. For this

61 Law No. 575.
purpose it was also created the "Fondo Nacional de Desarrollo Regional" - FNDR, a resource fund for investment, approved in the national budget, on which regional SERPLACs had total autonomy over its allocation to projects presented by different SEREMIs within their region. The coordination for this resource has been administered at the national level by the "Subsecretaria de Desarrollo Regional", depending, interestingly enough, from the Ministry of Interior, a political ministry, instead of from its natural place: ODEPLAN.

According to Violich-Daughters, two counter-effects had this decentralization policy to become more effective: in the first place, while more political power was given to the regions, the state apparatus was reduced dramatically in its size (from 700,000 employees in 1973 to 147,000 in 1987 according to ODEPLAN), having in consequence less to say in local decisions, which from then on were mostly in hands of the private sector. In the second place, the absence of a democratic system, made the local authority (Intendente) a delegate from the President. i.e., the central government.

Urban ideology

In 1979, and within the deregulation macro-policy context described, and following orientations given by ODEPLAN, the Division of Urban Development (DDU) of MINVU elaborated the National Policy of Urban Development (PNDU). The main objective was to compile sectoral policy with macro-economic policy. Applied to urban planning, the liberalization policy was interpreted as the acceptance of the notion that cities have a "natural growth tendency", which local or central governments should regulate the least [Lopez: 1981]. This natural tendency was observed in Chile by MINVU planners, as
determined by demographic, socio-economic, and tax factors; and by people’s location preferences, as well as by an absence of agricultural planning.

Major arguments for implanting this new policy were to create incentives for private investment, and to smooth the gradient price curve for urban land. The only limit for deregulation policies in this area would be the "state obligation to protect the common good", a concept never accurately defined. With the proclamation of PNDU, the government abandoned two decades of urban growth control by the state.

**Metropolitan planning**

With respect to a metropolitan government for Santiago, the military government selected the third strategy proposed by CIDU’s study in 1972 (Metropolitan agency at level of central government), becoming Santiago and its region governed by an "Intendencia Metropolitana" with a jurisdiction on the Metropolitan Area of Santiago, and Santiago itself becoming the Metropolitan Area. This agency would respond to both, Ministry of Interior and ODEPLAN, generating a permanent conflict of objectives, specially under a military governor (Intendente), which also had to respond to his hierarchal military superior. The Intendencia government’s jurisdictional control over Santiago’s metropolitan planning has been far from clear [Violich-Daughters: 1987], committing itself mostly to housing plans, biased with political orientation and favoritism due to its institutional relationship with the Ministry of Interior.

MINVU on the other hand, and in agreement with the National Indicative Plan, created a regional office for Santiago
(SEREMI-M), which took in charge the control of PRIS. SEREMI-M also coordinated the creation or modification of the region's communal land-use plans (Plan Regulador Comunal - PRC), all of which by the early 80s were already in agreement with the new planning strategies of the government, specifically, they became more flexible in their land-use regulations. SEREMI-M became also in charge of regulating new urban development on the expansion area ("area de expansion urbana"), name given to the suburban area in the 1979 modification to PRIS, made with the purpose of a land market liberalization.

Also in 1979, and under the need of harmonizing the PRIS with the PNUD, the Department of Urban Development and Infrastructure of SEREMI-M finished the studies for the liberalization of Santiago's urban limits and prepared the reformulation of PRIS. The analysis considered the potential for urban growth of several sectors located in the suburban area. Using twenty one variables, grouped into three "components" (environment, population, and organization), each sector obtained a compound coefficient that signed out its growth potential 62.

The better coordination between public institutions, and the planning subordination of MINVU to ODEPLAN, gave the new version of PRIS greater consistency with national economic policies. In October 1979 by Supreme Decree 420 it was promulgated a code that regulated the Urban Expansion Area. SEREMI-M held the decision-making process for new developments. Developers (though not the Intendencia Metropolitana for its housing projects) had to be granted a special authorization to build in this area after compiling

with municipal land-use codes. With respect to the urban area, PRIS was left almost intact. This probably due to the fact that the plan --because of its scale-- had enough flexibility with respect to zoning codes to be compatible with the PNDU. It was then the turn to reform --based on the same premises-- the local (communal) land-use plans --PRCs. Those of greater Santiago were all revised between 1979 and 1985.

In 1985, after six years of being the PNDU the official urban ideology, planners within MINVU, which had been in a low profile resistance to the new ideology of urban policies, were able to gain enough muscle to get the government to reformulate and decree a new PNDU, which blended a market view of urban development with a stronger role for the state. Parts of the 1985 PNDU were the total antipode of the 1979 PNDU, stating for example that urban land is a scarce resource. Nevertheless, for Santiago this new PNDU had no impact because it was not transposed into PRIS or any other plan, i.e. for MINVU, it was going through the motions for institutional conformity.
CHAPTER IV: CONCLUSIONS

Conclusions for this study can be made on the two different levels of analysis raised in this thesis. The first referring to PRIS as a metropolitan land-use plan in general, and the second to this plan in Chile’s context within the period of analysis of this study.

It is clear to me that PRIS was subject to the usual major flaws that affected land-use planning during the 60s and 70s: lack of flexibility, poor implementation strategy, and a physical bias of its professional team. These factors, added to the long term strategies of this instrument, made it look like an immutable object by succeeding planners dealing with urban planning in Santiago in the following years, and thus they disregarded many of its prescriptions, mainly in the growth management aspects. More loosely policies, with shorter term tactical plans could have been more implementable than PRIS static and long term propositions. If urban development strategies, with an active state managing growth, would have been considered, instead of a restrictive growth control scheme, probably PRIS would have been a powerful instrument. If PRIS, instead of the "end state" concern, would have had a more "more process-oriented" concern for the means of promoting and controlling development, as the vital implementation function [OECD< Ian Haywood: 1977], probably would have had a leading role in Santiago's planning because it would have had incorporated all the social dynamic process of the 60s and early 70s in Chile. The static nature of PRIS made it become increasingly disconnected of national planning objectives, specially in a context like Chile's 60s and 70s, when these were constantly changing, often contradicting
preceding ones, even during a same government (case of position toward urban land as a resource in Pinochet's).

In the mid 60s, urban planning became also task for other social-science-based professions. Economists, sociologists, anthropologists began to have a say in development planning. Thus, urban planning became a more interdisciplinary activity, and goals were more socially oriented than what PRIS could offer. Because PRIS was not designed to incorporate new approaches, it was bypassed, and seen with mistrust by agencies and institutions outside the Ministry of Housing, who disregarded it as a physical oriented plan. Also during this period a more process of growing public participation was taking place in Chile, and PRIS did not offer a chance of incorporating and using this dynamic.

PRIS no-growth statement, understandable as a reaction to an explosive concentrated population growth (the Chilean version of the baby-boom), in the peak of the immigration phenomena, but not when these conditions changed, made the plan become impracticable and obsolete. In consequence, succeeding governments until 1973 bypassed many of PRIS' statutes in growth control, namely urban limits. Later, the military government removed them with the SD 420/79.

With respect to PRIS' planning policy context, it becomes necessary in any analysis to understand that this was one of the urban planning instruments among several that were concurrently in place, usually overlapping in territorial jurisdiction, and with also overlapping time-frames: local land-use plans, pre-inversionales, national urban policies, national housing plans, national development policies, etc. Most of these instruments were produced by different professionals teams, working in different state institutions, in different periods of time, and enjoying
diverse degrees of power. The hierarchical chain NATIONAL SECTORAL DEVELOPMENT PLANS---\rightarrow REGIONAL PLANS ---\rightarrow METROPOLITAN LAND-USE PLANS---\rightarrow MUNICIPAL LAND-USE PLANS, which was put in operation in Chile during the period of this analysis, and which is supposedly a step-wise approach to integrate national objectives with land-use planning, has not been at all an harmonious system. Santiago, where all these plans are in place, has never been able to deal appropriately with them due to many contradictions among each other, but mainly because professional borders have to be crossed from one level to the next.

Sometimes these plans have been created with the implicit intention of causing the revision of another plan. It happened to Santiago’s local land-use plans when PRIS came into effect (1960), and to PRIS and local land-use plans with the National Policy of Urban Planning (1979). In the latter case, PRIS was an opposing force to a free land market system, and probably the intention was to abolish PRIS or make a new metropolitan plan for Santiago. But this would have found opposition in professional groups within MINVU staff which was still advocating for this plan. Also in professional associations (mainly architects). In consequence, enough modifications were introduced to undermine its statutes and neutralize it. In the aftermath, the plan was still there, but rather inoffensive.

Because PRIS was an imperial style of plan, and thus, was rarely modified, other planning instruments ran at one time or another in conflict with this plan. Not to having a sponsor institution, namely a metropolitan government, usually caused PRIS to lose these disputes with other instruments. Because planners behind PRIS (department of planning at MOPT, and later DDU at MINVU) were not among those with the most leverage in the executive power, PRIS
did not stand a chance when ODEPLAN imposed a different approach to planning.

Maybe when MINVU was just founded in 1966, was the golden opportunity for PRIS to take a leading role in Santiago's urban development, but the institutional conflicts among the development corporations, and the duplicity of functions between MINVU and MOPT, described in chapter III, hindered this chance. PRIS was sentenced to be the plan of the DDU, instead of guiding all the planning institutions that were involved in Santiago's development.

Short term goals of the different administrations was also responsible for lack of significance of PRIS. The housing or "viviendista" approach always produced better political rewarding, and in consequence, was more attractive to governments that desperately needed political support (always insufficient in Chile's 60s and 70s).

Also, a problem of scale affected PRIS. When its study began in the early 50s, metropolitan scale planning was gaining momentum in Chile and elsewhere. However, when the plan came into effect by 1960, several factors were making state planners focussing more at the regional level of planning: a devastating earthquake in the south, international financing agencies, and a process of imbalanced urbanization toward Santiago. Regional scale planning became increasingly appealing to planners in the mid 60s and early 70s, and much energy was devoted to this approach. In the late 70s and 80s instead, municipal planning was the scale planners were looking at, and the effort this time was being assigned to decentralize planning. In consequence, PRIS' metropolitan scale of approach was never in the mainstream of development planning in Chile after the 50s.
In spite of this, in the early 70s PRIS again could have had an opportunity for becoming a key planning instrument if the studies of CIDU regarding the creation of a Metropolitan government agency would have thrived across the national executive power and legislature. Having a backup agency could have provided advocates at a high level in the hierarchical structure of government agencies. Needless to say: improved coordination for operating at the metropolitan level mainly with service provision, as well as gaining momentous in guiding development, and attracting qualified professionals (case of BRA in Boston). Nevertheless, the fact that local governments -municipalities-- were subject to increasing political confrontation in the 60s and 70s, and that these governments were an alternative source of power, a sort of political buffer from the central government, made this initiative distrustful to the political parties. They were unsure which side would be favored by this mid-level agency, how much power it would have, and who was going to be in control it. Consequently the idea never raised enthusiasm in the legislature.

