ABSTRACT

This thesis describes the comprehensive planning effort undertaken by the Metropolitan Area Planning Council in the Boston area. This effort engaged over 4,000 of the area’s residents between 2002 and 2009 and produced a new vision and action plan for the region entitled ‘MetroFuture,’ Without formal authority to ensure compliance with the plan, the agency worked to increase the scale, transparency, and specificity of its efforts in order to build broad-based support for implementation. This study analyzes MAPC’s use of modeling, public participation, and advocacy and evaluates the strengths and weaknesses of the agency’s “new regionalism” approach. They were able to achieve more diverse participation, a more comprehensive plan, and actionable recommendations with input from a much broader set of actors than previous efforts. They were hampered by the lack of political endorsement from state and local leaders, as well as by financial constraints and their inability to secure stakeholder agreement on key recommendations. The concluding discussion makes recommendations to other metropolitan regions trying to re-think how best to conduct comprehensive regional planning efforts.

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Chapter 1. INTRODUCTION

Metropolitan regions, from multi-million person urban areas to the world’s largest “mega-cities”, have emerged in the 21st century as the dominant centers of commerce, education, employment, resource consumption, pollution, and other human activities for an increasing number of people throughout the world. A common characteristic of these regions is that they contain multiple municipal governments within them – cities, towns, and unincorporated areas – that may collaborate or compete as circumstances or higher authorities (i.e. state or national governments) require (Feiock, 2009).

Many of the ills faced in these areas, such as traffic congestion, strained public infrastructure, and regional inequality, are caused, in large part, because of the negative impacts one community faces because of the decisions of another. For example, as a town far outside the urban core develops more housing, it may create more traffic for communities further in as commuters shuttle through to centers of employment or education. Without effective mechanisms for both horizontal (e.g. city to city) and vertical (e.g. city to nation) coordination of planning and governance, the metropolitan region can face a “tragedy of the commons,” (Hardin, 1968) whereby the prosperity and quality of life declines for the region as a whole.

In an effort to support the growth and development of high-quality metropolitan regions, planners, policy-makers, and stakeholders have organized a variety of regional planning efforts1 around the world that have sought to determine and implement the best use of land, public budgets, and regulation. This study focuses on a recent example from the United States – the Boston Metropolitan Regional Planning Commission’s MetroFuture regional planning process.

A Brief History of Comprehensive Municipal Planning in the U.S.

Metropolitan regional planning in the United States first began as a proposition from leading planning and architectural minds during the Progressive Era of the late 19th and early 20th centuries. Two pioneering leaders of these efforts were Daniel Burnham, famously quoted as saying "Make no small plans", who led the Plan of Chicago effort in 1909 and Edward Bennett, who led the creation of the Plan of New York and Its Environs in 1929. These efforts were privately funded and sought to establish a comprehensive agenda for development for municipal governments in each region.

1 I will use the terms metropolitan planning and regional planning interchangeably throughout the document.
Both Burnham and Bennett brought together teams of architects, economists, and other experts to research the conditions of each region and develop new regional plans for future growth. Their philosophies, more than scientific research or public opinion, guided their choices of how to designate various land uses, densities, and, most crucially, siting for infrastructure such as rail lines, roads, parks, and public spaces.

Their plans were not master plans for completely undeveloped expanses, but instead were efforts to give shape to these rapidly growing regions in order to maintain and improve quality of life and efficiency. Both the Chicago and New York plans celebrated dense urban cores and sought to protect open space outside of the cities (Fishman, 2000). Lewis Mumford vehemently criticized this approach for the New York plan in a 1932 article in the *New Republic* and subsequent communications. Mumford advocated a regional vision that called for the creation of a network of suburban “New Towns” that would reduce density and weave settlement into the surrounding natural landscapes while preserving greenbelts and other open space (J. Thomas, 2000).

While these and other similar metropolitan regional plans had some influence upon their respective regions, the eventual metropolitan form that emerged was quite different than the comprehensive vision they or their critics had put forward. The Great Depression and then New Deal response resulted in a major shift in control over infrastructure spending from the local to the national level. Federal support for single-family home mortgages and auto-oriented development, combined with increasing real incomes and a desire by those that could to leave the crime and congestion of the city (Mieszkowski & Mills, 1993), encouraged an explosion in low-density development outside of the urban core after World War II. Earlier comprehensive regional plans were largely ignored and federal dollars instead were also used to support draconian urban renewal policies that razed “blighted” neighborhoods to build large highways, modernist public housing, or other amenities.

The Roosevelt Administration was committed to decentralizing the growing population. This pattern of low-density urban expansion was soon labeled “urban sprawl” and was criticized for numerous aesthetic, sociological, environmental, and other concerns (Krieger, 2003). The resulting destruction of existing neighborhood communities, small businesses, and historic buildings in the urban core, as well as the loss of open space and increased air pollution from sprawling suburban development, fomented a strong backlash by community organizations, environmental advocates, and others. The planning

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2 Ian McHarg would later dedicate his seminal 1969 work *Design With Nature* to Lewis Mumford.

3 To give you a sense of how long this debate has been taking place, William H. Whyte published an essay titled Urban Sprawl in *Fortune* in 1958.
profession as a whole was criticized for encouraging and enabling such developments (e.g. Jane Jacobs). The notion of planners as public interest servants was roundly criticized.

However, the core of the planning field continued to focus on comprehensive rational planning, continually working to create a science out of the emerging field. Nowhere was this more pronounced than in the early efforts to create comprehensive models that attempted to forecast future employment, population growth, housing development, land use, transportation, and other characteristics of the metropolitan region. These large-scale modeling approaches provoked intense debate and were criticized by many, including Douglass Lee’s “Requiem for Large-Scale Models” in which he hoped they "symbolized the last offensive of the technocratic, hypercomprehensive mode of planning" (Lee, 1973).

What planning theorists and others also criticized was the very attempts to be comprehensive in planning at all scales, particularly on the regional scale with all of its multiplied complexity. Charles Lindblom argued in 1959 for a “Science of Muddling Through”, whereby planners would abandon the data and intellectual complexity of comprehensive efforts for “successive limited comparisons” focused on achieving short-term goals (Lindblom, 1959).

In 1965, in a period rife with racial conflict affected in part by the dramatic changes in metropolitan form, Paul Davidoff argued against the notion that there was a single “public interest” that planners could define. He argued that, instead of the technical approach advocated by Lindblom, planners must recognize that “values are inescapable elements of any rational discourse-making process and that values held by the planner should be made clear”. Beyond just recognizing values, he argued that "the planner should do more than explicate the values underlying his prescriptions for courses of action; he should affirm them; he should be an advocate for what he deems proper" (Davidoff, 1965). In this way, Davidoff argued for a form of planner-supported pluralism that would reorder the planning process to be more like the judicial system – a competition between professionals representing different interests in a public setting.

Over time, alternative proposals for the role of planners emerged. John Forester, for example, made a case for planners to respond to the technical and political focus of conventional planning not by becoming advocates for a particular interest, but instead by improving their abilities to enable collectively developed vision and action. Whereas Davidoff emphasized the need for planners to advocate, Forester emphasized the need for planners to listen. This is not to say that Forester believed planners should be agenda-less. In fact he acknowledged how powerful planners can be in shaping the attention of the participants in a planning process. However, unlike Davidoff, Forester argued that interests are not necessarily discrete and clear, like polarized legal disputes,
and planners should focus their efforts on improving the process of planning more than choosing sides (Forester, 1982).

These bottom-up planning philosophies encouraged much greater public participation in planning than had previously been expected or conducted. The planning community has wrestled with these dilemmas throughout the remainder of the century (and continues to today) – comprehensiveness versus incrementalism, advocacy versus neutrality, and bottom-up versus top-down.

**The New Regionalism**

It is from these debates in planning that in the early 21st century a new form of regionalism emerged. New Urbanists, such as Peter Calthorpe (Calthorpe, 1995) and others, argued against prior forms of regional planning that have often addressed only a limited set of issues at regional scale (e.g. transportation for most Metropolitan Planning Organizations) and did not explicitly advocate smart growth principles. They called for a new regionalism that would take a more comprehensive and normative approach. As Wheeler (Wheeler, 2002) states, “In contrast to much of the regionalism during the second half of the 20th century, the new approach:

- Focuses on specific territories and spatial planning;
- Tries to address problems created by the growth and fragmentation of postmodern metropolitan regions;
- Takes a more holistic approach to planning that often integrates planning specialties such as transportation and land use as well as environmental, economic, and equity goals;
- Emphasizes physical planning, urban design, and sense of place as well as social and economic planning; and
- Often adopts a normative or activist stance.”

“New Regionalism” efforts in Utah (Envision Utah), Metropolitan Chicago (Go To 2040), central Florida (Heartland 2060), the San Francisco Bay area (FOCUS), Sacramento (Regional Blueprint), Central Texas (Envision Central Texas), and Baltimore (Vision 2030) have combined transportation, land use, environmental planning, and other elements in an attempt to better integrate interrelated systems in the region and build broader buy-in to the final plan. They have sought to engage a broader set of stakeholders than conventional regional planning by improving the communication of planning ideas, engaging in more salient subjects, and utilizing more interactive meeting formats (e.g. using keypad polling and design charrettes). Through these methods, regional planners hope to educate the public on the consequences of particular land use,
transportation, and other decisions of regional significance, as well as to garner their support for “smart growth” measures.

A common approach that these efforts have shared, adopted from strategic planning in the private sector, is to create alternate scenarios for regional development that explicitly highlight the tradeoffs between them. One example is the tradeoff between an increase in low-density single family housing and preserving open space, thereby forcing people to choose between competing priorities. The intention behind this is both to educate the public about these inter-relationships and to encourage them to support smart growth principles.

These efforts have engaged a diverse array of citizens through surveys, public workshops, and other means to shape the process. They had varying levels of public participation, but almost universally much more public participation than traditional regional planning, which had been dominated by a small set of planners, policy-makers, and local elites. The comprehensiveness and participation in these efforts have made them more expensive than previous efforts, many ranging from $600,000 (Baltimore) to $6 million (Chicago) (Cotter, 2005).

These efforts have varied widely in the level of authority the convening regional organization has had to ensure implementation of the resulting plan. These levels of regional plan influence run from being solely advisory and supporting implementation through capacity building (e.g. Metro Boston), to providing financial incentives to encourage municipal adoption of regional plan recommendations (e.g. Metro Denver), to using state sanctioned authority to bring local plans into conformance with the regional plan (e.g. Portland Metro) (Rosen, 2007) (Feiock, 2009).

One of the key distinctions that determine the level of influence of the regional plan is whether or not the agency that created it is the designated Metropolitan Planning Organization (MPO) for the region. This federal designation, established in 1962 and strengthened in 1991, now empowers the agency to shape the allocation of federal transportation dollars through a regular regional transportation planning process (Weir, Rongerude, & Ansell, 2008). In some regions, the MPO and the more broadly focused regional planning agency are one in the same (e.g. Sacramento, Atlanta) and in others they are separate (e.g. Boston, Baltimore, the San Francisco Bay Area). Some regions have merged these organizations to enable more integrated planning, such as the merger of the Chicago Area Transportation Study (the MPO) and the Northeastern Illinois Planning Commission (NIPC) to create the Chicago Metropolitan Agency for Planning (CMAP).

Finally, comprehensive modeling has made a comeback in recent decades as planning theory, data availability, and computer technology have improved. These models have been integrated with Geographic Information System (GIS)
technologies to enable spatial rendering of the model outputs (Wegener, 1994). A key dilemma in relying upon these models is the ‘black box’ phenomenon whereby stakeholders in a planning process aren’t able to understand the model architecture and assumptions, which disproportionately empowers the modeler to shape the outputs and can undermine stakeholder trust in the process. Recent advances in “scenario sketch” modeling software have enabled more people to manipulate model assumptions through a graphical interface (R. Thomas, 2010).

**Research Question & Significance of Research**

This study explores one example of a New Regionalist comprehensive regional planning effort conducted by a regional agency – the Boston-area’s Metropolitan Area Planning Council or MAPC. MAPC is not the Metropolitan Planning Organization for the Boston Metro area, nor does it have authority over any other infrastructure or land use decisions. Between 2002 and 2008, MAPC organized the MetroFuture comprehensive regional planning process to create a vision and specific recommendations for changing negative projections for the region going forward.

The central question of this study is for metropolitan areas with a weak regional agency (i.e. without the authority to change policies or resource allocation within constituent municipalities), how can the agency best persuade or pressure other authorities (i.e. municipal, state, and federal) to act in concert with regional agenda?

Related questions include:

- How can the agency best understand and explain current trends and the impacts of alternative futures? How does it identify which policies and planning interventions are appropriate in order to create a more desirable future?
- How can the agency best educate and engage citizens and leaders in understanding current trends and supporting a preferred future? How can the agency help bridge the gap between the plan and implementation?
- What changes are appropriate for the agency to make internally in order to improve regional performance?

This study is significant because of the increasing state and federal interest in and support for comprehensive regional planning. California, for example, has begun requiring an unprecedented level of comprehensiveness and integration in planning by its regional planning agencies in the interest of reducing vehicle miles traveled and, in turn, greenhouse gas emissions from cars and trucks. This requirement was enacted in 2008 through the state’s Senate Bill 375. The
federal Department of Housing and Urban Development (HUD) has begun to encourage similar comprehensive regional planning through a $150 million grant program to support regional agencies in undertaking this kind of comprehensive regional planning.

Given the wide variance in the levels of authority regional agencies have around the country, as well as the highly variable public appetite for the kind of dense, mixed-use development most often prescribed by recent efforts along these lines, effective strategies for developing and implementing comprehensive regional plans are increasingly necessary.

This study explores MAPC’s experience in conducting this kind of regional planning process. Specifically, the study will look at the context for the region, the previous regional planning effort, and the modeling, political management, and organizational practices involved in developing and implementing the plan. These aspects will be explored through the dilemmas mentioned earlier – comprehensiveness versus incrementalism, advocacy versus neutrality, and bottom-up versus top-down

**Methods Used in the Study**

This study relies upon semi-structured interviews staff and Executive Committee members of the Metropolitan Area Planning Council (MAPC) and regional stakeholders involved in the MetroFuture process.