During Pinochet's government, and after institutional reform, a pseudo-metropolitan government was created (Intendencia Metropolitana), but by that time urban planning in Chile had been taken over by economic planning, whose supporters were in ODEPLAN, agency which had gained a leading role in Chilean planning, and which possessed a cohesive staff, dominated by free-market oriented economists. Added to this, the new organizational structure of government left this agency under the command of the Ministry of Interior, a political entity, which by nature has short-term goals. Intendencia Metropolitana in consequence was mostly devoted to housing and employment projects. SEREMI-M, the metropolitan branch of MINVU was left with the responsibility of PRIS.
Added to the above, hindering Intendencia Metropolitana's effectiveness in urban planning was the fact that its executive director (Intendente) was since its creation a general of the Chilean Army. Managing urban development is not something military feel comfortable with because it is not in their style of work. Discussion, negotiation, compromise, consensus, are not concepts with which military are familiar. Usually, military governments prefer to devote their energy to public works and construction projects, where top-down planning (more equivalent to their vertical command style) proves effective. This is why this agency was very efficient in implementing public works projects that PRIS still demanded from its original conception, mainly related to road system and parks. But, no effort was made to import PRIS from SEREMI-M and transform it into an effective instrument for urban development or growth management.

Final words

Ironically, PRIS was able to survive all these years, not because of its flexibility or practicality, but because of a combination of external factors: Chile's legalist inertia, which makes it easier to create a new instrument than to nullify an existing one; professional boundaries, which other professions located in different agencies might challenge but not abolish; and also, and simply because no alternative plan was ever seriously proposed.

PRIS however, was certainly a good start for integrating national planning objectives into land-use planning at a metropolitan scale, an objective that has not been strongly pursued in the last decades. I believe that a plan like this should be understood in the future, not by its outdated propositions, but by what it represents in terms of legal
power, scale, and permanency: an instrument coded into the legal system, of a metropolitan scale, and having enough presence to remain in place for three decades. I believe that if new growth management techniques and modern zoning codes are introduced, as well as public participation, expanding the scope of physical planning and linking it directly to the resolution of critical and social and economic issues, PRIS could become an effective planning instrument for and of Santiago's inhabitants.
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GLOSSARY OF ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CCHC</td>
<td>Chilean Chamber of Construction (&quot;Camara Chilena de la Construccion&quot;).</td>
</tr>
<tr>
<td>CDP</td>
<td>Christian Democrat Party (&quot;Partido Democrata Cristiano&quot;).</td>
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<tr>
<td>CIDU</td>
<td>Department of Urban Studies at the Catholic University of Chile. (&quot;Centro Interdiciplinario de Desarrollo Urbano&quot;). After 1984 it became the Institute of Urban Studies - IEU. (&quot;Instituto de Estudios Urbanos&quot;).</td>
</tr>
<tr>
<td>CODECO</td>
<td>Municipal Council (&quot;Corporacion de Desarrollo Comunal&quot;). Semi-legislative bodies at the level of municipalities stipulated by the new constitution of 1980, but not in operation until 1990.</td>
</tr>
<tr>
<td>CONARA</td>
<td>Commission for Administrative Reform (&quot;Corporacion Nacional de Reforma Administrativa&quot;). Task force established during the first years of the military government for detecting unnecessary duplicate functions of different government agencies and proposing administrative reforms.</td>
</tr>
<tr>
<td>CORFO</td>
<td>National Development Corporation (&quot;Corporacion de Fomento y la Produccion&quot;). Chile's leading planning agency since its foundation in 1939.</td>
</tr>
<tr>
<td>CORHABIT</td>
<td>National Housing Corporation (&quot;Corporacion Habitacional&quot;). Founded in 1965. Assigned for lower cost housing projects than CORVI.</td>
</tr>
<tr>
<td>CORMU</td>
<td>National Urban Renewal Corporation (&quot;Corporacion de Mejoramiento Urbano&quot;). Founded in 1965.</td>
</tr>
<tr>
<td>CORVI</td>
<td>National Housing Corporation (&quot;Corporacion de la Vivienda&quot;). Founded in 1953.</td>
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Urban Development and Budgetary Division ("Division de Presupuesto y Desarrollo Urbano"). Office responsible for PRIS at the Ministry of Housing since its foundation in 1965 until 1976; specifically, in the office of intercommunal planning. After administrative reform of 1974, when budgetary responsibilities were transferred to ODEPLAN, it became DDU, and the Intercommunal plans were relocated at the regional branches of the MINVU.

Presidential Decree ("Decreto con Fuerza de Ley"). Executive decree that needed no approval by Legislature, because it was based on special prerogatives conceded by the latter to the President.

Municipal Department of Public Works ("Direccion de Obras Municipales"). Municipalities with a population larger to 5,000 require that these entities count with an Urban Advisor ("Asesor Urbano") to be in charge of local urban planning.


Special Fund for Regional Development ("Fondo Nacional de Desarrollo Regional"). Created during the military regime in an effort for developing the regions.

National Institute of Statistics ("Instituto Nacional de Estadisticas").

Ministry of Housing and Urban Development ("Ministerio de la Vivienda y Urbanismo"). Founded in 1965.

Leftist Radical Movement ("Movimiento de Izquierda Revolucionaria"). Organized massive land take-overs during the late 60s and early 70s.
MOP or MOPT  Ministry of Public Works and Transportation ("Ministerio de Obras Publicas y Transporte"). After 1965, when the Ministry of Transport was created, the final "T" was dropped.

ODEPLAN  National Planning Office ("Oficina Nacional de Planificacion"). Founded in 1965 as an advisory agency for the President. After 1974 its executive director obtained ministry status ("rango de ministro").

ORPLAN  Regional Planning Office ("Oficina Regional de Planificacion Nacional"). Conceived in the late 60s as part of the effort for regional planning. After the 1976 administrative reform they became SERPLAC ("Secretaria Regional de Planificacion"), which duplicated ODEPLAN in the regions.

PDC  Communal Development Plan ("Plan de Desarrollo Comunal"). Comprehensive plans produced by SECPLACs, ODEPLAN's branches at the municipal level, starting in 1980.

PNDU  National Policy of Urban Development ("Politica Nacional de Desarrollo Urbano"). Document with legal status that gives the main guidelines for urban planning and policy design. The first is from 1979, and it was reformulated in 1985.

PRC  Municipal Land-Use Plan ("Plan Regulador Communal").


SEREMI  Regional Ministry ("Secretaria Regional Ministerial"). Created with the 1976 administrative reform. Each of the thirteen regions has these duplicates for
thirteen regions has these duplicates for every national ministry. MINVU's SEREMI-M, corresponds to the Ministry of Housing's metropolitan region branch, and is the agency in charge of PRIS since that date.

SERPLAC
Regional Planning Office ("Secretaria Regional de Planificacion"). Duplicate of ODEPLAN at the regional level, and responsible for the allocation of the share of the Special Fund for Regional Development -FNDR.

SERVIU
Urban Housing Bureau ("Servicio de la Vivienda Urbana"). Agency created after the 1976 administrative reform to replace the housing and urban development corporations. Mostly dedicated to the allocation of affordable housing subsidies, and urban street paving.

SOFOFA
Association of Entrepreneurs of Heavy Industry ("Sociedad de Fomento Fabril").

SRCP
Regional System of Urban Centers (Sistema Regional de Centros Poblados"). Regional policy studied by the Allende regime (1970-73) but not implemented.
Chinese land-use planning for cities and municipalities is regulated by several types of plans and codes, often superimposing one another in their jurisdictions. Each of these type of instruments has different origins and history, which start with the first building code of 1929, created as a reaction to an earthquake in a southern region of the country, and which showed the need for regulating the quality of construction.

Land-use plans can be summarized as variations of a "Plano Regulador", equivalent to the Master Plan or Urban General Plan used in the United States, though far more legalistic [Violich-Daughters: 1987]. These plans basically consist of a map which zone land-use and transportation patterns, and a complementary land-use code. They are produced by teams of architects and engineers who, previous to 1980 were employees of a governmental entity (municipality, or Ministry of Housing), and after that date, certified consultants.

The oldest of these plans is that of the commune of Santiago (1939), which was designed under the supervision of the Austrian city planner Karl Brunner. During the 50s and 60s, most urban communes in the country created their own Plano Regulador, greatly influenced by Santiago´s. In Greater Santiago between 1979 and 1985, and with the intention of gaining consistency with general planning policy, all of these local land-use plans were revised; work done by private consultants under the supervision of the Ministry of Housing.
During the 60s, the metropolitan scale was introduced to land-use planning, and the three largest cities were given their metropolitan regulador plans: Santiago (1960), Concepcion (1965), and Valparaiso-Vixa del Mar (1970). PRIS, subject of this study, is the metropolitan regulador plan for Santiago.

In the 60s and 70s it was introduced a strategic land-use plan (Plan Seccional), which, at a smaller scale than a local Plano Regulador, intervenes in a special urban situation with special land-use regulations. These are normally used for urban renewal purposes, and are created by municipalities in combination with the Ministry of Housing (MINVU). Not many of these plans have been implemented, but, nonetheless, some have been quite successful.

Jointly with these specific plans there is a general umbrella law (Ley General de Construccion y Urbanismo) and a complementary ordinance (Ordenanza General de Construccion y Urbanismo) which are the general building and urban development codes for the whole country. These instruments have been revised several times since the first in 1931, being the latest in 1976.

At the local level, these instruments are duplicated with more specific regulations: local building and urbanization codes (Ordenanza Local de Construccion y Urbanismo), which, together with local the Plano Regulador, are responsibility of the municipalities, specifically, the "Direccion de Obras Municipales" — DOM (Public Works Department).