In December of 2009, I met with Holly St. Clair and Tim Reardon, two of the members of the core MetroFuture project team for the MAPC. They provided me with an overview of the process, some of their key learnings, and recommendations of stakeholders to interview. They also provided me with documents that represented key planning and presentation artifacts – meeting presentations, staff updates, and others – from throughout the process. The MAPC provided me with ongoing contact throughout the thesis writing process.

Throughout March, I interviewed sixteen stakeholders who had been involved with the MetroFuture process in a variety of ways. The interviews lasted from 45 to 90 minutes. Some were Steering Committee members, some were consultants, and some were occasional participants now tasked with implementing the recommendations. I digitally recorded all but one of the interviews and then coded each interview to identify relevant content and common themes.

In April, I met again with Holly and Tim to answer some additional clarifying questions. I also met with Martin Pillsbury, one of the lead staff involved in the
previous regional planning effort by MAPC. I completed the thesis in May of 2010.
Chapter 2. MetroPlan and the Case for MetroFuture

The Boston area began its foray into regional planning in the 1880s, when the pollution of the Charles River encouraged the creation of the Metropolitan Sewerage Commission (Fishman, 2000) and then the Boston Metropolitan Parks Commission, which published its first report in 1893 (“Department of Conservation and Recreation,” 2010).

Massachusetts’ Regional Planning Law was adopted in 1955. This law, Chapter 40B of the General Laws of Massachusetts, delineates how cities or towns are to coordinate development. In 1962, Congress passed legislation requiring the formation of a Metropolitan Planning Organization (MPO) for any urbanized area with a population greater than 50,000. These organizations are the conduit for federal transportation dollars to the regions.

In 1963, Massachusetts’ 40B was amended to establish regional planning agencies and define their purposes, roles, and responsibilities. For almost all of the regions in Massachusetts, the regional planning agency became the federally recognized MPO. However, for the region consisting of the 101 cities and towns surrounding Boston, the MPO and regional planning agency were kept separate.

The regional planning agency for the Metro Boston area is the Metropolitan Area Planning Council (MAPC). The central duties of the regional planning agencies are spelled out clearly in Chapter 40B of the General Laws of Massachusetts:

CHAPTER 40B. REGIONAL PLANNING

Chapter 40B: Section 5. Powers and duties; reports

Section 5. A planning commission established hereunder shall make careful studies of the resources, problems, possibilities and needs of its district and, on the basis of such studies, shall prepare a comprehensive plan of development or a schematic study plan of such district or of such part or parts thereof as the commission may deem necessary and in such plans shall make such recommendations for the physical, social, governmental or economic improvement of the district as in their opinion will be in the best interest of the inhabitants of the district. Such plans and recommendations shall concern, among other things, the general use of the district, including land use, principal highways and expressways, bridges, airports, public utilities, public facilities, parks, recreational areas, public institutions and such other matters as in the opinion of said commission will be beneficial to the district and will promote with the greatest efficiency and economy the coordinated development of the district and the general welfare and prosperity of its people. Before the adoption of any such regional plan or a portion
thereof, the district planning commission shall hold at least one public hearing thereon, notice of the time, place and subject of which shall be given. Written notice of such hearing shall be given to each planning board, board of selectmen, and city council. Notice of the time, place and subject of the hearing shall be published at least once in a newspaper having substantial circulation in the region at least ten days before such hearing. **Adoption of such plan or portion thereof shall be by a majority vote of the representatives of the district planning commission.** Such plan may be amended from time to time in the same manner as hereinbefore provided. A copy of the plan adopted by the commission or any amendments thereto signed by the chairman shall be filed with the town clerk of each member municipality not more than thirty days after commission action. Such plan or portion of a plan shall be a public record. Such district planning commission shall also assist the planning boards of the several cities and towns within the area of its jurisdiction in applying any district plans and recommendations so adopted to the local board’s area of jurisdiction.

Such planning commission shall report annually to the city councils and town meetings of the cities and towns within its district, showing the status of its plans and recommendations. **Such plans and recommendations shall be advisory only.**

The MAPC is funded through a combination of support from the cities and towns in the region, and occasional support from private foundations. The current mission of the MAPC is to “promote smart growth and regional collaboration, which includes protecting the environment, supporting economic development, encouraging sustainable land use, improving transportation, bolstering affordable housing, ensuring public safety, advancing equity and opportunity among people of all backgrounds, and fostering collaboration among municipalities” (“Mission Statement | Metropolitan Area Planning Council,” n.d.).

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4 Emphasis added
As of 2010, a twenty-five-member board governs the MAPC, and is responsible for hiring its Executive Director and overseeing the operations of the agency. Each of the 101 cities and towns in the region has a designated representative for the MAPC. Thirteen of these representatives currently sit on the Executive Committee. The Governor and state agencies have twenty representatives, with six currently serving on the Executive Committee. There are nine additional “Ex Officio” representatives of various state and local agencies, of which four serve on the Executive Committee (“Board/Council | Metropolitan Area Planning Council,” n.d.). MAPC currently has fifty staff organized into twelve divisions in the organization (Executive, Communications, Government Affairs, Data Services, Regional Plan Implementation, Transportation Division, Environmental Division, Land Use Division, Municipal Governance, MetroWest Growth Management Committee, Human Resources & Administration, and Finance) (“Staff Directory | Metropolitan Area Planning Council,” n.d.).

Given the “advisory” nature of the MAPC’s regional plans, one of the core capacities that MAPC uses to influence local planning decisions is its role as a technical support provider. Many of the MAPC staff are experienced planners, GIS analysts, and government affairs representatives. As Tina Rosen notes in her 2007 PHD dissertation, the “…MAPC uses its access to data and technical
expertise, particularly it['s] computer-modeling capabilities, as a means of influence" (Rosen, 2007).

According to Jay Ash, the current President of the MAPC Executive Committee, “MAPC has done a good job of developing a reputation around public policy circles as a credible combination of think tank and doer of things” (Ash, 2010). This combination speaks to their both analytical skill in the office, as well as proficiency in working directly with cities and other actors in supporting plan and policy development. In addition to his position with the MAPC, Jay Ash is the Cty Administrator for Chelsea and MAPC’s President and representative on the 14 voting member board of the Boston MPO.

**MetroPlan 2000**

From its establishment in 1963 through the mid-1980s, the MAPC planning staff created various topic-specific regional assessments and plans on transportation, open space, and other issues as requested by state and federal authorities. For example, they conducted a federally funded regional water quality management planning effort in the 1970s as a requirement of Section 208 of the Clean Water Act (Pilsbury, 2010).

The emergence of a more comprehensive and normative regional planning vision came with the arrival of David Soule, MAPC’s new Executive Director, in 1986. “It was his vision to launch a regional plan,” said Martin Pillsbury, an environmental planner at MAPC who worked with David on the planning effort (Pilsbury, 2010). In MAPC’s twenty-year history, the agency had not created an over-arching, multi-disciplinary, plan for the metropolitan region.

**Strategic orientation**

David and the other staff at MAPC launched the new regional planning process, called MetroPlan 2000, in 1987. At that time, according to Martin Pillsbury, they felt as though there “weren’t very many models out there for this”. David “put MAPC ahead of our time,” said Martin. David envisioned for the regional plan to incorporate smart growth principles, which had been generally discussed in planning circles since the 1970s, but there was not yet a coherent smart growth movement or framework.

According to the final plan itself, “In 1987, the Metropolitan Area Planning Council initiated the MetroPlan 2000 planning process in recognition of the mixed impacts of widespread low density development in the region. Vehicular traffic was growing by 4% per year with related increases in congestion and air pollution. Water supply and wastewater treatment capacity was being rapidly
exhausted. The ratio of housing costs to wages was higher in the Boston area than any other metropolitan area in the nation. The region required a vision for its future that would allow and promote economic development in an efficient, safe and well planned manner” (METROPLAN 2000: The Regional Development Plan for Metropolitan Boston, 1990). The planning effort was funded through existing assessment fees and fees for service.

The planning process was organized around five separate “planning elements” - Housing, Open space, Transportation, Economic Development, and Water Resources. A related Department Head within MAPC oversaw the planning for each of these issue areas.

From 1987 to 1989, each Department summarized the historic, and sometimes projected future, trends relevant to their issue area and convened a related policy committee to help develop policy recommendations. Committee members included municipal officials, state agencies, and a few external stakeholders. These committees developed policy recommendations on economic development, facility siting, housing, land resources, solid waste, transportation and water resources.

In describing the makeup of the policy committees, Martin Pillsbury said the water resources committee he worked with “ended up having a mix, probably a quarter to a third being outside, not your usual suspects in the MAPC family.” The water resources committee included representatives from the local water and sewer districts, for example, to “reality check” the policy recommendations. There was a concern on other committees, housing for example, about opening up the committees to outside advocates as then municipalities might “lose control” of the process.

The MAPC staff also worked to create a regional development plan as part of the overall MetroPlan process – a “framework for identifying the smart growth areas where you want to encourage growth”, according to Martin. The MAPC staff thought that by designating these areas for priority development and developing plans for how to develop those areas, they and the municipalities could make a more compelling case to state and federal infrastructure investments. “If it’s part of an officially adopted plan like this and it’s … official lines [drawn] on a map, then we’re going to have a better chance, no guarantees, of getting the infrastructure investments that are needed there and other actions that other state agencies might take. It was always our intention to create a, David Soule used to call it, ‘stone soup’. …We were setting the table in the hopes that we could create a snowball effect.”

These infill development areas were designated “Concentrated Development Centers” (CDCs). The MAPC staff initially took a fairly top-down approach to identifying areas should be designated CDCs. Martin described the process this way:
“Our first instinct in drafting the plan … was, ‘We’re the planners. We know best. We can come up with some criteria for where those [CDCs should be] and put the dots on the map.’ And then people said, ‘Wait a minute!’ We [had expected] to sit in our ivory tower and have the command and control [to decide] ‘that’s where the growth will be, and there.’”

“We put out an early draft … that had some provisional dots on a map that had been internally generated here in the ‘ivory tower’ and it got some real pushback. There were some suburban towns, like Burlington, that said ‘no, we don’t want that dot for our area. … You’re going to make us into downtown Boston. We want to be suburban.’ And then there were some other areas where we didn’t put a dot that said, ‘what about us?’ like Quincy Center, for instance”.

After pushback from municipal officials, the MAPC staff went back and tried to figure out a different approach “to get some buy-in from the places we’re talking about,” said Martin. “So we [decided] to put this framework together, develop the structure, but not populate it with any specific places and put it out to the world and say, ‘Ok. You cities and towns come forward and self-nominate yourselves if you think you qualify for these criteria that we’ve defined.’”

The resulting CDC framework and policy recommendations became MetroPlan.

Performance

In May of 1990, the MAPC Board officially adopted the plan. In fact, for the first time ever according to Martin, they had a roll call vote and approved the plan unanimously. Staff had conducted significant internal work to garner support in the board before the vote, and the primary pushback was whether or not this would affect home rule. Some compromises were made to lessen this risk.

In reviewing the draft set of fifty-four recommended actions, the Executive Committee vetoed the four that went beyond the MAPC’s traditional technical assistance role in conventional planning issues. These four recommendations included an expansion of MAPC’s authority that would have allowed them to reject a proposed use of open space, a proposal for the agency to engage in employment placement programs, a proposal that the agency establish a Metro Area Recycling Cooperative, and that the agency advocate for statewide education reform.

The board supported the Concentrated Development Center proposal and criteria. According to Martin, “There were very few [designated places], if any, that were actually in [the plan]. The concept, the placeholder, for that was in there with the intention that once the plan was in place we would then go about a process of working with towns and cities who, at their interest and initiative, not because we directed them, would come forward and go through [this
process].”

From 1990 to 1995, MAPC staff, board members, and the policy committees made refinements and amendments to the plan. Martin coordinated ongoing implementation of the plan, specifically overseeing the Community Development Center process. “The process was pretty formalized. We had these criteria for density, transit access, and things of that sort. If the Mayor or planning department in a city or town came forward and said, ‘We think we can meet these criteria. We want this designation,’ we would work with their planners to put together what we called a ‘mini plan’ that spelled out the specifics. It defined the boundary [of the CDC]. It’s not the whole town, [but] some areas around the downtown district with certain density cut-offs, mixes of housing and jobs, [etc.]. We would work with the planners to define it, literally put a line on a map [to say], ‘here’s the district’. We would inventory the kind of land use that was there already. We would inventory what infrastructure already served the area and if there are any inadequacies (e.g. need for sewer upgrades for additional capacity). Road and transit [were] often part of the transportation upgrades in order to support either the existing growth or any anticipated new growth that we might want to occur.”

Once the “mini plan” had been written, “the Mayor or the Selectmen in the town, signed a formal Memorandum of Understanding to designate it as a CDC. We would have signing ceremonies and it garnered some interest in the local press,” said Martin. Through the mid-1990s, MAPC staff worked with municipalities to create plans for fifteen Concentrated Development Centers.

Perceived performance

However, beyond the buy-in of those fifteen municipalities, progress on other aspects of MetroPlan was a challenge. “We ran into a brick wall in the 1990s trying to get the [state] transportation agencies to take any account of MetroPlan initially,” said Martin. The region continued to have much more rapid population growth in the suburbs than the urban core. Many of the problems associated with urban sprawl continued to increase, such as traffic congestion, loss in affordable housing, and the loss of open space (“A Decade of Opportunity: Crafting a Collaborative Vision for the Future of Metro Boston,” 2003).

According to Martin Pillsbury, “The problem with [MetroPlan] actually coming into its full implementation is that there did not exist any kind of a formal state-level plan, or regional-level like Portland has. If you had an overarching framework that you could plug this into, where then because it met certain criteria and the state agencies could agree, ‘Ok. Yes, now we’ll put more money in these particular areas’. That would be good. But we really were working on a bully pulpit sort-of process to just try to advocate for, but no formal way that we
could guarantee that people would get that kind of priority.” MAPC staff lobbied the Governor and state agencies, first during the Dukakis Administration, to support the CDC and other elements of the plan. Governor Dukakis convened a summit of his department heads to create a smart growth agenda for the state, but MAPC was not able to secure an executive order requiring the agencies to support the regional plan.