Starting in the 80s, and under a the new institutional structure, whereby the national planning office (ODEPLAN) has municipal branches (SECPLACs), new comprehensive development plans (Plan de Desarrollo Comunal) have been
produced and compiled with local land-use plans. However, at the regional and metropolitan levels this has new approach has not been implemented.
London

"The British post-war system was a response both to the devastation of the last war and to a desire to create a new order and a sense of equity. Plans were seen as models of an ideal situation which, given time, would be realized on the ground. Legislation gave teeth to a system which it was assumed would be good for the public. One of these assumed desires was for better environmental standards and that such standards could only be achieved by separating work areas from residential areas with cities as work-places and suburbs providing housing through the grouping and segregation of land use activities". At least three consequences derived from this planning style: first, planning was descriptive rather than prescriptive, and second, concentration on zoning planning led to an emphasis on spatial aspects of planning in detriment of non-spatial elements [OECD, Ian Haywood: 1977].

Paris [Trilling: 1981]

In 1956 the planners of the French Ministry of Construction started designing the Plan d'Amenagement et d'Organization Generale de la Region Parisien - PADOG. Its main goal was to limit the growth of Paris, which was believed to be at the detriment of the rest of the country. It was adopted by the Gaullist government, which had taken office in 1958, in
"The PADOG was the beginning of a sustained effort to create comprehensive land use planning at the level of the metropolitan Paris region and to provide for a spatial structure of activities that would improve upon projections of existing non-planned tendencies"..."Substantively the PADOG embodies the no growth, protectionist ideological tenor of the inter-war period"..."the view that the capital should not be allowed to expand demographically and geographically"..."in the french called Malthusianism" a fear that the economic and demographic expansion was not sustainable and needed a protracted, sustained stagnation. The existing process had to be countered by techniques of positive regional planning.

The question to planners was at what rate should Paris be allowed to grow relative to provincial cities? PADOG worked on the assumption that migrations to Paris could be reduced from 50,000 to 25,000 people a year through the limitation of employment creation. This was pursued by limiting the construction permits of offices and factories (physical control).

PADOG proposed massive improvements in the transport infrastructure aiming at reducing congestion in the center. Two deep-level express lines, RER (Reseau Espress Regional) was to serve the Paris suburbs, and would operate in combination with the Metro.

The planning unit for which PADOG zones is an area of 5000 square miles containing a central built area of 463 square miles (1,200 square kilometers) containing a population of 7,313,911. Four zones were considered:
1. The noyau central (central core), where, in conjunction with the Plan Directeur, calls for preservation. It creates a nearby growth-pole (La Defense) to channel new commerce, and service activities (located in the third zone).

2. Ten peripheral arrondissosements, with a population of two million (two thirds of central Paris). PADOG calls here for renovation, recuperation of misused land, and reduction of population. The density of this zone was often higher to 800 inhabitants per hectare.

3. Banlieieu outside the 20 arrondissosements, with 214 communes and with four million inhabitants, and to receive the population removed from the second zone. Proposes the creation of three development nodes to serve as well, the inhabitants of this zone, and those of the second zone, where spill-over growth from the three core zones (commerce and service industries, administration, and the university) would be channelled. The most important of these nodes is La Defense, with high-rise buildings (office, and housing), and infrastructure to accommodate 800,000 people.

4. Rural belt with a population of 1.2 million and preponderant agricultural activity. Thirty towns are in this are, a dozen with population between 10,000 and 30,000. PADOG tries to maintain a non-built zone, a sort of green-belt inspired in the London Green belt.

PADOG was a "decisive document" in the sense that it reversed a post-war "hands-off" policy by restructuring the Paris metropolitan region with a coherent giant public works program.
PADOG criticism can be broken into three major difficulties:

1. PADOG's planners Malthusian attempt to limit growth was misconceived. It was argued that excessive growth of Paris would hinder competitiveness with other European capitals, and planned a population of 12 million for the year 2000. Nevertheless, between 1962-64, Paris grew at a rate three times higher than PADOG's assumption (average of 165,000).

2. Planning boundaries were to tightly drawn, and the allocation of constructible land was scarce to meet the growing demand. Also, the lack of integration between the central agglomeration and the wider city was unrealistic, suffering the plan constant "violations".

3. PADOG's time horizon (1970) was too modest. This short term view encouraged a search for mitigation type of thinking rather than looking for fundamental solutions.

PADOG must be seen as both, "an artifact of its time, and a stepping stone". It was an advanced document in the right direction, "and set the stage for an ambitious land-use planning effort, notably in the spheres of transport and in the initiation of the suburban nodes." Its effectiveness fell on its basic premise, that it was both desirable and possible to halt demographic and physical growth of Paris. However, it is thanks to PADOG that the principle tools of management of the Paris region were created and implemented. Also, two major concrete realizations owe to this plan: RER and La Defense.

The control and supply of land is controlled in Paris by the Land and Technical Services Agency (AFTRP), created in 1962,
through acquiring land for development, protect forests and to intervene the land market. This is done through preemption rights on zones of differed planning (ZAD), established in 1964-65. These were designed to ensure that the announcement of proposed development under the regional plan (1965) would not lead to an increase in land prices and speculation. Complementary to ZAD tool as a mean for combat against speculation of urban land, a legal maximum occupation coefficient has been established, 1:1 for all France, and 1:5 for Paris [OECD, Christian Hortus: 1977].

United States

Most of metropolitan areas in the US are suffering from an overlapping myriad of units of local governments (in larger cities these can larger than a thousand). Most metropolitan residents are served at least by a county, a municipality or township, a school district, and one or more special districts (sewer, street improvement, fire protection). These government are weak, and the overlapping situation weakens them further (struggling for resources from the same land parcels). Also, the nature of these governments -- considering mobility of population-- inhibit long-range planning and the presence qualified decision-makers essential to local government. There is a lack of administrative structures capable of handling overall system-wide problems [Patterson: 1988].

Recent experience has showed some successful metropolitan reorganization: Toronto, Miami, Nashville, Jacksonville, and Indianapolis. Other case have dealt with metropolitan special cases districts: parks and recreation, sewer and water utilities, public transportation, and metropolitan planning. Still however remains a problem of funding these
agencies, having a role of merely advisory entities. The federal government for some time has been on the line of promoting the formation of councils of government "through requiring them in all metropolitan-wide planning". It has become more evident that metropolitan scale government is better at dealing with certain planning issues, specially transportation planning, and urban renewal [Patterson: 1988].

Three major events have served to weaken planning in regard to its comprehensiveness both in geographic coverage and breadth of subject matter:

1. The 1974 Housing Act which decided to award Community Development Block Grants (CDBG's) directly to eligible local governments, which resulted in the formation of Community Development departments devoted to short-term, limited scope, renewal-revitalization programs.

2. Elimination of "701" funding for planning purposes (during first Reagan administration).

3. Relaxation of the planning requirements to grant CD Block Grants. [Patterson: 1988]

The reduced requirements and change in emphasis in federal funding and accountability have caused cities to have acute budgetary problems and lacking of devotion for long-range, area-wide comprehensive planning [Patterson: 1988].

In the British tradition this type of planning is referred to as "structure planning", while in the United States the Federal government calls it "level two planning", and the
states "regional planning", "county planning", or "sub-state planning". In all case it refers to "some sort of large-scale physical land-use planning which determines land-use allocation in an area including few or many local municipalities" [Fabos: 1985].

In the United States transportation planning became synonymous of metropolitan regional planning, giving primary concern to accessibility. Land-use allocation models were the instrument to develop land based on surveyed preferences. The equivalent to European comprehensive planners are the American highway planners [Fabos: 1985].

At the level of metropolitan planning, public planners have a predominant role. Planning consultants, or private planners have an insignificant role. This owes to the fact that metropolitan planning is a long-range activity, a continuous activity where a bureaucracy is essential [Fabos: 1985].

In the US metropolitan and rural planning instruments have usually been of single purpose, instead of an integrated approach [Fabos: 1985].

"... the importance of this middle level or metropolitan and regional and rural planning is increasing. As land-use issues have become more complex, as our understanding of the interrelationships between human activities and the environment have increased, as local areas have grown into metropolitan regions, this regional level planning has become inevitable. A significant growth in this area of land-use planning is vital and most likely to occur in the near future" [Fabos: 1985].
What do we want metropolitan regional agencies to do (at the urban level) and are they strong enough to do it? "What we want them to do is to contribute to efficiency in public services where these are divided, uncoordinated jurisdictions"..."We want them to contribute equity --fiscal equities and social equities-- where larger units will overcome the parochialism of smaller units". Council of Governments - COGs, are too weak at present to attain many objectives significantly [Stollman in Campbell: 1976].

Federal government action contributed to the creation of sub-state regional organizations in the 60s (COGs). A few were multi-functional, being devoted to planning and development, health, education, economic development, transportation, mental health, aid to the aging, etc. Most were devoted mostly to planning, and most of these received comprehensive planning grants from the Housing and Urban Development Act of 1965. "Most remain advisory, lack of regulatory power, and with a few minor exceptions, do not deliver services. Their emphasis remains on planning and the results of their planning efforts can be ignored by local jurisdictions" [Campbell: 1976].

In the US there is an acceptance of the principal that urban growth should be guided through public policy decision involving a wide array of community interests group. Policies are "made principally by locally elected governments, within prescribed legal and administrative limits, and with governments at the regional, state, and national level playing various roles. The professional contributions are clearly interdisciplinary and residents have a voice" [Violich-Daughters: 1987].

"The physical concerns in the United States have been function-efficiency-value-oriented rather than aesthetics-
amenity-design-oriented, as was traditional in Europe, where... much of the contents stems from architectural and engineering criteria, with less attention given to political processes or to socio-economical analyses" [Violich-Daughters: 1987].

"Technical work of urban planners is institutionalized on a more legislatively structured basis; urban plans are formulated in public view and are exposed to discussion and reactions at public hearings required by law". Physical regulations can even be subject to popular vote. [Violich-Daughters: 1987].
ANNEX 3: LAND-USE REGULATIONS

Zoning

Is "the demarcation of a city by ordinances and the establishment of regulations to govern the use of the zoned land". Its main objectives are usually to improve efficiency, to promote agglomeration benefits, to specify minimum health and safety requirements, and to provide land for public goods and services. Zoning techniques have evolved through time:

- Zoning based on scale of intensity of use (from single family-residential to heavy industrial).

- "Bulk Control" zoning ordinance (to control density, production, and traffic; provision of adequate daylight and air; and provision of sufficient privacy and open space). Older zoning ordinances regulated shapes, volume, placement, setbacks, etc. of buildings. More modern ordinances just control floor-area ratios.

- Zoning for mixed-use development, transit impact, and cluster and planned-unit development. More comprehensive but flexible approach.