Over time, MetroPlan and MAPC’s influence of upon the Boston MPO improved. “In the plan of 1997, and maybe 2000, we began to make some inroads to get the state members of the MPO to … put [in] a MetroPlan scenario [alternative into their planning process],” Martin said. “They didn’t select that as the preferred alternative, but at least we had that as an idea and a possible outcome.”

**Evaluating MetroPlan**

*Pressure to Change*

In 2000, ten years after MetroPlan had been adopted, the MAPC staff and board began reflecting on the impacts the plan had and realized many of the recommendations hadn’t been implemented as fully as they’d hoped. In 2000 to 2001, the staff began an effort to amend and update the plan. They originally conceived of this as a simple project to bring the data up to date, revise the narratives, write new qualitative descriptions of issues in the region and update their status, and to develop new recommendations and better ways to implement them.

According to Rick Dimino, the then President of the MAPC Executive Committee, the MAPC staff and Executive Committee “stepped back and said, ‘Ok. What did we learn from [MetroPlan]? How do we do it better this time?’…I think [the staff], and we as an Executive Committee, learned that we wanted to do something much more substantive and much more thoughtful and much more effective than the last planning effort” (Dimino, 2010).

In reviewing the impact of MetroPlan, the MAPC staff and Executive Committee found that few of the plan’s goals had been achieved and that, while the plan had been unanimously adopted by the MAPC Executive Committee – representing all 101 cities and towns in the region – few of them were making use of the plan and it did not really influence their day-to-day choices.

What began as an effort to review and revise MetroPlan evolved into a decision by the staff and Executive Committee to set aside the old plan and to start conceptually from scratch. “It’s not like we’re wiping the slate clean really,” according to Martin Pilsbury, “but the specific structure of the plan, the specific processes in that plan, we said let’s not be bound by that. Let’s rethink the
whole thing from the ground up... That quickly led to the outreach needed to be more than outreach, it has to be involvement,” Martin continued. “It has to be, what we eventually called, ‘plan building’ and bringing in partners. In a way that was unusual and unaccustomed for public agencies to really get outside the borders of just doing a draft and taking it to a public meeting.”

“The challenge for all plans is that they get done and then they sit on a shelf,” said Rick Dimino. “What we did not want to have happen is that this plan ends up being another piece of material on a shelf. We wanted this plan to be a living plan that had stakeholder and public ownership and to establish a dynamic that created some legs, if you will, to making the plan a vital part of the strategic development of MAPC’s policies and activities, as well as its organizational structure.”

Change in Strategic Orientation

In 2002, David Soule left MAPC and was replaced by Marc Draisen, a former state legislator and director of the Citizen’s Housing and Planning Association (“Marc Draisen | Metropolitan Area Planning Council,” n.d.). Marc placed much more emphasis on public, legislative, and media outreach in MAPC’s work. He brought on full-time staff to deal with those areas, which had previously been managed by part-time staff.

A team to lead MetroFuture was formed. The members of the team were Marc Draisen, Curtis Davis (the Director of MetroFuture), Martin Pilsbury, Amy Cotter (then Senior Program Manager and she would later become the Director of MetroFuture), and Holly St. Clair (Director of Data Services for MAPC). Curtis Davis had previously worked in architecture and construction management and joined MAPC to manage the MetroFuture process (“Curtis Davis - LinkedIn,” n.d.). Holly St. Clair had worked at MAPC since 2001 and worked for the City of Boston before then (St. Clair, n.d.). Tim Reardon joined the team in 2003 and would play a crucial role throughout the project.

The team also reached out to local people with expertise in collaborative process, such as Cynthia Silva Parker, a Senior Associate at the Interaction Institute for Social Change (IISC). Cynthia said, “The MAPC staff said to me, ‘Help us figure out how do we get more people in the planning process so that we have to do less selling on the tail end’,” (Parker, 2010).

The MAPC committed around 15 of their staff people to attend a 3-day IISC facilitation training. This training taught many members of the MAPC staff approaches for collaborative planning that they began to see as useful for both external and internal work. According to Cynthia, “They said, ‘Part of the problem in the way planning is done is the siloing. The transportation people and the land resource people and the water people – they don’t talk to each
other. We have to do a planning process that is more integrated around concepts, not organized around the familiar planning dimensions.’

…Conceptually they wanted it to be integrated – which was compelling and I thought a great idea. I’m not a planner, but given my academic background in city and regional planning [I thought] that’s smart, very smart. They said, ‘Look, if we want people out there to stop siloing, we have to stop siloing in here’, because the agency was organized in various siloed ways as well.”

In consultation with Cynthia, and after evaluating MetroPlan, the team came to the conclusion that the next regional planning effort needed to be more inclusive than previous efforts, both in terms of incorporating issues that were of concern to people (even if beyond the scope of what MAPC had traditionally dealt with) and in terms of the sheer number and types of people they should engage. They saw the previous lack of inclusivity and participation as a critical reason why the plan wasn’t implemented.

As Amy Cotter, the Coordinator of MetroFuture, put it, “…We are an agency that does not have the authority to compel anyone to do anything in particular and we wanted to do a regional plan that had implementation potential. We made the conclusion that in order to do that, we needed to build a constituency in the course of developing the plan. Not only so we then have that constituency prepared to help us implement the plan, but so the plan will actually be better and people will find it a better roadmap for growth and development because of the participation of so many different constituencies” (Cotter, 2010). The team began to call this constituency they were seeking to organize the “plan builders” and saw them as a crucial product of the MetroFuture planning effort.

**The Purpose & Principles of MetroFuture**

These experiences helped to shape the goals and strategy that MetroFuture would pursue. “I would say MetroFuture had three goals,” said Marc Draisen;

1. “Do a really bang-up smart growth plan;

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5 The state’s requirements for public participation in regional planning are fairly minimal:

“Before the adoption of any such regional plan or a portion thereof, the district planning commission **shall hold at least one public hearing** thereon, notice of the time, place and subject of which shall be given. Written notice of such hearing shall be given to each planning board, board of selectmen, and city council. **Notice of the time, place and subject of the hearing shall be published at least once in a newspaper** having substantial circulation in the region at least ten days before such hearing.” (“M.G.L. - Chapter 40b, Section 5,” n.d.)
2. To build a constituency of supporters who would help us to implement that plan; &
3. To transform the culture of this agency” (Draisen, 2010)

To learn about the cutting edge of regional smart growth planning, in 2003 the MetroFuture team reached out to people who had led similar comprehensive regional planning efforts in the past. The team worked with Ken Snyder, the CEO of PlaceMatters, to convene a meeting of several of the leaders of these efforts, called a “peer-to-peer summit”. “At that meeting we had Robert Grove representing the Envision Utah effort, Frank Beal who was with the Metropolis 2020 project in Chicago, Ron Thomas with the Common Ground project in the Chicago area and NIPC, John Lambie with the Florida House Institute, and [Andrew Michael from the Bay Area Council]. These people were very familiar with large regional projects. Envision Utah was one of the pioneers in doing scenario planning visioning,” said Ken (Snyder, 2010).

From this meeting and other research about these planning efforts, the team learned the similarities and differences between their needs and the achievements of the other efforts. For example, the Envision Utah was initiated because they were, according to Ken, “looking at a million people added to their population by 2020, so they had a real growth challenge.” “Boston was more about demographic shifts and not necessarily large numbers of growth. Boston has a unique economic situation, being a more prominent university / college hotbeds in the country, a very strong inner core (in contrast with some of the other big cities they were looking at). The first tier of suburbs around the urban core, for example, is one of the areas seeing the most shifts. A lot of the conversation was how do you deal with the unique situation and circumstances and create a visioning process that fits with that. I think they did a great job with that.”

In addition to a different context, one of the other differences the team saw was a difference in the level of ambition in making the plan implementable. According to Holly St. Clair, “Tim and I were surprised. When we went to read other big planning efforts, implementation strategies, it was all glossy, mom and apple pie, there was no detail.” “[Like] ‘focus growth near city and town centers’”, said Tim. “Why did you need a process to figure that out? What does it actually mean?” said Holly. “Where’s the public policy? Where’s the meat?” said Tim. From this evaluation, the team wanted to create much more specific and measurable plan elements and recommendations.
Chapter 3. MetroFuture

Phase 0 – Designing the MetroFuture Planning Process

Working with Cynthia Silva Carter and others, the MetroFuture team organized a twenty-member Interim Steering Committee to create a workplan, budget, and governance structure for MetroFuture. Supported by Cynthia from IISC, the group organized their first Boston College Citizens Seminar to launch MetroFuture on May 22, 2002. The event involved over 400 government, business and community leaders from throughout the Metro Boston region. The keynote speaker for the event was noted New Urbanist and New Regionalist Peter Calthorpe. The Mayors of Marlborough and Somerville also spoke at the event. The event concluded with the formation of a Process Design Team that would work to design the MetroFuture effort.

![GOVERNANCE MODEL](image)

*Figure 2: The proposed governance structure for MetroFuture (Parker, 2003)*

The Process Design Team would work with the staff and a new MetroFuture Steering Committee through a newly established governance structure. The Steering Committee was comprised of representatives of the MAPC Council and

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6 MAPC was not yet tracking participant demographics at their meetings, so additional detail is unavailable.
stakeholders representing a variety of interests from throughout the region. This was the primary body acting as a sounding board for the staff on process design, content development, and other issues throughout the project. The Steering Committee met monthly and was able to shape the planning process, but did not have authority over the final plan itself – this would violate state law\(^7\) (see Appendix VI for the Steering Committee membership).

\begin{figure}
\centering
\includegraphics[width=\textwidth]{draftMetroFuture_design.png}
\caption{The draft MetroFuture process design (Parker, 2003)}
\end{figure}

\(^7\) General Laws of Massachusetts, Chapter 40B, Section 5 “Adoption of such plan or portion thereof shall be by a majority vote of the representatives of the district planning commission. Such plan may be amended from time to time in the same manner as hereinbefore provided. A copy of the plan adopted by the commission or any amendments thereto signed by the chairman shall be filed with the town clerk of each member municipality not more than thirty days after commission action. Such plan or portion of a plan shall be a public record. Such district planning commission shall also assist the planning boards of the several cities and towns within the area of its jurisdiction in applying any district plans and recommendations so adopted to the local board's area of jurisdiction.”
The planning process was designed to work through a sequence of phases:

1. Identifying issues and visions,
2. Forecasting the trends relevant to those issues,
3. Developing alternative future scenarios,
4. Integrating those scenarios into one regional plan, and
5. Implementing and adopting that plan.

Parallel streams of engagement were planned to engage various stakeholders in each of these phases, including leadership dialogues and large public meetings. In July of 2003, the team organized a “Tools Summit” of local and national experts to explore the range of technologies available as decision support tools for public engagement. The goal for this effort was to find tools that could help increase the scale and interactivity of the public participation process, and to support alternative scenario development.

![Figure 4: The actual MetroFuture timeline (Reardon, 2008a)](image)

**Evaluating Phase 0**

MAPC staff organized the Steering Committee and the Executive Committee approved the final its composition. The 53 Steering Committee members represented cities and towns, public agencies, NGOs, universities, real estate organizations, foundations, and a variety of consulting organizations from throughout the region. The Committee consisted of 31 men and 22 women.
Notably missing were several key business representatives, such as the Greater Boston Chamber of Commerce or industry representatives, and politically conservative nonprofit organizations. Major employers, such as the health care industry and education institutions, were represented by a planner from the Medical Academic and Scientific Community Organization (MASCO) and by Pablo de Torres from the MIT Industrial Liaison Program.

Reflecting upon the challenges of engaging, the business community, Marc Draisen said, “It has always been difficult to engage the business community in the smart growth planning process. We had very little luck with the Greater Boston Chamber of Commerce. We had very little luck with NAIOP (the National Association of Industrial and Office Properties) and the real estate board, organizations like that. We had more luck with smaller chambers, some individual business leaders and a few business trade associations,” such as the North Shore Chamber, the South Shore Chamber, the Naponsett Valley Chamber of Commerce, and A Better City.

Another part of the challenge, according to Amy Cotter, is that “it seems as if there isn’t a single business civic institution for greater Boston.” There’s A Better City, an organization created to represent business interests on the ‘Big Dig,’ but “they’re very Boston focused, not for the whole region. There’s Associated Industries of Massachusetts which is more industry focused. So there [are] not only geographic divisions, but sectoral divisions as well.”

Another challenge with the initial process design was its apparent overly ambitious timeline. From a November, 2004, report to the Barr Foundation:

“Difficulty meeting time frame. When MAPC adopted a detailed work plan for the MetroFuture planning project, each of five phases was given a period of approximately eight months for completion. Staff and some members of the Interim Steering Committee warned that this period would be insufficient, but the Executive Director insisted on this time frame. The Director turned out to be wrong” (Draisen, 2008).

The MetroFuture process had a difficult time maintaining this timeframe for a number of reasons, most importantly the very limited budget and difficulty raising it. The original process design called for a $1M budget and MAPC was only able to eventually raise $250k. Cynthia Silva Parker noted that the fundraising challenge was not a complete surprise.

“One thing I didn’t mention, which is something we know to be true, [is that] there’s always a gap between the end of the design phase and the beginning of the planning phase because you’ve just designed this elaborate thing and then you’ve got to organize yourself to go implement the design. You’ve got to resource it and the more complex the design, usually the more resources required,” Cynthia said. “There was a gap of about, I don’t know, 6-8 months or so that was a fundraising and ‘shop it around’ phase. Even though there’d been about 80 people in the design [team], there were still a lot of people who needed
to see the design, who needed to get engaged in implementation, who – the hope was – would support it with funds or support with staff time or whatever. That ‘shop it around’ phase was something we flagged at the beginning as, ‘This is going to happen’, but we didn’t think it would be quite as long. That, for some people, felt like a loss of momentum. It’s something to plan more carefully around and to start looking around for resources before you get too close to the end of the design phase because you can start to anticipate resource needs even before the design is done. I think we could’ve started that sooner.”

Ken Snyder, an early consultant to the project, reflected that part of the fundraising challenge might have been created by not having an experienced project fundraiser involved in the project. “I think that the ability to lock in more funding may’ve been enhanced if they had someone that was a more seasoned project fundraiser; that was really right away looking at federal and foundation funding and really trying to lock that in. I think that would’ve helped.”
Phase I - Visioning

In an effort to make the process as inclusive of various interests as possible, the Process Design Team chose to go in a different initial direction than previous regional planning efforts. Most regional planning processes started their public conversations with a forecast of trends, which then led into a conversation about what kind of a future their constituents wanted. MetroFuture, instead, started with the visioning questions with a few historical trends, but no projection of future trends. The team’s thinking was that this could enable much broader visioning, not limited to the issues of growth and transportation that would have been presented in projections.

As Cynthia Silva Parker put it, “To their credit, the design team said early on, ‘We don’t want to pre-determine the categories around which this plan is going to be built. We want that to emerge from the first phase of the conversation.’” This strategy was argued against by many of the senior planners at MAPC, but the MetroFuture team won out.

In evaluating this approach, Ken Snyder said, “The strength with doing that is that you’re really starting at 30,000 feet up and you’re trying to get, sort of, big ideas from people and not get quickly constrained by the information that’s being put together by the model. Part of the downside of going right into the projections is that the models are rarely completely accurate, so you’re starting with one group’s ideas on where things are going to head. In some ways you’re going right to folks about what do they want early on. I think that works well. I think the modeling needs to kick in pretty quickly so that they can start making informed ideas and strategies in the next phase.”

Visioning Workshops

The first visioning event was held at Boston College in October of 2003 – the MetroFuture Kickoff with 400 participants. The event began with “Table Warm-up Exercises” consisting of keypad polling questions to get a sense of the demographics of the audience. Demographic questions included age (36% 50-59 versus 11% in the region, 0% 0-19 versus 25% in the region), ethnicity (85% white vs. 79% in the region), household income (31% $100k-$149k vs. 13% in the region, 2% below $25k vs. 22% in the region), sector of work (39% public, 31% nonprofit), and where and how long people had lived in the region.

The presenters then went through a description of the MetroFuture process in PowerPoint and introduced the visioning section with a few facts about the recent history of the region relative to housing affordability, loss of open space, the increase in traffic congestion, and a profile of employment growth sectors. Participants then discussed the region’s key resources and challenges, with their feedback going to a theme team to be summarized and presented on PowerPoint later in the meeting. Angela Glover Blackwell from PolicyLink gave a
brief talk on regional equity – a key theme the MAPC staff worked to encourage early on – while the theme team time finished their work.

Participants then began the next round of discussion – the visioning exercise. During this discussion, participants brainstormed their visions of the future and chose their top three visions as a table. The visions then went to a theme team to be summarized and organized into voting slides. During voting participants were asked, “How much would this vision enhance your quality of life?” for each of the twenty-one vision elements.

Below are the themed vision elements that resulted from the kickoff meeting. Those in italics received over 50% of the votes for “Definitely improve it a lot”.

- Affordable housing that is evenly distributed throughout the region
- Stabilize the housing market at the point of infrastructure investment to prevent displacement
- Cities are livable for families—quality, education and affordable housing
- Encourage productive small businesses, including agriculture and manufacturing
- Making greater Boston the “Silicon Valley” of health care/biotech
- Reduce the number of days (not hours) of work (reduce congestion, lost time, etc.)
- Most people take most short trips without cars in mixed use development
- Inexpensive, integrative multi-modal transportation system—regional, accessible, equitable
- Roadways with tolls and congestion pricing
- Economic planning integrated with transportation
- Housing, food, health, & education in every neighborhood for sustained diversity of religion, race and income
- Opportunity for a range of people to live a middleclass life style—irrespective of capability, race, income
- Economic planning integrated with transportation
- A caring adult in the life of every child
- Youth involvement in decision making
- Equitable access to resources
- Universal health care
- Local agriculture
- Compact communities surrounded by open space
- Equitable access to quality education at all levels in all communities
- After school programs for children of working parents (“Visions Across the Region,” 2003)

This MetroFuture Kickoff event was followed by a series of subregional visioning workshops throughout the fall of 2003 to early 2005 to get public input on the region’s strengths, weaknesses, and what visions residents had for the region’s future (see Appendix III for a list of visioning workshops organized and facilitated
by MAPC). These meetings engaged an additional 200 people. Through these meetings MetroFuture staff worked to engage not only members of the public who would come to a general public meeting, but also key “special interest groups” that would be concerned about particular aspects of the region (Draisen, 2003).

For the most part, participants in the visioning workshops consisted of civically engaged professionals – town meeting members, middle managers in business, and staff members at non-profits organizations. Local leaders, such as selectmen, business owners, and agency directors also participated, though in fewer numbers (Draisen, 2004). MAPC staff supplemented the visioning workshops with additional visioning activities to engage seniors, youth, and members of the business community. For example, the MetroFuture team staffed an information booth at the ‘Strictly Business Expo’ attended by more than 1,000 business people from five Chambers of Commerce south of Boston.

The findings from all of the visioning workshops and other engagement efforts were published in a report titled "A Tapestry of Visions" in December of 2004. From this feedback, the staff identified forty-two vision themes, choosing to reflect a larger diversity of visions than to over-aggregate vision statements, as well as to reflect vision statements put forward by a minority of participants. The vision themes covered such familiar topics as growth and land use (e.g. “Growth is not haphazard—it is guided by informed, proactive planning efforts” and “Well-built town centers and main streets regain prominence as centers of community life”), as well as issues that hadn’t been addressed in the previous regional plan (e.g. “Every school gets adequate funding, and every student gets a top-notch education” and “Clean, renewable energy powers the region, and we save resources through conservation and recycling”) (Reardon, 2004b).

In November of 2004, UMass Boston conducted an additional telephone poll of 402 residents to confirm these findings and MAPC staff and partner organizations conducted a survey at events throughout the region and through newspapers in Salem and the Minuteman area subregion (i.e. the

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8 See Appendix V for a complete list of these vision themes.
area between and including the towns of Acton, Lexington, and Hudson). The results of the survey were published in a report titled “The Resonance of Regionalism” in January of 2005. Key findings from the survey included:

- The top five regional challenges are the cost of housing, transportation, environmental issues (including sprawl), jobs, and education.
- Most people in the region feel that more new development (both housing and businesses) should be focused in existing cities and town centers, where people can walk from one place to another.
- People throughout the region, including those in suburban areas, support expanded public transportation—as opposed to road-building—as the best way to deal with the region’s transportation problems.
- More than half of the people in the region think that increased coordination between cities and towns will save money and improve the quality of development.
- There is strong support for coordination and regional decision-making on issues related to transportation, the environment, water supply, and economic development. There is also growing support for regional action on issues that have traditionally been considered strictly ‘local’ concerns: housing and land use planning (Reardon, 2005).

An additional vision-related effort the MAPC staff conducted was a review of the existing municipal plans from the cities and towns in the region. The staff summarized their findings in August of 2004 in their “Starting Points for a Regional Vision” report. The report summarized issues of maintaining or creating community identity, strengthening neighborhood character (e.g. improving the quality of new development, enacting controls on development of various kinds), creating housing diversity (e.g. affordable, senior housing), improving community finances & municipal services (e.g. education, fiscal management), developing local economies, establishing town centers & commercial districts, protecting open space & the environment, and improving transportation (Reardon, 2004a).⁹

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⁹ See Appendix IV for a summary of all of the visioning activities conducted by MetroFuture.
Evaluating the Regional Visioning Phase (Phase I) of MetroFuture

Comprehensiveness vs. Incrementalism

After reviewing other recent comprehensive planning efforts and MetroPlan, one of the key process design choices that the MetroFuture staff made early on was to start the effort with engaging area residents in sharing their vision for the region’s future. Traditionally, most regional agencies would put forward a projection of current trends (e.g. growth in population, loss of open space, growth in VMT, etc.) to make the case for engaging in a regional planning effort. However, because of the MetroFuture team’s desire to be more open and comprehensive than previous efforts, they thought that presenting such trends would too narrowly focus the conversation.

In the words of Amy Cotter, one of MetroFuture’s core staff, “I think that the deliberateness of that openness is best expressed by the very fact that we started with initial visioning. We didn’t start with a projection of trends. So we chose to engage people in a conversation about their aspirations for the future of the region unconstrained by the topics we chose to put before them…We didn’t just give them the usual land use agency projections. We asked them what they wanted for the future of the region and then used that to inform our selection of trends to project. Some things were impossible to model.”

The visioning phase also introduced participants to a technology that would be used throughout the process – keypad polling. This technology enabled real-time feedback from the audience, made the demographics of the meeting versus the region transparent, and “helped to further engage people and make sure that they felt like they were contributing to something and that they could understand it at their level,” according to Jay Ash (Ash, 2010).

Neutral vs. Advocate

MetroFuture’s approach to visioning helped strengthen the planning effort in two ways – by increasing staff and participant understanding of dynamics in the region, and by strengthening legitimacy for the rest of the process.

By asking over 2000 citizens their visions for the region without focusing this initial conversation on the limited set of issues MAPC would normally project, they allowed for many more issues to be raised than were addressed in the previous MetroPlan process and, in fact, more than most regional planning processes typically tackle. By creating this openness to other issues, the MetroFuture team and participants were able to get a better sense of many more of the variables that affect the state of the region, as well as an initial sense of some of the interrelationships between them. Planners rarely focus on
many of the issues that people brought up, like the quality of schools, although these issues directly impact many issues more typically in the planning domain, like the siting of new homes.

Amy Cotter thought that “by putting visioning before trend projections… I felt like it provided our plan with a much more authentic, if you will, underpinning.” This initial openness in the visioning determined the areas that the MetroFuture team and the Steering Committee worked in over the course of the rest of the project. Rather than ignoring some issues because they were outside of what MAPC had worked on previously, the staff reached out to stakeholders and experts in those areas to better understand the issues at play and how to incorporate them into MetroFuture.

This approach strengthens the legitimacy of the entire planning effort because it’s recognition of value pluralism, the “multiplicity of values” as Tim Reardon put it. “We spent a lot of time unearthing different perspectives, which was beneficial not only for the public to learn about how others think, but also for MAPC planners to appreciate those perspectives and internalize them without rushing to the solution space,” Tim said. This open and inclusive approach also motivated an effort among MAPC staff to create a “sustained relationship [by] going out and listening to people and trying to figure out what they said, trying to figure out how to internalize it, and going back and doing that over-and-over again until you figure out what all these different voices are and how they can be incorporated into the plan, rather than just seeing them as ‘interest groups’.”

One criticism of the process MetroFuture used for visioning is that many of the region’s top leaders weren’t included and that the vision elements that resulted from the public process weren’t visionary enough. Some interviewees had hoped to have some of the region’s intellectuals provide their visions for the future of the region as an initial public education method, so that it might stretch people’s thinking and encourage more creative ideas. There was a tension between wanting ideas to emerge from citizens and wanting to get some of the most informed and influential thinkers to provide their vision as well. The MAPC staff invited several of these people to participate, but few of them found the process worthy of their time.

What may’ve been the effect of having, say, William Mitchell (Director of the MIT Media Lab’s Smart Cities group) provide a regional vision for urban transportation or a Paul Peterson (Education Policy Professor at Harvard’s Kennedy School of Government) provide a vision for improving school performance throughout the region? We do not know, but somehow tapping into these kinds of people and resources may have provided even more provocative and inspiring visions than those generated through public participation. Whether these more leading edge visions could garner subsequent adoption into an actual plan, and then the political and financial support to realize them, is all the more unclear.
**Bottom up vs. Top Down**

The initial visioning event took place nearly a year after they had originally intended to hold it. The staff spent that time shopping the planning process around to try to diversify the people involved in the process. Additional funding would have allowed for them to hire more outreach staff and thereby speed up this effort.

The MetroFuture team initially had a challenging time engaging low income communities and communities of color, particularly in the visioning phase of the project. This was, in large part, the result of few connections between Steering Committee members and staff with leaders in those communities. “The original group kept wracking their brains,” Cynthia Silva Parker said. “There’s only one Asian American in the entire city that anyone on the committee could name. Pen Lo was the only name that kept coming up and Ray Hammond was the only [African American] name that kept coming up. We’ve got to go further than that.”

Much of the local civic leadership at the time was also dominated by white and wealthy individuals, Holly St. Clair noted, which made engaging diverse leaders even more challenging.

Beyond the lack of contacts and connections to these communities, Cynthia also thought that the MAPC staff weren’t necessarily prepared to engage people who have historically been marginalized. “If you say you want new constituents at the table, they’re going to push your thinking. In general, the questions about bringing more diverse players into a conversation – a lot of times people think, well you bring people who look different and feel different, but they’re going to come in and kind of think just like us. But, of course, they don’t. I don’t think we did enough to help people imagine what might be different or how they might have to engage differently.” The MetroFuture leadership team had several people on it with experience in community organizing and outreach, however the lack of resources on the project prevented them from being able to hire additional experienced outreach staff or to really develop other MAPC staff to take on this role.

Wig Zamore described the outreach challenges this way. “It’s always hard to draw in the two ends of the population. Who you get quite naturally, and MAPC does this in spades, you get the planning advocates, whether it’s an avocation or its some related profession. The room fills up with those people and the room fills up with people who have better than average education, but even more than that, have much higher than average attention in their adult life to these kinds of issues – regional planning type issues. You can get the nonprofits and the nonprofit funders fairly easily. It’s hard to put the environmental justice population in the room. It’s very hard to put the top leadership into the room from other sectors of society. Whether that [is] the research universities, private
sector, captains of industry – [it’s] very hard to put them in the room” (Zamore, 2010).
Phase II – Trends / Baselines

In December of 2004 the MetroFuture staff and Steering Committee selected from the vision themes five over-arching “planning dimensions” for which they could create baseline projections in order to understand the trends in each of these areas. The planning dimensions were:

- People and Communities
- Buildings and Landscapes
- Air, Water, and Wildlife
- Getting Around
- Prosperity

The staff organized an “Inter-Issue Task Force” to look at cross-dimensional aspects and to integrate the final model. The purpose of these task forces was to help inform the development of a model that could be used both to forecast current trends, and to create alternative future scenarios in the later stages of the effort.