  - Mixed-use zoning may be applied to special mutually supporting large-scale estate developments.

  - Transit zoning is used for rezoning land around a public transport station to allow higher densities and mixed uses.
- Planned-unit development zoning is used for parcels of land containing a residential housing cluster of prescribed density and appropriate commercial and institutional facilities. (Rarely used in LDCs). [Courtney: 1983]

More recent zoning techniques include: floating zoning (defined but not approved until need arises), conditional zoning (enables the local government to bargain certain concessions with developer), interim zoning (moratorium on alterations while city decides purchase or rezoning), and phased zoning (developer must prove availability of infrastructure and services, or/and promise of provision of open space, construction of low-income housing, and conformity to design standards, in order to obtain permit). [Courtney: 1983]

Two types of difficulties usually arise from zoning:

- incorrect definition of the framework by which the social objectives are to be met (older type of regulations were oriented for the development of one lot at a time making little sense when applied to large-scale projects)

- costly and limited implementability which often leads to opposed results (legal status of regulations hinder its flexibility). [Courtney: 1983]

More recently however some efforts have been made to improve this planning tool: amortization for non-conforming uses;
performance standards; giving priority to use instead of density; conditional uses to be reviewed by a planning commission or other entity; historic, cultural and aesthetic zoning, requiring review by experts; introduction of planned unit development to be reviewed by a planning commission; introduction of incentives for developers to provide certain amenities; etc. [Patterson: 1988]

Zoning works best when it is one among diverse policy instruments. Although necessary for the purposes it seeks, if alone, it cannot outlaw existing uses, oppose owner resistance, and often limits desirable changes in land-use. "in developing countries, where the supply of urbanized land is increasing more slowly than the growth of urban population, it may readily lead to illegal development" [Courtney: 1983].

Subdivision regulations can is a powerful instrument to determine neighborhood patterns. Once the size and shape of the lots has been defined, the essential character of land uses, street patterns, and public utilities is determined. It also strongly affects the type, size and quality of structures and the density of population [Courtney: 1983].

This tool can only be effectively applied only to areas being urbanized for the first time, and even the problems of enforcement arise. Rapid growth of squatter settlements make these regulations ineffective. A major problem in developing countries is that its application is based on its success in developed countries (mainly US and France) with too high standards and limited flexibility [Courtney: 1983].

Approval by government agencies is the main way in which controls over development rights, subdivisions, and building
are enforced, done through the issue of building permits [Courtney: 1983].

Urban planning puts into operation the regulatory instruments described. The most commonly used processes are: comprehensive general planning, master planning, strategic planning, and structure planning. The first two tend to assume a static or slow-growing urban situation, "quite manageable in terms of public investment decisions, and the long-range planning of major infrastructure projects. This is the reason they work well in developed countries. In LDCs however, where growth is rapid, and financial resources and infrastructure is insufficient, traditional planning (comprehensive and master plans) tends to become an isolated activity, often lacking of effective tools for implementation. "Zoning and police power, normally the only tools implied by master plans, are usually inadequate" [Courtney: 1983].

Structure, or strategic, planning -- evolved from the British planning tradition -- lends itself for LDCs. This strategy highlights the critical issues, identifies the priority investment for infrastructure, and establishes priority areas for development (expansion, renewal, upgrading, densification). It does not require elaborate data gathering and becomes an ongoing process selecting key areas for action [Courtney: 1983].

List of Instruments of urban land policy:

A. PLANNING INSTRUMENTS
   Actions taken on the basis of planning decisions

   1. Public planning monopoly
   2. Building prohibitions restrictions
B. TAXATION INSTRUMENTS
   Actions taken through the imposition of charges

C. MARKET INSTRUMENTS
   Following the rules of the free market compensating
   the owners with usual market values

D. FINANCIAL SUPPORT INSTRUMENTS
   Loans and subsidies granted or regulated by public
   bodies

E. ADMINISTRATIVE INSTRUMENTS
   Actions based on the legal power of the public
   authorities to establish their own rules [IFHP: 1981].
ANNEX 4: SUMMARY OF THE NATIONAL URBAN POLICY OF PINOCHET'S GOVERNMENT (PNDU-1979)

The basic premises of the PNDU can be summarized in the following concepts 63:

1. "Social benefits" of land, used for urban purposes, is greater than its use for rural purposes, and this is shown by the willingness of people and institutions to pay more for the first than for the latter.

2. Loss of agricultural land to urbanization is not a common problem to all cities; being many surrounded by unproductive rural land.

3. Given the extreme scenario of low density growth in all cities of Chile, by the year 2000 this type of occupation would represent a loss of 3.7% agricultural land.

4. Land is only one of the inputs in agricultural production. Developed countries have proved that the most important for increasing productivity is not land but technology.

5. The absence of market regulation policies in the past twenty years (1960-1979) was probably the cause of the urban occupation of the richest soils in cities' surroundings, which instead, if competed though price factor, might have been preserved as rural.

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63 Pino, Rafael, "Consideraciones para una politica de crecimiento y estructuracion urbana", Revista AUCA No. 37, Santiago, August 1979.
With these principles in mind, the DDU established the following basic premises in the PNDU 

1. "Urban land is not a scarce resource. Its apparent scarcity owes to the lack of harmony between the technical and legal norms, and a genuinely free real-estate operating market".

2. "Land use is to be defined by its greater profitability. Urban land is a resource to be freely exchanged through the market, limited only by zoning regulations, technical norms, and public interest for specific social functions. The use of land is only determined by an equation that balances social gains (mechanism for optimal state benefits), and private lucre, in the sense of making possible private development, according to the limitations dictated by norms and urban planning instruments".

3. "Population concentration generates comparative advantages for the development of social and economic activities".

4. "Urban land use must be subject to flexible regulations, defined by market requirements".

5. "The state is responsible for the protection of the common good: this is determined by those policies that guide the relations of the urban-land market, with the purpose of protecting the common

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good and the environment".

Sources:

Lopez, Marco Antonio, "Expansion de las ciudades", in EURE no 22, September 1981.

APPENDIX: PRIS AND SD 420/1979 ORDINANCES
DIRECCION DE PLANEAMIENTO
Depto. Planos Reguladores
ORDENANZA DEL PLAN INTERCOMUNAL DE SANTIAGO
GENERALIDADES
DEFINICION DEL AREA INTERCOMUNAL.—El Plano Intercomunal del Gran Santiago comprende las áreas urbanas y rurales de las siguientes comunas: 1.—Santiago; 2.—Conchalí; 3.—Quilicura; 4.—Rancagua; 5.—Las Condes; 6.—Santo Domingo; 7.—Providencia; 8.—San Miguel; 9.—La Cisterna; 10.—Paine; 11.—La Granja; 12.—San Bernardo; 13.—Puente Alto; 14.—Pulque; 15.—Mapocho; 16.—Barrancas; 17.—Quinta Normal.

APLICACION PLANO INTERCOMUNAL.—La aplicacion del Plano Intercomunal se regirá por la presente Ordenanza y por las disposiciones establecidas en la Ley General de Construcciones y Urbanización (L.G.C.U., N.º 1949) y de los artículos 539, 553, 556 y 557 de la Ordenanza General de Construcciones y Urbanización vigente.

MATERIAS FUNDAMENTALES DEL PLANO INTERCOMUNAL.—El Plano Intercomunal comprende los siguientes aspectos fundamentales:

1.—LIMITES DE EXTENSION URBANA Y SUBURBANA,
2.—AREA URBANA.
3.—AREA SUBURBANA.
4.—AREA RURAL.

II.—VIALIDAD,
1.—CARRETERAS DE ACCESO AL GRAN SANTIAGO.
2.—SISTEMA DE CIRCUNVALACION DE LAS COMUNAS PERIFERICAS.
3.—SISTEMA DE DISTRIBUCION INTERMEDIOS.
4.—RADIALES INTERCOMUNALES.
5.—SISTEMA DE DISTRIBUCION CONVENCIONAL.

III.—ZONIFICACION,
1.—INDUSTRIA.
2.—ARCASES VERDES.
3.—VIVIENDA.

1.—AREA URBANA.—Corresponde al área determinada por el Límite Urbano del Plano Intercomunal. En ella podrá realizarse todas las edificaciones habitacionales, comerciales, industriales, etc., conforme a las disposiciones de zonificación establecidas en la reglamentación del Plan Intercomunal, elaborada por los Reguladores y Ordenanzas Comunales.

2.—AREA SUBURBANA.—Se define como tal a las áreas comprendidas entre el límite urbano, antes señalado, y el Límite Suburbano (determinado en el Plano de Zonificación Intercomunal de Santiago).

El área suburbano cubrirá 5 comunas con las siguientes destinaciones principales:

a) Areas de parcelas agrícolas-residentales.

Las dimensiones, mínimas de estas parcelas serán de 5,000 m² y de 15,000 m², respectivamente, de acuerdo a las zonas fijadas para cada caso en el Plano de Zonificación Intercomunal del Gral. Santiago.

No se permitirá la formación de predios menores en estas zonas, y los edificios no podrán ser construidos. Las actividades que no estén permitidas y las condiciones generales a las que debe atenerse para la explotación agrícola del inmueble, se hará en la orientación del propietario mismo y de sus inquilinos o trabajadores, las que no podrán ocupar más de 1/3 de la superficie de la parcela. La superficie minima para las parcelas de 5,000 y 15,000 m², respectivamente.

La urbanización mínima de dichas áreas estará fijada por el Plano de Obras Sanitarias y de Pavimentación Urbana del Ministerio de Obras Públicas.

b) Reservas Forestales.

Las áreas establecidas en el Plan de Zonificación están destinadas a la formación, no publicado realizarse subdivisiones, salvo las destinadas a parcelas forestales no inferiores a 25 ha., y que se declara cumplidas las disposiciones de la Ley 1,717 y del Art. 4 del Reglamento de Particiones Agrícolas (decreto 315, de 25 de Mayo de 1934).

c) Areas Agrícolas en reserva.

Son las áreas agrícolas comprendidas entre los Límites Urbanos y Suburbano, que momentáneamente no se pueden utilizar para este fin, ni subdividirse en parcelas de una superficie inferior a 15 hectáreas.

d) Areas de uso especial.

Están destinadas a fines específicos como arrodinios (civiles, militares, comerciales, etc.) o depósitos, centros de servicios, etc., que deben inscribirse en las comunas de Las Condes, La Cisterna y Quilicura.