Each task force identified a set of quantifiable variables that could be used to assess the state of that issue.

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**Figure 8:** A portion of the model flow diagram

**Figure 9:** An example of the planning dimension matrices

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**Table:**

<table>
<thead>
<tr>
<th>Dimension = People and Communities</th>
<th>Elements from Visions</th>
<th>Outcomes</th>
<th>Measures</th>
<th>Data</th>
<th>Calcs</th>
<th>Related Dimensions</th>
<th>Drivers</th>
<th>Resources</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The region embraces diversity and integration, and provides opportunities for every race and culture with opportunities to succeed</td>
<td>Racial, ethnic, economic diversity; neighborhood diversity; diversity of educational opportunities; support for arts</td>
<td>Integrated Schools</td>
<td>Disparities Index by school or district</td>
<td>Data center: public school enrollment by race &amp; ethnicity by school district, Department of Education</td>
<td>Disparities Index by school or district</td>
<td>Prosperity</td>
<td>Affordability, housing, wealth, impacts of school choice program</td>
<td><a href="http://bronx.k12.ny.us/docs/eq.html">http://bronx.k12.ny.us/docs/eq.html</a></td>
<td></td>
</tr>
</tbody>
</table>
| Every child gets adequate funding, and every student gets a rich, enriched education | Going to school, equipment, & equal voice for higher education; strong public schools in the region; quality of education not dependent on family’s wealth, - less reliance on property tax, regional schools | Measure quality w/ 1) Dropout rates 2) MCAS 3) 2-4 year-college plans 4) $3,000 per-pupil expenditures, 5) Adequate facilities, 6) Alternative Options, 7) Preschool 8) SAT scores & post | Dropout rates, college plans, free lunch, per pupil expenditures, test scores | Measure quality w/ 1) Dropout rates 2) MCAS 3) 2-4 year-college plans 4) $3,000 per-pupil expenditures, 5) Adequate facilities, 6) Alternative Options, 7) Preschool 8) SAT scores & post | Prosperity | Quality, diversity & race 1) ideal 2) above $30,000, 2) below $30,000, 3) above $5,000, 4) below $5,000, 5) above $1,000, 6) below $1,000, 7) above $500, 8) below $500, 9) above $250, 10) below $250, 11) above $100, 12) below $100, 13) above $50, 14) below $50, 15) above $25, 16) below $25, 17) above $10, 18) below $10, 19) above $5, 20) below $5, 21) above $2, 22) below $2, 23) above $1, 24) below $1, 25) above $0, 26) below $0 | Measures and standards: taken from “Roots of the Class: Characteristics of Higher Performing Urban High Schools in Mass.” |}

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*Note: The table and diagrams illustrate the planning dimensions and their related metrics, drivers, and resources. The notes column includes specific references and additional data sources.*
area (e.g. per pupil expenditures, dropout rates, and college attendance as methods of evaluating educational quality in the region) and the inter-issue task force wrestled with how to combine them into an integrated model. “For example, Wig Zamore (a clean air activist from Sommerville and member of the Steering Committee) helped with air quality modeling questions,” said Holly St. Clair, “[such as determining] what was an acceptable quick outcome with some numbers that we could come up with.”

This phase in the process was one of the first opportunities stakeholders had to use a GIS-based scenario modeling and decision support tool called CommunityViz, developed with support from the Orton Foundation in Colorado. The tools CommunityViz enable the user to manipulate various aspects of a proposed plan (e.g. housing density, land use types, etc.) to create alternative scenarios and analyze their effects. The MetroFuture team had selected CommunityViz as their primary decision support tool from their earlier ‘Tools Workshop’ and other research.

The baseline model was created through a two-step process. First, initial population and employment projections were distributed in an Access and Excel environment to the region’s 2700 Traffic Analysis Zones (TAZs). “Based on that initial distribution of housing and population and employment and housing types, we then put that into CommunityViz as the Business as Usual model,” said Tim Reardon. “The initial setting for all the assumptions would achieve that distribution, so then by changing the assumptions about the distribution across community types or within TAZs with different attributes within community types and housing types, you could create different scenarios,” he added.

Figure 10: Task Force workplan

A list of the members of the Inter-Issue Task Force is in Appendix VII
With that allocation of housing, population, employment, and housing types across the region incorporated into CommunityViz, the staff incorporated multipliers for the other variables (e.g. education, water demand, etc.) to enable users get a sense of how that allocation would affect those issues. This created their “business as usual” scenario.

Current Trends Briefings

As a transition from the visioning phase to the current trends phase, the MetroFuture team organized another Boston College Citizens Seminar on January 27 of 2005 to engage participants in thinking about the current trends and the challenges of accommodating future growth.

The event began with “Keypad Warm-up Exercises” including questions on gender (59% male, versus 48% in the region), age (all ages represented within 7% of what’s in the region), ethnicity (35% white vs. 79% in the region, 14% black vs. 7% in the region, 13% Latino vs. 6%, 15% Asian vs. 5%, 22% “other” or “two or more” vs. 3%), household income (33% below $25k vs. 22% in the region, all other income groups within 5% of actual), sector of work (31% public, 19% private, 19% nonprofit), where and how long people had lived in the region, education level, willingness to walk to transit, and acceptable door-to-door commute time to work. In comparison with the initial visioning forum, the demographics of this Citizens Seminar represent a significant increase in both ethnic diversity and the inclusion of low-income people into the process.

The presenters then went through an update from the visioning phase of the MetroFuture process, the work that lay ahead, and introduced a “Building Metro Boston” exercise to help people understand the challenges of distributing growth around the region. To introduce the

Figure 11: Sample "Building Metro Boston" exercise map
exercise, the speaker gave some simple projections of the number of people expected to move to the region over the next ten years. In this exercise, participants distributed dots onto a map, with orange dots representing 50 jobs and blue dots representing 50 homes. Participants first discussed their general priorities for growth and then placed the dots on the sample maps.

Through keypad polling, participants then expressed that many tables were not able to agree on the appropriate level of density (43% “No agreement at all”) and participants were divided on how helpful the exercise was in understanding the tradeoffs involved in growth (31% “Very helpful” vs. 21% “Not helpful at all”). The development patterns expressed in this exercise by participants were later used as a basis for the development patterns in Metro Future Alternative Scenario Number 2 called “Little by Little”.

After the January 2005 Boston College Citizen Seminar, MetroFuture staff went on to conduct an additional 46 briefings, 20 of which focused on “underrepresented populations”. These briefings generated 18 news stories in local outlets (Cotter, 2006).

Evaluating the Forecast of Current Trends Phase (Phase II) of MetroFuture

Comprehensiveness vs. Incrementalism

The primary strength of the process the MetroFuture team used in modeling was that it was incredibly transparent, which helped engender greater trust in the process and set up the later stages for success. As Amy Cotter put it, “I think that, by-in-large, we avoided the “black box” perception.”

In the words of Karen Wiener, Deputy Director of the Citizens' Housing and Planning Association and a participant in many of the MetroFuture events, “I have to say they did a very, very thorough job on really looking at every aspect that could be questioned and trying to explain their assumptions, of their assumptions, of their assumptions, so to speak. That said, assumptions are assumptions, so you can only make them reflect what you think reality will be and you, of course, have no idea and people have different perspectives on that. I think they handled it as well as one can handle that kind of exercise” (Wiener, 2010).

There is no way to know the accuracy of the resulting business-as-usual model as no one can predict the future. The core population and employment projections came from standard demographic methodologies, so they would not be any more or less accurate than those made elsewhere. Multiplying the related impacts upon those core projections created a rule-based model that was explainable to stakeholders and the interested public.
The potential trade-off in creating a rule-based model is that it may lose some of the dynamic complexity and negative feedbacks that exist in the real world. More powerful models, such as the common regional economic model created by Regional Economic Models, Inc. (REMI), have the advantage of better capturing dynamic complexity, but the models themselves are so complex that they do not enable many stakeholders, or even planners, to understand how they work.

As Holly St. Clair put it, “People always say to me, ‘Why don’t you use REMI?’ I [say], ‘Because it’s a black box.’ [They respond], “Yes, but it’s the most trusted model. Why do you think you can make a better economic model than them?” And I [reply], “The one thing I know is their model is wrong and whatever I build will be wrong, but what was important to us and we found the reality was if we couldn’t sit down and explain our model in, lets say, an hour to 45 minutes to an interested member of the public, it was not worth it and they didn’t trust it.”

“At the beginning, we had these model diagrams that were really convoluted and crazy. At the end it was quite a simple model. When I tell other people what we did for our model, like planning experts, they [say], ‘Ugh! That’s not state of the art land use modeling.’ I [say], ‘Yeah, but you know what? My community members understood it and trusted it. Can you say that about yours?’ And they [say], ‘Well we don’t engage the community in our modeling.’ I [respond], ‘I know. That’s the difference [between] our [approaches].’”

One of the problems created by creating the baseline projection from scratch after the visioning effort, was that it significantly extended the timeline of the project. The first visioning workshop was in October of 2002 and the full baseline projections were not put forward until May of 2005. The January 2005 workshop presented only a small sample of projections. This was partly due to funding constraints – MetroFuture had to cut its technical budget in half, which made the work take twice as long – but also clearly due to the decision to hold off on creating a baseline projection until the end of the visioning phase.

“Most planning organizations start their visioning sessions with a baseline in hand and sort of ground everybody in what are the current trends,” said Holly St. Clair. “We specifically chose not to do that because we wanted to let people to think blue sky and not tie them down. Now I think if I did that process over again, I would have the baseline in hand, start the visioning, but not release the baseline at that meeting. I would just have the baseline a month later. It just drew it out too long. We also know that everybody’s worried about housing, jobs, transportation – we have our core expertise that we should develop the baseline around and then leave money and effort to add in the new things that the public process would bring in. We were nervous that if we did all that we wouldn’t have energy or interest, or we’d have such a construct that would never allow it, which might’ve been true but now I’ve done it enough I think I could build in the flexibility – knowing that other things are going to come in.”
Bottom Up vs. Top Down

Another strength of this phase is the clear effort made to diversify participation, as evidenced by comparing the demographic polling results from the January 2005 BC Citizen Seminar with those of the October 2002 event.

It also seems as though the team struggled to make public participation in the second phase anything more than just efforts to educate the public. The “Building Metro Boston” dot exercise seemed to not have enabled people to realize the insights into the trade-offs and tensions that the MetroFuture staff had hoped they would. Perhaps the exercise was too abstract or the audience too dominated by people friendly to dense mixed-use development – thereby a group that doesn’t really see a trade-off in clustering dots on top of each other. The goal of the next phase, the scenario phase, was to make these choices much clearer.

The 16-member Inter-Issue Task Force consisted of municipal officials, public agency staff, academic advisors, and members of the Steering Committee (see Appendix VII for a complete list). The Task Force provided an opportunity to bring in outside perspectives through regular meetings to help improve the quality and reliability of the modeling effort.

Neutral vs. Advocate

In reviewing the model architecture, it is unclear how the synthesis of the vision statements and composition of the Task Forces may have influenced the model structure. Perhaps if the real estate development community had been involved, some other performance measures may have been included.
**Phase III – Scenario Development**

*Developing the Scenarios*

Based upon the business as usual trends, the MetroFuture staff, along with the Inter-Issue Task Force, developed several different community typologies to help explain similarities and differences between how different parts of the region had been and were projected to grow. These community typologies were organized around three characteristically different community types in the region – the inner core & regional urban centers (i.e. high density, lots of multifamily housing, downtown neighborhoods in need of revitalization, little to no undeveloped land left for development), maturing suburbs (i.e. moderate density, 15% or less land as open space available for development), and developing suburbs (i.e. rural or suburban, abundant unprotected open space, rapid growth since the 1970s).

The staff also redesigned how they were going to go about the scenario-planning phase of MetroFuture. Their original plan for the scenario process was to create alternative scenarios by each of the five planning dimensions - People & Communities, Buildings & Landscapes, Air, Water, & Wildlife, Getting Around, and Prosperity – and then to integrate these scenarios into one. After going through the process of developing the vision themes and business-as-usual scenario, the staff realized that creating alternatives by planning dimension could create such disparate futures that integrating them into one could be nearly impossible.

Instead, in the fall of 2005, they changed the plan to create a set of alternative futures scenarios that would change trend drivers in varying degrees. They would structure them so that the alternative scenarios were logically consistent and would enable participants in their meetings to decide which scenario they supported as the preferred future for the region.

*Working Sessions to Develop Scenarios*

The team organized a set of Scenario Working Sessions from late 2005 to June of 2006. Their purpose was “to introduce participants to the results of MetroFuture visioning, to familiarize them with the baseline or “business as usual” scenario (Phase II), and to engage them in the development of alternative scenarios to help the region more successfully to reach the visions expressed in Phase I.” (“MetroFuture Outreach Strategy In Preparation for Phases III and IV,” 2005)

The June 2006 meetings were the largest of all of these working sessions, with more than 400 people attending meetings in Framingham and Boston. Participants at these meetings came from throughout the region. The organizers,
according to Amy Cotter, would “assign to each table of ten, three people from the inner core, two people from the developing suburbs, two people from the maturing suburbs, and deliberately mix together people from different backgrounds, as distinguished by their community types. That whole goal there was to help people appreciate that places theoretically dissimilar from their place have similar challenges and, well gosh, maybe we can work together to tackle these challenges.”

The participants used keypads to answer a set of demographic questions and then used a workbook at their table to create their own preferred scenario. The workbook had ten questions for participants to discuss and work through. These questions were:

1. How should we plan to distribute the region’s projected population growth?
2. What mix of housing types should be built in Developing Suburbs?
3. What mix of housing types should be built in Maturing Suburbs?
4. What mix of housing types should be built in the Inner Core and in Regional Urban Centers?
5. What types of commercial and industrial development should the region be building?
6. How can we create jobs and improve the region’s economic competitiveness?
7. How can the region improve the quality of education for all students?
8. What should be our goal for water conservation?
9. How much land can we afford to lose?
10. How should we allocate our transportation resources?

For each question, the workbook provided relevant vision statements, the current trends projected for that issue, ideas for how to change those trends, and three to six alternative strategies that participants could choose between. For example, for question #1 participants could see the projected growth for different community types and reallocate percentages those of future growth (“Alternative Futures Workbook: MetroFuture Working Sessions,” 2006).
Participants then used a spreadsheet tool at their table to develop a combined scenario. In order to make the scenarios realistic, and to show to participants the trade-offs involved in various choices, the spreadsheet was formulated to turn cells red if the scenario was not internally consistent (e.g. they had allocated more land to housing without subtracting sufficient open space).

**Figure 12: Sample of the June 2006 Alternative Futures Workbook**

**Figure 13: Sample portion of the "Red Cells" worksheet**
The staff had originally intended to use CommunityViz in this meeting to enable participants to move sliders and to see reallocated variables (e.g. housing, developed land, etc) move dynamically and graphically. The program was not able to run such large datasets in real-time and so MAPC’s “data services worked really hard for long sleepless nights and developed an Excel model that expressed similar elements to the CommunityViz model”, according to Amy.

“The ‘red cells’ became a touch stone for me, and I think others in this project,” Amy said, “because this was in the phase of the project where we were asking people to react to the projections of current trends and I call their reactions, sort of, fuel for three alternative scenarios, each of which had to be internally consistent. There couldn’t be any impossible situations within those scenarios and those impossible situations, in the spreadsheet model, were expressed by red cells. So we asked people how much housing you want to create, how much open space do you want to preserve, how many jobs do you want to provide, what should the average commute be. Each of those in varying combinations could yield an impossible situation. People working at their tables would get a red cell. That really effectively taught people that you cannot have boundless aspirations. That was really valuable.”

Placing people at mixed tables by community type also made quite an impression on many participants according to Aaron Henry, a town planner who worked for Milton and then Lexington during the course of MetroFuture. “I have this sense of the community seeing itself as on the edge of the wilderness and if you go any further past this community, you’re in the country. If you go any further inside, you’re in the city and we’re this little Eden right on the edge of everything and have the best of both worlds. When, in fact, both communities are fairly densely built-out communities and that pastoral imagery is a little outdated. So when you talked about the concepts of Transit-Oriented-Development, mixed-use housing, density, all of a sudden, you’re starting to rub up against those perceived notions of community character, so now you’re starting to get comments like, “Well, we’re not the next town in, we’re not Arlington or we’re not Dorchester or we’re not … And it’s like, ‘Well, you’re more like them than you might imagine.’ I think you started rubbing up against some of those insecurities, or some of those perceptions of what the community was and issues about what that means. … [The tension between] ‘I didn’t want to live in the city. I chose this town because I was moving to the country’ [and the realization that their town is changing]. You get that. There’s a tension there that came out, and in a good way, I mean that was the point of the exercise to some extent, I think” (Henry, 2010).
Additional Activities to Develop Scenarios

The staff and Steering Committee worked throughout the remainder of the year to develop scenarios that people could choose between. Jay Ash described it this way, “I remember as we were talking about trying to create these buckets that people could feel comfortable being in that I thought it was a very clever way of getting to it and giving people a menu of things really helps. What you have to be careful of in these types of planning processes is that you just can’t pronounce, ‘This is the way it’s going to be.’ You’ve got to give people the option to find their own way along where they want to be. I thought that one of the important things about MetroFuture was that it really did show that if you were more progressive or more risk-aversive, there were things that could please you – that you could identify with and point to.”

The team initially developed three scenarios – a status quo scenario, a modest improvement in strengthening smart growth policies, and a more aggressive scenario. Some members of the Steering Committee thought that the scenarios weren’t aggressive enough and began an effort to create a fourth scenario that incorporated the need to reduce fossil fuel consumption and adapt to climate change, among other issues. This fourth scenario group brought together a variety of people including Robin Chase (the founder of ZipCar) and staff from the Tellus Institute (a Boston-based not-for-profit research and policy organization).

The staff and board members had mixed feelings about incorporating this additional scenario. Some described it as the most extreme scenario, others as the scenario “that looked at MetroBoston’s ability to be resilient in the face of climate change” in the words of Amy Cotter. “It’s the only one that brought in external forces. When you’re modeling, you have to draw boundaries somewhere and we really had to struggle to maintain that boundary because people were calling for sea walls and all sorts of things.”

Rick Dimino characterized it this way. “I appreciate [their] advocacy. I think it’s really important. My view of advocacy is that there [are] points of view on the continuum and they’re all important. You have to find a way of taking that input and coming up with, if you’re in a position of making a decision, what’s in the best interest on behalf of the constituents that you’re serving. What did you learn from all these advocates relative to helping to shape that decision? What [are] the best parts of that information? What’s the most viable opportunity to deliver the service or the plan you’re responsible for? Therefore, different points of view on the continuum are very helpful because they help to influence that thinking. So that was very important. Maybe we wouldn’t have gone as far in the scenario that we did without the influence of even going further.”
“We wanted to make sure that if we were going to create a future scenario that had some real change agents in it that were really going to push the region to do some things that were pretty uncharacteristic relative to trends and behaviors, thinking, etc., that we needed to push as far as we could relative to what people might imagine and see about that, but not make it so unrealistic that we would reduce the credibility of the effort. We couldn’t do that. It was a very important balance. When you’re a decision maker you have to make these decisions and I think we struck a good balance.”

The staff and Steering Committee worked together to develop names and characterizations for each of the four scenarios, trying hard not to put them in a hierarchy. The four total scenarios were titled “Let It Be” (the current trends scenario), “Little by Little” (a scenario based upon adoption of existing smart growth tools available in the region), “Winds of Change” (a more aggressive scenario which would “significantly change the regional distribution of growth” and encourage greater density), and “Imagine” (the most aggressive approach to managing growth and encouraging a much more dense and transit-oriented region; it was also the one scenario to incorporate the need to adapt to climate change (Which Way to a Greater Boston Region? A Guide to Alternative Futures, 2006). Some members of the group were frustrated with the “Imagine” label: “They made it sound unattainable,” one of the group members said.

The four scenarios allocated differing amounts of population, housing types, employment, and then affected traffic, water use, air pollution, and other variables to a greater or lesser extent depending upon their distribution. For example, “Let It Be” had the greatest number of single-family housing, lowest density, and highest traffic and air pollution. In contrast, “Imagine” had the greatest density, lowest number of new single-family houses, and lowest traffic and air pollution.

Presenting the Four Scenarios In Public Working Sessions

These alternative futures were presented to 500 citizens at two evening “working sessions” in December of 2006 – one in Danvers and one in Randolph, both suburban locations. Like the previous meetings, the meeting began with participants answering a series of demographic polling questions with keypads. Between the two meetings, the group was more white (87% vs. 79% in the region), wealthier (82% with household incomes over $50k vs. 56% in the region), more educated (95% college graduates vs. 35% in the region), and older (59% over 50 years old vs. 27% in the region). They were fairly diverse geographically, with slight over representation from the “Maturing Suburbs” (31% vs. 24% actual) and slight under representation from the “Inner Core” (31% vs. 35% actual).
After the initial keypad polling, speakers reviewed the problems created by the current trends and some of the differences between each of the four scenarios (two slides on each scenario). Participants then explored one scenario in-depth through a workbook that compared that scenario to the “Let It Be” current trends scenario.

![“Winds of Change”](image)

**Figure 14: Example of a trade-off dimension from the participant workbook**

A computer was set up at each table with CommunityViz to enable participants to manipulate “key drivers” in each scenario using that interactive interface to see the different outcomes that could result from changing that driver. The earlier issues the organizers had with the software were resolved because the scenarios were now less data intensive than in the previous public meeting attempt.

After exploring one scenario with current trends through the workbooks and CommunityViz, participants then voted with their keypads on which scenario they think they would prefer. Winds of Change received 38%, Imagine 25%, Little by Little 18%, and None of the Above 18%.

Participants then discussed and compared all of the scenarios and at the end were able to use their keypads to vote for which alternative they preferred. Between the two working sessions, participants favored Winds of Change, with 58% of the votes cast. Imagine came in second with 31% and Little by Little was third with 10% (“Working Sessions Meeting Summary,” 2006).
From January to March of 2007, the MetroFuture team organized an additional 19 “preference selection briefings” where they targeted particular constituencies that were underrepresented at the December meeting for input. The format of those meetings was similar to the December meeting. Groups that sponsored briefings included business groups (A Better City, Assabet Valley Chamber of Commerce, Neponset Valley Chamber of Commerce), institutions (MASCO), immigrant organizations (Asian Community Development Corporation, Roca, Inc.), and nonprofit organizations (CHAPA, North Shore Non-Profit CEOS). The team also posted an online survey on the MetroFuture website where they asked people their preference between the scenarios and other open-response questions. This poll was publicized in email alerts and in local media outlets (Falla, 2007). Participants in the “preference selection briefings” supported “Little by Little” in larger numbers (20% vs. 10% in the December meetings), but a majority still supported Winds of Change. Participants in the online poll supported Imagine by 55%.

Evaluating Phase III – Scenario Development

*Bottom up vs. top down*

Having facilitators and a CommunityViz manager at every table helped to ensure every participant had the opportunity to contribute. Conducting additional activities to engage more diverse constituencies and nearly 1,000 participants in this phase also helped to increase the credibility of the effort. If MetroFuture had additional funds, perhaps they could have conducted a random sample poll of area residents to test the preferences of an even larger number of people.

The keypads continued to be a powerful tool in public meetings. In addition to the keypads creating transparency for the participants, they also helped create transparency for the planning team. “The other thing about keypads that were nice that we discovered … is that [they] allowed us to engage at the beginning of the meeting and the end of the meeting and ask the same question of how do we have an effect,” said Holly St. Clair, “At the Northeastern phase III or phase IV meeting... the first time we introduced an early version of the model, which was a glorified spreadsheet with the red cells, at the beginning of that meeting we asked something about your understanding of the region and its problems or its residents or something like that. At the end we [also] asked it. It was ~25% at the beginning of the meeting, it by the end it was up to like 65-75%. They had a better understanding of the region and the diversity of its problems at the end of the meeting… As planners we try to create that (learning), but we were deliberate and we could measure it and it was so cool. That doesn’t really happen that often.”

*Comprehensiveness vs. Incrementalism*
The use of the “Red Cell” spreadsheet and CommunityViz helped participants to better understand the interrelationships of the issues they were dealing with and the trade-offs those relationships create. Some involved may not have wanted this framing, like the advocates of the Imagine scenario, but this approach is more honest about the sacrifices certain choices entail, even if they’re simply perceived sacrifices, for example increased density being perceived as a sacrifice, even though the quality of that density could vary dramatically.

From the perspective of Aaron Henry, a town planner and facilitator at these events, “I thought that actually was really well done. I thought the technology helped, between the GIS and the CommutyViz planning program. I think really translated, again, into a highly visual exercise and I think that helps when you’re talking to these people who don’t necessarily… it’s hard to grasp what all of these things mean and that was an easy way for people to see the choices they were making and the consequences of those choices.”

Transparency of this part of the process could be improved by incorporating some of the 3D visualization tools that have been developed in recent years. Creating street-level visualizations of what the experience of the different scenarios would be like could help participants to gain a much more visceral sense of the differences between them and which they would be willing to support when it came to their neighborhood.

Neutral vs. Advocate

Generating the scenarios from participant feedback provided the planning team with solid footing when putting the scenarios forward. This legitimacy could have been challenged by the decision to allow the Imagine scenario to be included as well, but the planning team dealt with it well – namely requiring the Imagine scenario to be evaluated along the same dimensions as the other three scenarios. The fact that the alternative received 31% of the votes in the workshops demonstrates a strong amount of public support for many of the ideas within it. It is reasonable to assume that including the Imagine scenario made the Winds of Change scenario seem moderate in comparison.

In fact, the team could have gone even further in soliciting Imagine-type proposals. Instead of resisting this effort, embracing and publicizing it could have engaged the broader academic, planning, and development communities in generating scenario ideas to put forward. Nothing prevented those communities from participating in the formal public process, but a design contest-type approach may have been more appealing as they could have had more ownership over the characteristics of the scenario. This would have required an even greater openness with the model used to create the trend scenario so that scenario authors could work with it in designing alternatives.
Phase IV – Ratifying the Preferred Scenario

In March of 2007, the MetroFuture Steering Committee adopted a modified version of the Winds of Change scenario as the preferred scenario to put forward at a Boston College Citizen Seminar in May of that year. Winds of Change was modified to incorporate additional feedback the team had received over the past few months. Specifically, the modified scenario incorporated the Imagine scenario’s targets for per-capita water use reduction and low impact development. It also incorporated more aggressive improvements in energy conservation, renewable energy use, and greenhouse gas reductions. Finally, the modified scenario reduced the growth rates in some suburban neighborhoods that would have been changed the most by the Winds of Change scenario, which slightly increased the potential amount of open space consumed relative to Winds of Change (Cotter, 2007).

In May of 2007, a final Boston College Citizen Seminar was held for the public to review the MetroFuture preferred scenario. Over 400 people attended from throughout the region. Participants began the meeting by listening to a few welcome remarks and then going through a round of demographic keypad polling11. The presenters told them about the project’s history and timeline, as well as the projected business as usual trends for the region. Participants also received a briefing on the modified Winds of Change scenario and how it differs from business as usual. Participants had the chance to vote with their keypad on whether or not they supported the adoption of this plan and 94% of the participants supported it12. Finally, participants discussed ways they could help implement the plan.

Over the course of the next year, the MAPC staff and Steering Committee went through all of the components of the approved scenario and developed 65 specific goals that articulated different interrelated components of the vision, like “population and job growth will be concentrated in municipalities already well served by infrastructure, with slower growth in less developed areas where infrastructure is more limited” (Reardon, 2008a). Each of these goals was followed by a set of specific objectives, presumably generated by the scenario modeling effort. For example, for population and job growth creation, the related objectives were:

• The Inner Core will capture 35% of the region’s population growth and 41% of the region’s employment growth.
• Regional Urban Centers will capture 26% of the region’s population growth and 14% of the region’s employment growth.