3.—AREA RURAL.—En el área que se encuentra fuera de los Límites Suburbanos y que comprenden el área exterior al Límite de Planeamiento y Coordinación de Obras Públicas en sesión N.º 150, de 24 de Octubre de 1953.

1.—EXTENSION URBANA Y SUBURBANA.

El reconocimiento final del área Santiago se plasmará dentro de tres áreas fundamentales:

a) AREA URBANA.

b) AREA SUBURBANA.

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Ministerio de Justicia,

APLICA LAS REFORMAS QUE HA ACORDADO INTRODUCIR EN SUS ESTATutos EL TEIM DE PAMANENTO DE SANTIAGO.

Republica del Chile, Ministerio de Justica. Santiago, 10 de Diciembre de 1953.

Se declara que ha sido Artículo para que se aplique la reforma del artículo 442 del Código de Comercio, Santiago, a iniciativa de Diciembre de mil quinientos treinta y seis, a ser desde la fecha del 31 de Octubre de 1953.

Céntico el extracto que procede ha sido de la mencionada reforma, de acuerdo al artículo 442 del Código de Comercio, Santiago, a iniciativa de Diciembre de mil quinientos treinta y seis, a ser desde la fecha del 31 de Octubre de 1953.

Ministerio de Obras Públicas

APLICA PLAN INTERCOMUNAL DE SANTIAGO Y LA ORDENANZA

Núm. 2377. — Santiago, 10 de Noviembre de 1953. — Visto: estos antecedentes; lo conforme a la Dirección de Arquitectura y la Dirección de Planeamiento y Coordinación de Obras Públicas. Se establece el área urbana, con superficie de los artículos 11.º, 300 de la citada Ley N.º 1949, y de los artículos 11.º, 2.º, 300, del decreto N.º 137 de 1955, y que fija el texto definitivo del decreto con fuerza de ley N.º 2377, de 1953; se acordó por la citada Ley N.º 2377, de 1953, y en uso de las atribuciones que se encargan el artículo 300 del decreto con fuerza de ley N.º 137 de 1955, modificando el artículo 2.º de nuevo y de 1955, de 1953, y en uso de las atribuciones que se encargan el artículo 300 del decreto con fuerza de ley N.º 137 de 1955, modificando el artículo 2.º de nuevo y
VIALIDAD

Los sistemas fundamentales de la vialidad intercomunal son:
1. CARRETERAS DE ACCESO AL GRAN SANTIAGO.
2. ANILLO DE CIRCUNVALLACION EN LAS COMUNAS PERIFRICAS.
3. SISTEMA DE DISTRIBUCION INTERCOMUNITARIA.
4. VIA RADIALES INTERCOMUNALES.
5. SISTEMA DE DISTRIBUCION CENTRAL.

Los trazados de las vías están señalados en el Plan de Zonificación General y sus anchos se especifican a continuación:

1. CARRETERAS DE ACCESO AL GRAN SANTIAGO
a) Carretera Panamericana.
   a 1. - Avenida Norte, dividida en dos ramales: la primera desde el costado Norte de la Estación Renca al Río Mapocho, frente a la calle Walker Martínez, 60 metros; y la segunda desde Huechuraba hasta el Río Mapocho, frente al Puente Bulnes, 60 metros.
   a 2. - Sector Urbano, desde el Río Mapocho hasta Avenida San Joaquín, 50 metros (Avenida Walker Martínez, Robles y General Velásquez).
   a 3. - Sector Rural, desde San Joaquín hasta Avenida Colón, en San Bernardo, 100 metros.
   a 4. - Avenida Sur, desde Avenida Colón hasta empalmar con el Longitudinal al Sur de NOS, 60 metros.

b) Ochagavía.
   b 1. - Desde Avenida San Joaquín, en la comuna de Huechuraba, hasta el empalmar con la Carretera Panamericana al Sur de la Plaza de Armas, 60 metros.

c) Camino a San Antonio (Avenida Pedro Aguirre Cerda).
   c 1. - Desde el paso bajo nivel con el Ferrocarril longitudinal (Puente Melipilla) hasta el cruce del camino a Loquén, 40 metros.
   c 2. - Desde el cruce del camino a Loquén hasta su empalmar con el camino a Valparaíso en Paredón, 40 metros, y al No. 5, Camino a Loquén, 50 metros (desde Cerrillos al Poniente).

d) Camino a Valparaíso por Lo Prado.
   d 1. - Desde el cruce con el camino Los Pajaritos, en el sector Las Rejas, hasta el Poniente, 60 metros.

e) Camino Macul-Las Viacunas.
   e 1. - José Pedro Alessandri, desde Avenida 19 de Abril hasta Puente de Rios, 30 metros.
   e 2. - Desde el cruce de Puente de Rios hasta el Camino Departamental, 30 metros.
   e 3. - Desde el Camino Departamental hasta Las Viacunas, 40 metros.

f) Avenida Vicuña Mackenna
   f 1. - Desde la Avenida, Rodrigo de Araya hasta Walker Martínez, 45 metros (1). Con la eventual ampliación del Ferrocarril de Santiago a Puente Alto se utilizará como via de complementación la actual traza que ocupa dicho Ferrocarril, en el tramo comprendido entre el Camino Departamental y la Avenida, Walker Martínez.
   f 2. - Desde Walker Martínez hasta la Plaza de Puente Alto, 50 metros.

(1) Tiene la traza que actualmente ocupa el Ferrocarril a Puente Alto.

f 3. - Circunvalación por el Poniente de Puente Alto, 40 mts.

2. ANILLO DE CIRCUNVALLACION DE LAS COMUNAS PERIFRICAS.
   a) Para el tramo que atraviesa las comunas de Maipú, Las Heras, Renca, Quilicura, Conchalí y Las Condes (limitado en esta última en la Avenida Francisco Bilbao), 60 mts.
   b) En el tramo correspondiente a la comuna de San Joaquín, frente a Francisco Bilbao, por el Norte, hasta el Camino de Lo Heredia, por el Sur, 50 metros.
   c) Para el tramo que se desarrolla al Sur del Camino de Lo Heredia hasta el límite de las comunas de San Joaquín y La Florida, 60 metros.
   d) En el sector correspondiente a las comunas de La Florida y La Granja hasta la calle Juan Luis Fuentes, 60 metros.
   e) En la comuna de La Cisterna desde la calle antecesora mencionada hasta el Camino de Ochagavía, 50 metros.
   f) Para el tramo comprendido entre el Camino Ochagavía y el límite con la comuna de Maipú, 60 metros.

3. SISTEMA DE DISTRIBUCION INTERMEDIOS
a) Avenida Costanera Norte.
   a 1. - Tramo que se extiende desde su intersección con el Camino Villarrica, en Punahue, hasta el Puesto Manuel Rodríguez, 60 metros.
   a 2. - Tramo que se extiende desde el Puesto Manuel Rodríguez hasta el Puesto del Arzobispo (comprueba las actuales calles centésima y Bello), 30 metros.
   a 3. - Tramo que se extiende desde el Puesto del Arzobispo hasta su intersección con la prolongación de la Avenida Bellavista, 30 metros.
   a 4. - Desde la intersección de las Avenidas Bellavista y Santa María, antes señalada, hasta su empalmar con la prolongación de la Avenida Lo Sables hacia el Poniente a través del Río Mapocho, 30 metros.

4. VIA RADIALES INTERCOMUNALES

Gr. Avenida: 30 metros
Santa Rosa (San Miguel y La Granja): 40 metros
Avda. Sur (San Joaquín): 40 metros
Prolongación de Avenida Sur: 40 metros
Avda. Índios: 30 metros
Avda. Simón Bolívar: 20 metros
Avda. Diagonal Oriente: 25 metros
Avda. Eliseo Yáñez: 20 metros
Avda. Francisco Bilbao: 20 metros
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(f) Circunvalación por el Poniente de Puente Alto, 40 mts.

Como via de complementación en el sector central de la Avda., antes señalada, se consultarán las actuales Avenidas Borgoña, Artigas y Bellavista, con el fin de que la longitud total del Ferrocarril se complete con 50 metros. Se consulta para un futuro más lejano y cuando el incremento del tránsito así lo justifique, la hilabiliación de una autopista de doble calzada sobre el lecho actual del Río Mapocho, previa las obras necesarias para la regularización del actual cauce.

b) Avenida Oriente (Avenida Vicuña Mackenna)
   b 1. - Desde Plaza Italia hasta el Ferrocarril de Circunvalación, 40 metros.
   b 2. - Desde el Ferrocarril de Circunvalación hasta la Avda. Rodrigo de Araya, 50 metros.
   b 3. - Desde la Avda. Santa Rosa y Vicuña Mackenna se bifurca en dos ramales: la primera continuando por calle Pintor Cisneros, continuando hacia el Centro, 33 metros; y la segunda, que sigue paralela al Ferrocarril de Circunvalación, consultándose para ella 33 metros de ancho para sus calzadas, medidas de las líneas ferrocar.
   b 4. - Avenida Poniente
   b 5. - Constituida por las actuales Avenidas, Walker Martínez, Cormol Rojas, Apóstol Santángelo y General Velásquez, continuando hacia el Norte hasta su intersección con la Avda. Pedro Aguirre Cerda por el Sur.
5. — SISTEMA DE DISTRIBUCIÓN CENTRAL

Su tramo será definido de acuerdo con los estudios del nuevo Plan Regulador de la comuna de Santiago, que elabora la Dirección de Urbanización de la Municipalidad respectiva.

III. — ZONIFICACIÓN INTERCOMUNAL

La Zonificación del Plano Intercomunal comprende las siguientes materias:

**INDUSTRIAS ARIAS VERDES Y VIVIENDA.**

**INDUSTRIAS**

a) Clasificación:

1. — Industrias Peligrosas. — Son aquéllas que por la sola ramentación peligrosa expresa en los inventarios de sus instalaciones, materias primas, productos intermedios o productos finales pueden llegar a causar daños de carácter catastrófico, a la salud o a los productos finales, y pueden autorizarse para instalarlas, pero no puede instalarse nuevas industrias de este tipo.