11 Demographic polling data was unavailable for this meeting at the time of this study.
12 Specific polling wording unavailable for this meeting at the time of this study.
• Maturing Suburbs will capture 24% of the region’s population growth and 29% of the region’s employment growth.
• Developing Suburbs will capture 16% of the region’s population growth and 16% of the region’s employment growth.

On May 28, 2008, the MAPC Executive Committee adopted the goals and objectives of the MetroFuture plan as the official regional plan. Specific implementation strategies and designations on who was responsible for each were developed over the remainder of that year and published in December.

Evaluating Phase IV

Bottom Up vs. Top Down

Convening the final ratification vote of 400 participants and educating them on many of the specifics of the plan was a helpful and necessary conclusion to the public participation effort. There are several problems with phase IV, however, including the fact that those 400 participants represent only a small fraction of the 3 million people in the region. Further, the specific implementation steps that would be developed after the ratification took place are the more controversial decisions – how funding should be allocated, what policies should be enacted, etc. The event was framed and communicated as a concluding event, thereby undermining future stakeholder engagement in the tough conversations of how to best achieve the ratified goals.

Staff and a small group of stakeholders largely conducted the process of developing implementation steps for the plan. “In some topic areas, the allies, partners, plan-builders beyond the staff walked us through the process very far to the point of even shaping recommendations,” said Martin Pillsbury. “In other topic areas, they may not have come as far down the road, may’ve brought us to the point where [staff knew] the goals and objectives and then it [was] up to us to figure out how to translate that. That may’ve come from staff or the inner circle allies. We took everything out into the world again to vet the recommendations [, but] it’s probably true that for the majority of the recommendations, we had to rely on our own staff for those things.”

This final and crucial stage of the process then lost much of its bottom-up credibility. In a June 27, 2008, column by Len Mead titled “Taxpayers may be further assaulted by “Metro Future” in the Westborough News, the author makes some scathing criticisms of some of the implementation steps in the plan related to “revenue enhancement.” He criticizes the suggestions to increase several taxes and tolls in order to pay for recommended transportation improvements and encourages readers to attend a “MetroFuture Strategy Dialogue” taking place in Framingham a few weeks later (Mead, 2008).
The larger criticism that this points to is the neglect of MAPC to convene large-scale and diverse deliberation and negotiation on specific implementation steps. These are the toughest choices and the point at which the plan becomes real. Budgets get cut in one place to be increased in another. Taxes are increased in order to raise additional revenue. Regulations are put in place to restrict certain behavior. “The rubber meets the road on the specific recommendations,” said Martin Pillsbury.

“I’m not 100% sure that people understood the degree to which the scenarios would impact their neighborhood,” said Kurt Gaertner, the MAPC Executive Committee representative from the Massachusetts Executive Office of Energy and Environmental Affairs. “It’s always tough to translate the broad concepts of a regional plan down to what does it really mean for the average citizen. I know efforts were made at this, but I was never 100% sure that people understood that if I embrace the Winds of Change or the Imagine scenario, what that means in terms of my neighborhood – changes in the character of the housing, changes in roads, changes in transit. It’s really hard to tell… Because I know when it comes time to vote for that zoning change, if they didn’t get the implications now, we’re going to be in trouble. …It may make sense on a regional scale, you may embrace it conceptually, but then when it comes down to voting for a change for more density or something different in your neighborhood, did you really embrace that or not?” (Gaertner, 2010).

Aaron Henry, the Senior Planner for Lexington, spoke to these issues as well. “I think [participants] got it, more than [just] in theory, but I guess this is part of the nature of the problem of implementation. I think you can have people say all the right things, get it on more than just a theoretical level, but then when it comes down to, ‘Ok. Well this is what we agreed on. Let’s do it.’ And you’d find yourself with, ‘Not so fast…’ I don’t know where I’d put it on that kind of scale. I definitely thought the people that were there, that were participating, even those who just casually dropped in on some of those events, got what the exercise was trying to get across and were hard pressed to disagree with it because, again, I think the process was pretty well done. As I’ve looked at the MetroFuture map for what it means for Lexington, I think that’s where you get into the, ‘Ok. That’s great. We like it in the macro sense. For the region it clearly makes sense, but now how do I do it here.’ I think as public policy goes, that’s … Policy statements are easy, the implementation and actually getting it over the finish line can be something else. I guess I would say I’m somewhere in between.”

Perhaps the complexity of these policy issues would not have lent themselves to a broad public audience. But if not, then a true multi-stakeholder negotiated process should have been convened in order to get broadly shared agreement and support from the affected interests in the region. Without this, the bottom-up participation is merely framing the work of top-down planners and their core allies, not creating a constituency in support of specific changes.
Neutral vs. Advocate

There is disagreement among several of the core participants on how visionary the plan is. Some staff and board members, according to Cynthia Silva Parker, felt that the plan was “more dramatic and more radical than they would’ve imagined or dared to have proposed on their own”. On the other hand, some interviewees felt that the process should have proposed something even more aggressive.

The reality is that the resulting plan is likely a mix of some very new and provocative ideas and some ideas that had been put forward for years. “When you start to scratch below the surface and look at the content of the recommendations, you’re going to see a lot of consistency [with the earlier MetroPlan],” said Martin Pillsbury. “Even though we tried to go back to a clean slate, we worked our way back towards a lot of recommendations that are the present day version of some of the things that were in MetroPlan... We also went far beyond that. We took on whole categories that we didn’t even try to take on in MetroPlan. We took on much more with economic, social, and education things. [In MetroPlan] we were really more narrowly defined to the traditional planning disciplines. Within the areas that we covered in both plans, you’re not going to see a radical departure. The underlying core land use principles that we now call smart growth were in both plans. If you look at water, which was in both plans, many of the same issues are still with us. There may be different takes on the issue now than there were twenty years ago – I’m sure there are…”

Comprehensiveness vs. Incrementalism

The resulting MetroFuture goals, recommendations, and implementation steps were certainly much more comprehensive than MetroPlan. The summary of the regional vision consists of eight sections with two to nine vision themes for each section (i.e. 42 vision themes total). The MetroFuture plan has 65 goals and approximately 214 objectives over six topic areas. The implementation strategy has over 400 specific recommendations, as opposed to less than a quarter of that from MetroPlan.

The greatest challenge with this is not necessarily its comprehensiveness, but its lack of clear priority. “One of the greatest challenges with MetroFuture is that in being so comprehensive, it is difficult to prioritize the most important recommendations,” said Karen Wiener.

An advantage of being so comprehensive and specific is that MetroFuture was able to get into much greater detail in new issue areas, as well as issues long
Incorporating Public Education Into The Plan

Public education was a new issue area for MAPC. “The quality of public education has a huge impact on where people live, or where they want to live, where they’re going to go as soon as they can – that kind of thing,” said Cynthia Silva Parker. “The technical planner version of things, like how do we deal with the transit, doesn’t generally account for that kind of motivation.”

Participants brought up education again and again for both social justice and economic reasons. “It’s literally an economic issue for a lot of folks. Unless we solve real and perceived problems with crime and public education in cities, we’re not going to achieve our land use goal outcomes,” said Amy Cotter. “I come at it from that land use perspective. It’s all related.”

In the “Tapestry of Visions” report summarizing the results of the regional visioning workshops, some explicit vision elements are given on education, such as “Every school gets adequate funding, and every student gets a top-notch education” (Reardon, 2004b). The issue was incorporated into all of the scenarios put forward to the public and was incorporated into the goals, objectives (Reardon, 2008a), and implementation strategies of the regional plan (Reardon, 2008b).

An example goal for education in the plan is “Public schools will provide a high-quality education for all students, not only in the fundamentals, but also in areas like health education, physical education, art, music, civics, and science.” The related objectives are:

• “The region will have declining disparities in standardized test outcomes
and graduation rates by race, ethnicity, gender, income and Community Type.

- Student-teacher ratios will steadily decrease.

- All elementary and middle schools will use a health and physical activity curriculum.

- All of the region’s public schools will have at least one teacher dedicated to each of the following: visual arts, music, theater, and health/physical education.”

Some of the resulting implementation strategies on public education include “The Department of Education should establish regional or statewide teacher residency programs, focused on urban communities and underperforming schools”, “The Department of Education should establish a pilot program for School Support Organizations in underperforming districts”, and “The Legislature should provide funding for the Massachusetts Expanding Learning Time to Support Success Initiative.”
**Phase V – Implementation**

**Strategic orientation**

After the May 2007 ratification, the staff organized the recommendations into thirteen strategies that they believed were necessary to pursue in order to manifest the goals of the plan (Reardon, 2008b). Throughout the rest of 2007 and into 2008, they convened a series of public meetings (engaging over 350 people\(^{13}\)) and discussions with interested residents and experts (Draisen, 2008). The staff published a full list of the implementation strategies they had developed to achieve the goals and objectives of the plan in December of 2008 (Reardon, 2008b).

**Performance**

*Bottom up vs. Top down*

MAPC has had some early success in achieving adoption of MetroFuture recommendations. The Metropolitan Planning Organization for the Boston area used the Winds of Change population, household and employment forecasts to shape their 2030 transportation plan in order to “channel regional growth and development by targeting the majority of growth to denser areas with already available water, sewer and transit infrastructure. In this scenario, it is assumed that a greater percentage of residents will be living within walking distance of transit and of major activity centers” (“Journey to 2030 - Amendment,” 2009).

In the Boston MPO’s “IDEAS for VISIONS and POLICIES for the 2035 PLAN” (“IDEAS for VISIONS and POLICIES for the 2035 PLAN,” 2010), it lists as a “possible consensus statement” to “Embrace MetroFuture: focus resources in existing and planned smart growth areas (smart density matters).” It also lists a policy idea, “Invest in projects and programs that are consistent with MetroFuture land use planning (serving already-developed areas; locations with adequate sewer and water; areas identified for economic development by state, regional, and local planning agencies; and density).” It is clear that MetroFuture has been highly influential on the MPO. In a search of the MPO website, 105 pages reference MetroFuture. Interviewees also mentioned that the MPO staff “talk about MetroFuture a lot”.

The Massachusetts Smart Growth Alliance is using MetroFuture as the overarching framework for their new Great Neighborhoods Initiative. This new effort is working to develop actual place-based smart growth projects throughout the region. The sites they are targeting for action and the types of neighborhoods

\(^{13}\) Recorded demographics were unavailable for this meeting.
they are proposing are in line with the recommendations made in the MetroFuture plan.

Other close allies of MAPC have worked to help implement the plan as well. Amy Cotter recounted a foundation-led event to help encourage advocacy to support the regional plan. The “Boston Foundation, Barr Foundation, [and] Surdna all came together and brought a bunch of their grant recipients together and called on us to do transportation related advocacy in a way that would reinforce the regional plan.” Charlotte Kahn from the Boston Foundation also mentioned that they “have incorporated some of the MetroFuture goals in the foundation’s indicators project and civic agenda” (Kahn, 2010)

Rick Dimino mentioned that A Better City, the organization he now heads, is working to integrate it into their work. “For example, I sit on the Mayor’s climate action task force and we’re trying to do some predictive work relative to some policies that might influence climate change and GHGs. I’ve made sure that we’ve looked at the modeling that we did for MetroFuture to try to influence how we’re thinking about, for example, if we do more car sharing, if we’re able to shift more trips to transit – what the implications would be.”

Some supportive towns are using MetroFuture in their work. The Town Planner for Lexington stated that MetroFuture helped to get smart growth principles on the agenda and in discussion among the planning activists and local leaders in his community, which provides him cover to encourage those ideas as he’s then just working to comply with the regional vision. It also provides him with specific actions the town could take and some initial data to support them.

There continues to be a wide variety of other work that state agencies and others are conducting which is consistent with MetroFuture, but does not necessarily reference it. For example, the Executive Office of Housing & Economic Development (EOHED) has been running a “Growth Districts Initiative” that is encouraging commercial and residential development in areas that are mostly consistent with MetroFuture (Cotter, 2010). In some ways, this program fulfills the aspirations of some of the “Concentrated Development Centers” work of MAPC in the 1990s from MetroPlan.

More broadly, many interviewees expressed the notion that MetroFuture “framed the debate” on growth in the region and improved many more actors understanding of smart growth principles and the merits of coordinating and collaborating across municipal boundaries. The recent economic recession has also pushed some of the conversations on regionalizing services forward because of economic necessity.

Comprehensiveness vs. Incrementalism
The vast scope of the implementation required by MetroFuture would naturally be challenging to track, monitor, and evaluate. The over 400 implementation steps are very specific about which actors are recommended to take which actions. Tim Reardon was the editor of the implementation strategies report and is largely credited with ensuring it was so detailed.

As mentioned earlier, there are some critics of such a comprehensive strategy. Holly St. Clair argues it is because they can’t “grapple with the depth” and that this is one of the plan’s greatest strengths. “What it means,” said Holly, “is anybody in our region, or in a city or town, can say, ‘I care about this. Is there something in the strategy about it?’ and we can say, ‘Yes. It's in this chapter and this is what’s important and what it relates to.’”

“It’s not a one-size-fits all, it’s not mom and apple pie. There are real strategies and implementation pieces in there that are logical and are complex and are hard to implement, but we’re doing it and there’s sort of an understanding there of the complexity” (St. Clair & Reardon, 2010).

To help track progress on the plan, MAPC is collaborating with the Boston Foundation to create a Regional Indicators Program, the pilot report of which is expected this year. The Boston Foundation has had a Boston Indicators Project for several years, largely consisting of a diverse set of measurements of the city’s quality of life, such as crime, educational performance, economic prosperity, environmental quality, etc. It is unclear, at this point, whether the regional indicators will track specific actor performance on implementation steps, such as is called for in the implementation strategy, or will track more general performance on meeting the goals and objectives of MetroFuture.

The MAPC staff are also working to develop an “equity report card” that will pull together equity related metrics, evaluate how the region is performing on those metrics, identify key intervention points, and suggest a policy agenda to address them. This will be developed with an advisory committee.