2. — Zonas Industriales Intercomunales. — Son aquéllas ubicadas fuera de propiedad de la industria, que se autorizarán a dar lugar a instalaciones de industrias inofensivas, cuyos límites están determinados por el Plano Regulador Intercomunal, y en las cuales se permitirá el establecimiento de nuevas industrias inofensivas únicamente en las microzonas que para tal efecto deberán determinar los Planos Reguladores Comunales. Fuera de las microzonas no se permitirá ningún tipo de nuevas industrias. Las microzonas o sectores destinados exclusivamente a la instalación de industrias inofensivas se determinarán en concordancia con la planificación de cada barrio o unidades vecinales en que se emplacen.

c) Normas para la aplicación de las Zonas Industriales:

1. — Las industrias que actualmente están instaladas fuera de su zona correspondiente no podrán ampliarse, modificarse ni cambiar de ubicación dentro de la misma zona; para dichos efectos deberán trasladarse a la zona correspondiente.

2. — La zona industrial intercomunal ubicada al Norte de Santiago (correspondiente a las comunas de Quilicura, Renca y Cou-chill) está destinada especialmente para la instalación de industrias funerarias. Las industrias clasificadas como tales por el Servicio Nacional de Salud sólo podrán ubicarse en esta zona.

3. — Los talleres artesanales definidos por la Ley de Renta Municipal (ley 16,764, cuadro anexo N° 2, Nº 321) podrán ubicarse en cualquier zona industrial, y serán considerados como una industria propia para todos los efectos de la clasificación en su ubicación. Al mismo, aquellas clasificadas como inofensivas y con más de 30 operarios se podrán ubicar sin limitación de número en las zonas comerciales de cualquier tipo de zona. Se asimilarán a esta disposición las panaderías y pastelerías con menos de 20 obreros.

4. — Las bodegas se clasificarán también en peligrosas, molestas e inofensivas, y deberán emplazarse en las zonas correspondientes.

5. — La lista de industrias que se acompañan es meramente informativa, y las industrias que en ellas figuran como molestas pueden ser reevaluadas como inofensivas si a juicio del Departamento de Higiene Industrial del Servicio Nacional de Salud sus procesos de fabricación, de acuerdo con la técnica moderna, no ofrecen riesgo ni molestia a la comunidad.

6. — La aplicación de la zonificación del Plano Regulador es materia propia de la Dirección de Obras Municipales respectiva. La clasificación de las industrias en sus respectivas materias será materia del Departamento de Higiene Industrial del Servicio Nacional de Salud; en caso de divergencias entre ambos organismos, resolverá la Dirección de Planeamiento del Ministerio de Obras Públicas.

7. — Es previo a la autorización municipal para instalar una industria que esta sea clasificada por el Departamento de Higiene Industrial del Ministerio de Salud Pública y Presión Social.

**NOMINA DE INDUSTRIAS**

**Industrias peligrosas**

Fábricas de explosivos.
Refinerías y almacenamiento de petróleo y sus derivados.
Talleres de minerales sulfuros.
Reactores atómicos y plantas productoras de energía nuclear.

**Industrias molestas**

Tear industrial de seda.
Industrias de tello.
Industrias de mármol.
Aseradores y barracas.
Ararlas metálicas.
Artes de cobre y canicas.
Artes de fundición.
Aluminio.
Industrias de productos para uso y consumo.
Industrias alimentarias.
Industrias electroquímicas.
Industrias de automóviles.
Industrias meteorológicas.
Industrias de medicamentos y drogas.
Industrias de productos farmacéuticos.
Industrias de alimentos.
Industrias de bebidas.
Industrias de aceites.
Industrias de productos químicos.
Industrias de productos farmacéuticos.
### Industrias inofensivas

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### Zonas Mixtas con industria inofensiva

Las límites de estas áreas se establecen en el Plan de Zonificación. Existen las siguientes zonas:

- Reservas Forestales Rurales
- Reservas Agrícolas y Forestales Selváticas
- Parques Intermunicipales
- Areas Especiales
- Vías Turísticas

### Areas verdes

Se establecen diversas áreas verdes de uso público destinadas al aprovechamiento recreativo de la población y al manejo rural, así como áreas verdes que se utilizan para ejecutar construcciones de ninguna naturaleza, salvo aquellas destinadas a complementar las funciones de las áreas verdes y zonas verdes que requieran de la misma. Se establecen áreas verdes en las mismas que contienen los siguientes jardines:

- Reservas Forestales Rurales
- Reservas Agrícolas y Forestales Selváticas
- Parques Intermunicipales
- Areas Especiales
- Vías Turísticas

### Zonas industriales intermunicipales (Excluyendo Zonas Mixtas)

<table>
<thead>
<tr>
<th>Comunidades</th>
<th>No. indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quillama</td>
<td>A 1</td>
</tr>
<tr>
<td>Quillama, Braga, Conchal</td>
<td>A 2</td>
</tr>
<tr>
<td>Marranes</td>
<td>A 3</td>
</tr>
<tr>
<td>Nariño</td>
<td>A 4</td>
</tr>
<tr>
<td>Nariño</td>
<td>A 5</td>
</tr>
<tr>
<td>Nariño</td>
<td>A 6</td>
</tr>
<tr>
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<td>A 7</td>
</tr>
<tr>
<td>Hato</td>
<td>A 8</td>
</tr>
<tr>
<td>San Bernardo</td>
<td>A 9</td>
</tr>
<tr>
<td>San Bernardo</td>
<td>A 10</td>
</tr>
<tr>
<td>Puente Alto</td>
<td>A 12</td>
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</table>

### Nomenclatura de las áreas industriales

<table>
<thead>
<tr>
<th>Comunidades</th>
<th>No. indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santiago</td>
<td>B 1</td>
</tr>
<tr>
<td>Nueva</td>
<td>B 2</td>
</tr>
<tr>
<td>Santiago</td>
<td>B 3</td>
</tr>
<tr>
<td>Santiago</td>
<td>B 4</td>
</tr>
<tr>
<td>Santiago</td>
<td>B 5</td>
</tr>
<tr>
<td>Quinta Normal</td>
<td>B 6</td>
</tr>
<tr>
<td>Quinta Normal</td>
<td>B 7</td>
</tr>
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<td>B 10</td>
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<td>San Miguel</td>
<td>B 11</td>
</tr>
<tr>
<td>San Miguel</td>
<td>B 12</td>
</tr>
<tr>
<td>Rúas</td>
<td>B 13</td>
</tr>
<tr>
<td>Conchal</td>
<td>B 14</td>
</tr>
</tbody>
</table>
Parques Intercomunales. — (F) Áreas verdes que cuentan con espacios destinados a reuniones, juegos, deportes, etcétera, cuya superficie es superior a 30 hectáreas.

Sirven a las poblaciones de amplios sectores de la ciudad, inclusive dos o más comunas, y que en ocasión de exposiciones, ferias, festejos tradicionales, etc., cuentan con afluencia de personas de toda la área metropolitana. Se establecen las siguientes áreas:

### Comuna

<table>
<thead>
<tr>
<th>N° indicador</th>
<th>Nombre actual</th>
<th>Sup. aprox.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conchalí, 2</td>
<td>Parque Isaac</td>
<td>44 Hás.</td>
</tr>
<tr>
<td>3</td>
<td>San Miguel</td>
<td>52 Hás.</td>
</tr>
<tr>
<td>4</td>
<td>Parque Beso</td>
<td>100 Hás.</td>
</tr>
<tr>
<td>5</td>
<td>Parque Cisneros</td>
<td>69 Hás.</td>
</tr>
<tr>
<td>6</td>
<td>Parque Normal</td>
<td>104 Hás.</td>
</tr>
<tr>
<td>7</td>
<td>Parque Morillo</td>
<td>60 Hás.</td>
</tr>
<tr>
<td>8</td>
<td>Parque Normal</td>
<td>232 Hás.</td>
</tr>
<tr>
<td>9</td>
<td>Club de Golf</td>
<td>61 Hás.</td>
</tr>
</tbody>
</table>

Y, además:

Cuenca del Río Mapocho. — Superficie aproximada 690 Hás.

Cuenca del Río Maipo. — Frente a Puente Alto, con una superficie aproximada de 30 Hás.

Parques Comunales. — (G) Los constituían áreas verdes que en general tienen una extensión que fluctúa entre 8 y 15 Hás.

### Comuna

<table>
<thead>
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<td>7</td>
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<tr>
<td>8</td>
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<td>61 Hás.</td>
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</table>

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<tr>
<td>5</td>
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<td>Parque Normal</td>
<td>232 Hás.</td>
</tr>
<tr>
<td>9</td>
<td>Club de Golf</td>
<td>61 Hás.</td>
</tr>
</tbody>
</table>

Areas de interés histórico y cultural.

1. — Terrenos destinados anteriormente a Carretera Panamericana en las comunas de La Cisterna y San Miguel, y su prolongación en la comuna de Santiago, en el tramo comprendido desde el Parque Común, por el Norte, hasta la prolongación hasta el límite de la Avenida Isabel la Católica en la comuna de La Cisterna. Se consulta un ancho de 100 metros.

2. — Gran Avenida. — Desde el Ferrocarril de Circunvalación, por el Norte, hasta la calle Salamanca, por el Sur. Se consulta un ancho de 60 metros.

3. — Parque Isabel Riquelme. — Desde Viña Mackenna por el Oriente, hasta la Avenida Pedro Aguirre Cerda, por el Poniente. Su trazado está determinado por el plano correspondiente elaborado por la Ilustre Municipalidad de San Miguel (Cont. 1-3, 6 y aprovisionado).

4. — Avenida que unirá el Estadio Nacional, Estadio Colo-Colo y el Parque Intercomunal N. o 6 (La Cisterna). Se consulta un ancho de 60 metros.

5. — Avenida que une el extremo Oriente del Parque Isabel Riquelme, desde la Avenida Viña Mackenna hasta el Parque de la Viña Macul, por el Oriente. Se consulta un ancho de 60 metros.

6. — Avenida que une el extremo Poniente del Parque Isabel Riquelme, desde la Avenida Pedro Aguirre Cerda hasta el Caimino Las Patarias. Se consulta un ancho de 60 metros, de acuerdo al anteproyecto del Plano Regulador de la comuna de Maipú.

7. — Avenida Dorsal. — De la comuna de Conchalí y su prolongación hacia el Poniente, a través de cerros hasta la ribera Norte del río Mapocho. Se consulta un ancho de 60 metros.

8. — Avenida Tobalaba. — Es el tramo comprendido desde el río Mapocho por el Norte hasta el Camino Departamental por el Sur.

9. — Avenida Manquehue. — De la comuna de Las Condes, desde el río Mapocho, por el Norte, hasta el Parque Intercomunal N. o 7, por el Sur.

10. — Avenida Francisco Bilbao. — Es el tramo comprendido desde la Avenida Manquehue, por el Poniente, hasta el área destinada a cementerio, en la comuna de Las Condes, por el Oriente.

11. — Diagonal proyectada en el Plano Regulador de Rancas, desde el Parque de la Viña Macul, por el Oriente, su prolongación hacia el Parque a través de la Avenida Sur y la bifurcación de esta a través de la Avenida Matilla y el Parque Bustamante.

12. — Nuevo camino a Valparaíso por Lo Barnechea, en el tramo comprendido entre la Avenida Rancagua, por el Oriente, y el cerro del río Mapocho, por el Poniente. Se consulta una faja destinada a cara verde y calle de tránsito local de 70 metros de ancho, al Norte de la faja destinada a dicha Carretera.

**CAMINOS TURÍSTICOS.** — En el sector Oriente del Gran Santiago se establece un camino cuya traza... se indica en el Plano.
Lo Prado; al Sur, la calle San Pablo; al Norte limita con la Fracción Franklin del Plano Intercomunal; Superficie aproximada: 50 hectáreas.

Comuna de Quintaunca


Sector 2. — Al Sur, con la Calle del Corro; al Norte con una línea paralela a 400 metros de dicha calle; al Oriente con una línea paralela a la línea del Ferrocarril, y al Poniente con el límite de Extensión Urbana del Plano Intercomunal. Superficie aproximada: 24 hectáreas.

Comuna de Loncoche

Sector 1. — Limita al Oriente con la Avenida Independencia en un frente aproximado de 2,000 metros, a la altura del barrio del Carmen; tiene una profundidad de 400 metros. Superficie aproximada: 24 hectáreas.

Sector 2. — Limitado al Sur por la Avenida Dorsal; al Norte, paralela a 1,000 metros de dicha Avenida; al Oriente por la línea paralela a 400 metros de dicha Avenida; al Poniente, por la calle Alberto González Barahona. Superficie aproximada: 48 hectáreas.

Comuna de Rancagua

Limita al Norte con el Camino en la Estación Agrícola; al Oriente, con la prolongación de Exequiel Fernández; al Sur, con una línea paralela a 400 metros al final del Camino de la Escuela Agrícola, y al Poniente, una línea paralela a Exequiel Fernández, ubicada a 400 metros al final del Camino de dicha calle. Superficie aproximada: 23 hectáreas.

Comuna de La Cisterna

Limita al Norte con la calle Alejandro Granados; al Sur, con el Camino Lo Lillo; al Poniente, con el Camino Los Morros, y al Oriente, con la calle del Límite Intercomunal (prolongación de la calle de la Escuela Agrícola). Superficie aproximada: 70 hectáreas.

Comuna de San Bernardo

Limita al Norte con la calle Eucaliptus; al Sur, con el límite de Extensión Urbana del Plano Intercomunal (camino proyectado de Malbec a Puente Alto, por Vila- lido); al Oriente, con la calle Pérez; al Poniente, con la calle Freire. Superficie aproximada: 21 hectáreas.

Comuna de Buin

Limita al Norte con la prolongación de calle Mariscal Peraú; al Sur, con la Costanera Norte; al Poniente con el límite Oriente de la Extensión Urbana de la Papelera, y al Oriente, con la nueva Avenida Oriente del Plano Reglamentario, a una distancia de 200 metros. Superficie aproximada: 8 hectáreas.

Zonas Mixtas de Viviendas e Industrias

Ver las disposiciones relativas a Zonas Industriales en el Título III del presente Reglamento.
Ministerio de Vivienda y Urbanismo

MODIFICACION PLAN INTERCOMUNAL DE SANTIAGO Y SU ENTORNO

Santiago, 31 de Octubre de 1978 - Hoy se decretó lo siguiente:


Decreto:

Artículo 1º - Modifica el Plan Intercomunal de Santiago, aprobado por D.º Nº 2.387, del Ministerio de Obras Públicas, de 10 de Noviembre de 1969, publicado en el Diario Oficial de 21 de Diciembre de 1969, en conformidad a lo establecido en la Memoria Explicativa y en los Planes Reguladores de las Comunas, y en el Decreto 154, de 20 de Octubre de 1975, de la Dirección de Desarrollo Urbano del Ministerio de Vivienda y Urbanismo, y demás antecedentes que se acompañan.

Artículo 2º - Modifica, asimismo, la Ordenanza del Plan Intercomunal de Santiago, en la forma que a continuación se indica:

I. Reemplaza el Título Preliminar “Generalidades” por el siguiente nuevo Título Preliminar:

TITULO PRELIMINAR

Generalidades

Artículo 1º - El área territorial del Plan Intercomunal de Santiago comprende las comunas de Conchalí, La Cisterna, La Serena, la Florida, la Granja, la Reina, Maipú, Pudahuel, Puerto Alto, Providencia, San Miguel, San Fernando, San Juan, San Felipe, Quillota, Reñaca, Rengo.

Artículo 2º - Para los efectos de la aplicación del Plan Intercomunal de Santiago y su respectiva Ordenanza, las comunas comprendidas en el área territorial de dicho Plan se agruparán por Sectores Geográficos, en la forma que a continuación se indica:

<table>
<thead>
<tr>
<th>Sectores Geográficos</th>
<th>Comunas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centro</td>
<td>Santiago</td>
</tr>
<tr>
<td>Mor. Oriental</td>
<td>Las Condes, Providencia, La Florida, la Granja, la Reina, Maipú, Pudahuel, Puerto Alto, Providencia, San Miguel, San Fernando, San Juan, San Felipe, Quillota, Reñaca</td>
</tr>
<tr>
<td>Oriente</td>
<td>Rengo</td>
</tr>
<tr>
<td>Sureste</td>
<td>Conchalí</td>
</tr>
<tr>
<td>Sure-Poniente</td>
<td>PadreLas, Quinta Normal, Quillota, Reñaca, Rengo</td>
</tr>
<tr>
<td>Norte</td>
<td>Conchalí</td>
</tr>
</tbody>
</table>

La extensión territorial de los sectores geográficos a que se refiere el presente artículo, será coincidente con el territorio de las comunas que los integran, de conformidad con la División Política Administrativa vigente.

Estos sectores geográficos, en el Área de Expansión Urbana definida en el Título I de la presente Ordenanza, se subdividirán en subáreas que aparecen identificados en los planos RM-00-00-100 y RM-00-00-106-1.

Artículo 3º - En el área territorial del Plan Intercomunal de Santiago, la edificación y urbanización y, en general, el proceso de desarrollo urbano se regirá por las disposiciones de la presente Ordenanza.

En todo lo no previsto expresamente en la presente Ordenanza, regirá la Ley de Urbanismo y Construcciones, y de la Ordenanza General de Construcciones y Urbanización, Ministerio de Transporstes y Telecomunicaciones

RENU LUGO RENGDG

SUBSECRETARIA DE TRANSPORTES

EXTRACTO DE RESOLUCION

Por resolución Nº 1.929, de fecha 11 de Octubre de 1979, en el área de Santiago, San Bernardo, Pudahuel, Quinta Normal, Quillcura, La Reina, Las Condes, Providencia, San Miguel, San Fernando, San Juan, San Felipe, Quillota, Reñaca, del recorrido de transporte de pasajeros entre "Valparaiso - Santiago" y "Concepción - Talcahuano", por rutas Núm. 5, Oscar Delcosno y Maria Martineovich, Oficial de Partes.

Denro del área del Plan Intercomunal de Santiago tendrán plena vigencia, para las zonas urbanas, las disposiciones de los Planes Reguladores de las comunas comprendidas en dicha área intercomunal, como asimismo los Planos Sectores y su Ordenanza que delimita el área de expansión urbana definida en el artículo 5º de la Ordenanza, las áreas usos de suelo se considerarán compatibles con las normas establecidas por este decreto y constituirán, en todo caso, alternativas respecto de los usos regulados por la presente Ordenanza.

II. Reemplaza el Título II "Extensión Urbana y Sub-Urbana" por el siguiente nuevo Título II:

TITULO II

De las Areas Específicas del Plan Intercomunal de Santiago

Artículo 4º - Para los efectos de la aplicación del Plan Intercomunal de Santiago y de la presente Ordenanza, se distinguirán los siguientes tipos de áreas: Área Urbana, Área de Expansión Urbana y Areas de Restricción.

Artículo 5º - a) Se identificará como Área Urbana el espacio comprendido dentro del límite urbano del Plan Intercomunal de Santiago, establecido en el plano RM-00-00-100 de fecha Julio 1977, conferenciando por la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, b) Se identificará como Área de Urbanización el espacio, de expresamente urbanizado que se extiende entre el límite urbano señalado en el inciso a) precedente, el resto del área intercomunal y los límites señalados para las Areas de Restricción, donde corresponda. los límites de estas áreas están en los Planos RM-00-00-100-1 de Julio 1977, conferenciadas por la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana.

c) Se identificarán como Areas de Restricción aquellas en que, por razones de preservación del medio natural, seguridad de la vida y protección de importantes obras de infraestructura, entre otras razones, debe controlarse el desarrollo urbano incompatible con las normas y disposiciones de las áreas.

Son aquellas áreas de gran valor ecológico e irregulares que se extienden fuera del área intercomunal, se aprueban por el Jefe de la Dirección de Desarrollo Urbano del Ministerio de Vivienda y Urbanismo, Región Metropolitana, por acuerdo de los organismos competentes.

ARTÍCULO 6º - Corresponderá a la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, por acuerdo favorable de las instituciones u organismos legítimamente competentes, declarar, modificar o derogar Areas de Restricción, como así mismo, elimitarlas, ampliarlas, y a) anexar a las áreas, b) En las áreas de esta naturaleza, el Jefe del Departamento correspondiente, dará cumplimiento a lo que se establezca en el artículo 130 de la Ley de Urbanismo y Construcciones, y de la Ordenanza General de Construcciones y Urbanización, el que regirá.

En estas áreas se permitirán los siguientes usos prioritarios:

1. Científico-educativo-recreacional: Se entenderán comprendidos en esta categoría aquellos usos que contribuyan a la preservación de los valores naturales, manteniendo e incrementando, entre otros, la flora y fauna silvestre y la explotación de los recursos renovables.

2. Turismo cuya una su turismo

3. Recreos deportivos

4. Arreos de aseo frascati

5. Lotes de la propiedad

6. Areas de las comunas

7. Areas de las comunas

8. Areas de las comunas

9. Areas de las comunas

10. Areas de las comunas
Areas de protección de Monumentos Nacionales.

Quedan comprendidos en esta categoría los Monumentos Históricos y Arqueológicos, las Zonas declaradas Típicas o Pintorescas y los Santuarios de la Naturaleza. La localización, delimitación y los usos permitidos en estas áreas se regirán por el decreto supremo Nº 17.228, de 1970, sobre Monumentos Nacionales, y por las de los decretos supremos que se dicten por disposición de la referida ley.

Areas de Alto Riesgo para Asentamientos Humanos.

Son aquellas áreas que por sus características geográficas-fisiográficas son aptas para los asentamientos humanos. En estas áreas, cuya calificación definitiva corresponderá a la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, sólo podrán realizarse las construcciones calificadas por dicha Secretaría, previo informe favorable de los Organismos Técnicos competentes.

III. Agrégase a continuación del Título I el siguiente nuevo Título II, pasando los actuales Títulos II “Vivienda” y III “Zonificación Urbana”, a ser Títulos III y IV, y derogándose el Título IV “Densidades Urbanas”, agregado a la Ordenanza del Plan Intermunicipal de Santiago, por decreto supremo Nº 718, de Vivienda y Urbanismo, de 1972.

TÍTULO II

Normas generales aplicables en el Área de Exansión Urbana

ARTÍCULO 9º.— Para los efectos de planificar el proceso de desarrollo urbano en el área de expansión urbana, la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, determinará los usos permitidos y los excluidos de los distintos sub-sectores geográficos que se identifican en ella.

Corresponderá también a la citada Secretaría la revisión periódica de las normas contenidas en este título con objeto de mantenerlos permanentemente actualizados.

ARTÍCULO 9º— En cumplimiento de lo dispuesto en el artículo antecedente, los usos permitidos y excluidos en el Título V de la presente Ordenanza.

ARTÍCULO 10º.— Las subdivisiones y lotes que se originen en el área de expansión urbana sólo podrán ser aprobados por la Dirección de Obras Municipales respectiva, previo informe favorable de la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, quien podrá consultar a los organismos competentes cuando lo estime indispensable.

Para estos efectos dicha Secretaría proporcionará a los interesados que soliciten la información previa necesaria a utilizar en el desarrollo de los proyectos.

Los proyectos que se presenten deberán acompañarse de los siguientes antecedentes:

Plano de subdivision o de lote, según corresponda, que contenga los usos a que se proponen y un cuadro de superficies de los lotes resultantes. La trama viaria que incluya los perfiles de las vías, de conformidad con los estándares establecidos en la legislación vigente, y su relación con el tramo viario existente y/o proyectado para el sector en el Plan Intermunicipal.

Sin embargo, en los casos de proyectos emplazados en terrenos de clima igual o superior a 5 Hías, y que excedan las normas establecidas en el inciso 2º del artículo 12º de esta Ordenanza, se exigirá la presentación de un Plano Seccional, el cual deberá contener la información establecida en el inciso anterior y suyo trámite de aprobación se someterá a lo dispuesto en la legislación vigente sobre la materia.

ARTÍCULO 11º.— Para los efectos del emplazamiento de los lotes se deberá seguir el informe a que se refiere el artículo 19º la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, analizará los proyectos que se presenten a su consideración, entre otros, de acuerdo a los siguientes criterios:

a) Que el proyecto no asista de la estructura de la trama vial existente o proyectada para el sector en el Plan Intermunicipal o en el Regulador Comunal correspondiente.

b) Que el proyecto cumpla con las condiciones de uso, densidades y demás normas técnicas definidas para cada uno de los sub-sectores geográficos que integran el área de expansión urbana.

No obstante lo anterior, el propietario de un predio equivalente a dos o más unidades prediales mínimas de un sub-sector podrá optar a la concentración de unidades minutos y densidad con los establecidos para ese sub-sector en la presente Ordenanza.

Para tal efecto, el interesado deberá presentar un plano de multifacción de todo su predio, en el cual se define el proyecto y sus condiciones, densidades de uso, superficie de ocupación del suelo, coeficiente máximo de constructibilidad, etc., que en ningún caso podrá sobrepasar el total correspondiente a lo permitido para la totalidad de las unidades prediales que conforman dicho predio.

Asimismo, en los tramos de densidades contempladas en las Normas Técnicas de esta Ordenanza, los proyectos de lotes que se presenten podrán considerar lamas prediales disminuidas en un 30% respecto de las disposiciones legales vigentes.

DIARIO OFICIAL DE LA REPÚBLICA DE CHILE

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3. Las condiciones técnicas antes señaladas para los respectivos tramos, podrán alterarse automáticamente, en los casos que los proyectos se emplacen en terrenos de superficie igual o superior a 3 has., de acuerdo al siguiente cuadro:

CUADRO DE ALTERNACION AUTOMATICA DE LOS TRAMOS GENERICOS

<table>
<thead>
<tr>
<th>Tramo Genérico</th>
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<th>Máxima de los Tramos</th>
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Si los interesados requieren desarrollar proyectos en terrenos de 5 o más hectáreas, cuyas condiciones técnicas alteran las ya previstas en el cuadro anterior, el proyecto correspondiente debe ser presentado a la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, y siempre que dichas condiciones sean superiores a las ya señaladas, podrá solicitarse a la Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, mediante la presentación de un Plan Secional, su aprobación se ceñirá a la legislación vigente.

En todos los predios del área de expansión urbana, cuyas superficies correspondan a los tramos A, B y C definidos en este artículo, podrá construirse, además de la vivienda del propietario, una vivienda para terceros, y se deberá seguir el trámite indicado en el inciso 5º de este artículo, sin que se altere la ley aplicable.

ARTICULO 12º— La Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana, una vez recibidos los antecedentes completos exigidos en esta Ordenanza, según corresponda, determinará el plazo de 10 días hábiles para informar al interesado o su representante legal en la escritura de proyecto a su solicitud. Las solicitudes de parte de la Secretaría la fecha de ingreso del expediente en la Oficina de Partes de dicha Secretaría.

Si la Secretaría, en el plazo antes señalado, no hubiere expedido el informe o éste fuere desfavorable, el interesado podrá recurrir a la División de Desarrollo Urbano del Ministerio de Vivienda y Urbanismo, la que resolverá en definitiva.

El rechazo por parte de la Secretaría deberá ser debidamente fundado y notificado al interesado, con copia a la División de Desarrollo Urbano. La Municipalidad correspondiente aprobará los proyectos de loteo y subdivisión, como asimismo, los de edificación y urbanización que éstos den origen, en el término informado por la Secretaría Ministerial o por la División de Desarrollo Urbano, según corresponda.

ARTICULO 13º— Las condiciones de edificación y subdivisión predial expresadas en densidad bruta, coeficiente máximo de constructibilidad, porcentaje máximo de ocupación del suelo y superficie mínima de los predios, aplicables a cada uno de los sub-ámbitos geográficos del área de expansión urbana, aparecen definidos por tramos, en el siguiente cuadro:

CUADRO DE TRAMOS GENERICOS DE CONDICIONES DE EDIFICACION Y SUBDIVISION

<table>
<thead>
<tr>
<th>Tramo</th>
<th>Densidad Bruta hab./ha.</th>
<th>Coeficiente máximo de constructibilidad</th>
<th>Porcentaje máximo de ocupación del suelo</th>
<th>Superficie mínima predial m²</th>
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IV. Reemplázase en el actual Título III “Zonificación Intermunicipal”, párrafo “Areas Verdes”, inciso primero, la frase “Dirección de Planeamiento del Ministerio de Obras Públicas”, por la frase “Secretaría Ministerial de Vivienda y Urbanismo, Región Metropolitana”.

Asimismo, derogase el sub-párrafo “Reservas Forestales Rurales”.

V. Derogase en el actual Título III “Zonificación Intermunicipal”, párrafo “Areas Verdes”, el sub-párrafo “Reservas Agrícolas y Forestales Sub-urbanas”.


VII. Agrégase a continuación del nuevo Título IV el siguiente nuevo Título V:

TITULO V.

Normas técnicas aplicables al Área de Expansión Urbana

ARTICULO 1ºº— En el presente Título se incluyen las normas técnicas aplicables a cada uno de los sub-ámbitos geográficos del área de expansión urbana del Plan Intermunicipal de Santiago, de conformidad a los cuadros que se insertan a continuación.
<table>
<thead>
<tr>
<th>SUBSECTOR GEOGRÁFICO</th>
<th>USOS URBANOS PERMITIDOS</th>
<th>USOS URBANOS EXCLUIDOS</th>
<th>TRAMO</th>
<th>DENSIDAD MÁXIMA (HAB./HA)</th>
<th>COEFICIENTE MÁXIMO DE CONSTRUCCIÓN (BILDAD)</th>
<th>PORCENTAJE MÍNIMO DE OCCUPACIÓNDENEL SUelo</th>
<th>SUPERFICIE MÍNIMA (M²)</th>
<th>ASPECTOS GENERALES A CONSIDERAR</th>
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<tbody>
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<td>Area de Restricción, ver Art. 70 letra b.1 de la presente Ordenanza.</td>
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<td>8,0%</td>
<td>6,0%</td>
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</tr>
<tr>
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<td>Industrial de todo el suelo, Turístico, Recreativo de Deportes</td>
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<td>8,0%</td>
<td>6,0%</td>
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<td>Area de Restricción, ver Art. 70 letra b.1 de la presente Ordenanza.</td>
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<td>PORCENTAJE MÁXIMO DE OCUPACIÓN DEL SUELO</td>
<td>SUPERFICIE MÍNIMA A CONSIDERAR (m²)</td>
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- **Nota**: Se presentan datos generales para diferentes sectores geográficos, incluyendo usos urbanos permitidos y excluidos, densidad, coeficiente máximo de construcción, porcentaje máximo de ocupación del suelo y superficie mínima a considerar. Específicos detalles varían según el subsector y el tipo de uso.
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<th>USOS URBANOS EXCLUIDOS</th>
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**Notas:**
- Incluye áreas de recreación. Ver Art. 70 letra b, de la presente Ordenanza.
- En caso de que lo permita el tipo de suelo, puede ser un área de residencial.
Anóntese, tómese razón y publique.— Por orden del Presidente de la República, Jaime Estrada Leigh, General de Brigada, Ministro de Agricultura y Urbanismo.

Dios guarde a U.S.—Bernardo Garrido Valenzuela, ministro de fe.

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Diario Oficial de la República de Chile
Viernes 30 de Noviembre de 1979
(4132) Pág. tres.