Neutral vs. Advocate

In the implementation phase, leaders within MAPC have worked to incorporate the MetroFuture goals into the work of the organization and advocate for implementation steps externally. “…I think it’s important that the entity that is going to own the product at the end, and of course all the people own the product, but the entity that’s going to manage or administrate it, shepherd it through,” said Jay Ash, “has to have laid a foundation itself to be considered a credible group and has some street credibility.”

One of the primary ways that MAPC is supporting the smart growth outcomes put forward by MetroFuture is in their consulting and technical support work to
their member municipalities. One example is their support of a main street revitalization process for an area between the towns of Waymouth and Braintree called Waymouth Landing. MAPC staff worked with community members to develop 3-D visualizations of what a revitalized area could look like and the process has generated strong public support for the proposed mixed-use development in the area.

MAPC has been working with other towns to identify priority preservation areas, priority growth areas, green corridors between the preservation areas, and other land use designations consistent with MetroFuture. “It’s very specific work to try and see if there’s a way to bring each community closer to MetroFuture,” said Marc. “Now they’re not going to make it all the way. But if we revise their zoning so it’s 50% of the way closer to MetroFuture than the way it was before, that’s a lot of progress. So I think it’s the cultural change at this agency and the intense focus on implementation.”

In the February 2010 “Strategic Plan Update for 2010 to 2015”, the leadership realigned the agency to establish a new Director of Regional Plan Implementation role and placed the transportation, environment, land use, economic development, and housing divisions under a new Director of Smart Growth Planning. The agency has begun to track staff actions that serve to implement the MetroFuture plan through a tracking spreadsheet and other mechanisms for internal evaluation. On some of the overarching themes from MetroFuture, such as social equity, the agency is working to incorporate it into all of the work that they do. According to Marc Draisen, “We don’t have an equity staff. We want everybody to recognize that all of their issues have equity components and they need to address those concerns.”

The staff have been working to incorporate the lessons learned from the public participation effort in MetroFuture into ongoing work with municipalities. They have used CommunityViz and keypads in their work with several communities. They regularly incorporate public participation into planning proposals, whether it is requested or not.

“We were going to do a visioning process with a Mayor,” Marc Draisen described. “He was very interested. He was going to pay for it himself. We sent him the scope and he said, “Well. I think this is great, but there’s all this public participation stuff. I already know what I want to do.” So that may sound like a failure, but there’s a little corner of it that’s a success. Because nobody would ever expect MAPC to be the entity pushing for public participation and that now is just a standard part of our work. I think that the cultural change on the attitude and agenda of this agency makes this agency a more valuable part of civic life in

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14 This role has not yet been filled and the heads of each planning division are currently reporting to the Executive Director.
greater Boston. I think that’s very different from many of the other planning processes – especially the planning processes that were led by the business community.”

MAPC has now dedicated staff time to completely new issue areas, such as homeland security and crime. “Both of those endeavors are multi-disciplinary and multi-community,” said Marc. “So the actual work that’s happening is across municipal boundaries and all of that comes from MetroFuture.”

The agency is also regularly involved with updating the implementation strategies over time. Of the thirteen implementation chapters, MAPC is already rewriting three of them as implementation steps happen or new issues arise, like the challenging economy and real estate environment.

Beyond the internal work on implementation and work by other organizations, MAPC is engaged in various forms of constituency development and constituency mobilization. The thousands of participants in the MetroFuture process are now referred to as “Friends of MetroFuture.” Amy Cotter and her team are working to engage those people and others in continued learning about smart growth through programs like speaking events at MAPC and walking tours of places emblematic of smart growth principles, and engage them in action through a set of campaigns to garner municipal-level implementation of MetroFuture recommendations. Three campaigns – a campaign for local smart growth, a campaign for green energy, and a campaign for transportation investment – were launched in the summer of 2009, however they have not seen much action to date. The lack of movement was attributed to a lack of funding, staff time, and apprehension in the agency with taking on this type of organizing role, according to Amy Cotter.

**Evaluating Phase V**

*Bottom Up vs. Top Down*

One of the strengths of the more participatory approach that MetroFuture took is that it created a more broadly endorsed plan. “A lot more people are aware of it than in the past and more aware of the implications of the plan than in the past,” said Kurt Gaertner. However, broad awareness and endorsement does not seem to have been sufficient to make the plan a regularly used resource by municipalities in the region. “I haven’t heard MetroFuture come out of other people’s mouths,” said Jay Ash. “I see … slivers of the work that people are talking about doing together as being MetroFuture work.”

In reviewing applications from cities and towns for the Commonwealth Capital program (a program to provide state funding for sustainable municipal development), Kurt Gaertner could not find any that referenced MetroFuture,
despite a question on the application that explicitly asks if the proposal is consistent with their region’s plan. That being said, two municipalities, Lexington and Sommerville, referenced their work with MAPC in their applications.

Part of the challenge for municipalities in fully embracing MetroFuture is their lack of planning capacity. Less than half of the municipalities in the region have a full-time planner on staff and many of those that do have had to cut their planning staff time due to budget cuts. “My own planning staff is probably down half since I was the Planning Director 15 years ago,” said Jay Ash.

Another challenge is that MAPC has not yet provided clear and specific resources for municipal planners, either staff or volunteers, to downscale the regional plan to their jurisdiction and to measure progress against the plan. “There isn’t a specific something yet,” said Jay Ash, “and, arguably, one of the things we need to do is figure out is there a check list every year, is there something else? How do you keep reminding people? How do you get people to just take a quick look in this crazy busy environment that we have, how do you get people to take a quick look about - this is what MetroFuture said, oh yeah. We have to keep track of that.”

Without clear metrics to evaluate the consistency of municipal plans with the regional vision, inconsistent local plans are more likely to develop quite a lot of momentum and then MAPC is put in the position of reacting to them rather than helping to shape them from the outset. An example of this kind of conflict that took place during the MetroFuture process comes from the town of Westwood, MA, where a mixed-use and transit-oriented development called Westwood Station was proposed by a developer and supported by the town. MAPC came out in opposition to the project, siting the lack of sufficient density and capacity in the adjacent roads.

Mike Jaillet, the Town Administrator for Westwood commented, “That was going on while MetroFuture was in development. I always thought it was a great example of what MetroFuture was trying to accomplish. If I’m going to be honest, I have been disappointed in the reaction of some of the MAPC staff in their, what I would term, criticism of the smart growth development that we’ve been pursuing, which I found to be somewhat shocking in the light of the MetroFuture plan and what it was trying to accomplish. I think it’s an example of the old saying, ‘The greatest enemy of the good is perfection.’ … I had several conversations with the staff, but most especially the Executive Director about that. … I like Marc a lot, but he really dumbfounds me with this. … I can’t understand where he’s coming from when he criticizes Westwood Station” (Jaillet, 2010). MAPC needs to get clear guidelines out to communities so that they can reduce the likelihood of these kinds of conflicts in the future.

Finally, another reason for why few municipalities are referencing or using MetroFuture is that the scale of engagement in the implementation phase
dropped off considerably in comparison with earlier work. “The only thing I could say is that you need, probably, that much effort again on the implementation piece,” said Aaron Henry, the Senior Planner for Lexington. “A lot of time plans sit on a shelf because the planning’s the easy part. It’s the implementation that’s the hard part. I just wonder if MAPC put so much effort into the plan, hoping that the implementation would kind of just happen because of the genius of the plan. Unfortunately, the public [is] all too happy to just let these things sit on a shelf. Our own comp plan has a lot of ideas that aren’t necessarily incompatible with smart growth and it’s still sitting here ten years later. I think that’s just the nature of planning and how do you motivate the policymakers and the decision makers to stop saying it’s a good idea and to start doing it. So I wouldn’t change a whole lot. I would just say I think MAPC, and all of us, need to focus on, ‘Ok. How do we do this now? Really do it at the local level.’ That’s the fun part.”

Mike Jaillet put it this way, “As a member, I would offer the advice … that the show needed to be taken on the road more, in my opinion. There needed to be some show on the road to targeted municipal leaders and, by example, I mean … I think that there should have been an effort to organize the legislature, especially the ones in the metro region, to understand what was being developed and a presentation made to the town administrators and managers in the Commonwealth at one of their monthly meetings or host an event that includes the Mayors, Town Managers and Administrators, and city council members.”

“In my opinion, they needed to do more to inspire the leaders of the community to take this stuff seriously, to understand how their individual communities and the direction that they were heading were leading us collectively in the wrong direction. So I just don’t think that that has been done, at least not to date, well enough or deep enough. The reason why I say that is that it’s gonna take a lot of political courage in communities to change the policies. The policies are made at the local level. Zoning bylaws that exist in every community are done at the town meeting and through the planning board. The direction that they’re heading is larger lots, sub-divisions that are more complex. It’s all about keeping development out, keeping it less dense, making it more expensive and to have the courage to say, you know we need attached dwellings and stuff like that.”

Comprehensiveness vs. Incrementalism

In implementation, the comprehensiveness of the plan has been both an asset and a potential liability. It provides an integrated vision for the region that people could use to guide their policies and programs. “We established a credible roadmap for a variety of actors in a disparate array of disciplines,” said Amy Cotter. “They can look to MetroFuture and they can find something that aligns
with their interests and whether we do it by supporting them or they support us, but they see then the relationship of their interests to other things within the region. That very comprehensive nature is an asset."

However, a challenge created by the plan’s comprehensiveness is determining when and where MAPC should play a role in implementation on all of the disparate issues in the plan. Rick Dimino spoke of it this way, “I think we are still in a position where we haven’t yet figured out the relationship to equitable strategies to ensure consistency in the quality of education, for example, within the region. …We certainly understood it and dealt with it in our plan and that was kind of new for us. That’s good, but to really get to it and do more with it, it would really require a really substantive approach and a lot of hands on deck and a big commitment by political leaders, etc. so that’s a piece of the puzzle that remains kind of a question mark. …Again, I’m not sure if we’re the right organization for that, but it is something that needs to be done. …We have to be clear about what we as MAPC can do about this and what the rest of the community has to do about this.”

Finally, a drawback of the comprehensiveness of the plan is that the greatest leverage points for change, principally the need for state zoning act and property tax reform, may have gotten buried in the long list of recommendations. “I still think the biggest missing link here is the state - not having a statewide planning and policy framework that acknowledges and supports this kind of planning,” said Martin Pillsbury. “…If they don’t even want to use the Regional Planning Agencies [and] do a good job of it from some state planning office, fine. …Just do something! It’s so counter to our political culture with this home rule. I don’t know whether they ever will, to tell you the truth. If you look at it, as we have to do with most things in planning, as a long-term problem, as an incremental process, maybe we’ll work our way towards that a little bit at a time. It’s still to me one of the most frustrating things, because all of the concepts and the different recommendations and models that we put together sort of still run up against a glass ceiling, you might say, for being able to get further on. Even if you just say, ‘Ok, we’re only trying to worry for these 101 cities and towns, the rest of the state figure out what you want to do.’ The towns and cities that we work with are also still in that state structure. They are operating under the sets of incentives and disincentives that are put in place either intentionally, or as an unintentional byproduct, of the zoning act, our property tax system, and all of these bigger picture things that create the outside parameters, [that] become the rules of the game.”

“That’s still one of the biggest frustrations. How much can MAPC do as one regional agency to change those things at the [state] level? I think that we’ve had some impact; there has been some incremental change. We’ve been a player in that; we’ve been a factor. Some of the departments and divisions within the state are more on board with these ideas than others. They often do look to us as a partner in some of the things that they’re doing.”
“Until we can make more progress at that level, I think we’re always going to have some kind of glass ceiling that will limit how far we can go with some of these recommendations, even when we have willing towns and cities who get it and say, ‘We’d like to do this too, but you can’t ask me to do something that’s going to cut out 10% of our tax base unless you change the way we do our taxes [through] tax sharing, [not relying] on property taxes so much, or something.’

Neutral vs. Advocate

As a tool for advocating for smart growth in the region in implementation, MetroFuture has framed the debate and “filled a vacuum” for smart growth thinking in the region, according to Holly St. Clair and others. “In having a credible plan, it allows for people who are interested in trying to shape the future to be able to go out with more than just their own aspirations, more than just some rhetoric, more than just some facts and figures, said Jay Ash. “It’s really a coherent plan. Even if someone was skeptical of the plan, you have to admit that it’s well thought out and very detailed.”

Many of the organizational change efforts mentioned earlier have continued through the implementation phase. “One of the goals of MetroFuture is transforming this agency into a change agent,” said Amy Cotter. “That’s an ongoing effort. We’ve come a long way in the seven years I’ve been here, but we’re not there.”
Chapter 4. Conclusions and Recommendations

Let’s review three strategic choices that MAPC has made in their planning, execution, and implementation of MetroFuture to date. As mentioned in the introduction, they are the choice to adopt

1. A bottom-up or citizen-driven approach over a top-down elite-centric approach;

2. A very comprehensive planning approach over a more traditionally limited regional planning approach; and,

3. A very activist stand in advocating for smart growth principles more than maintaining a dispassionate convener and analyst role.

In this chapter, I will summarize some of the key findings and conclusions resulting from MAPC’s choices in these areas. Specifically, I will look at how these choices were applied in their use of modeling, their political influence and impact, and in their organization.

Bottom Up Vs. Top Down

A key movement in planning over the past several decades has been the effort towards more inclusionary and participatory planning (e.g. Jane Jacobs and then communicative planning school of Forester, Innes, and others). Deciding to pursue this more bottom-up approach to developing the regional plan was one of the key intentions behind MetroFuture and one of the greatest changes from the previous MetroPlan effort.

The purpose was to build a larger constituency of support for smart growth principles than MAPC had previously, which could then be mobilized in order to influence municipal planning and state policy. To build this kind of public support, the organizers planned to open up the modeling process, to engage a large and diverse number of participants, and to change the culture of the agency in support of more collaborative planning.

Modeling

In comparing the MetroPlan documents to MetroFuture documents and interviews, it is clear that MetroFuture made a much more concerted effort to ground their model design and projections in the values and visions put forward by participants in their public process. MetroPlan did not utilize modeling, making the case for regional change largely on historic trends and a few limited projections for population and employment. The process for making these limited projections was not transparent and only a limited set of actors were involved in using the content to develop plan recommendations.
In contrast, MetroFuture created an Inter-Issue Task Force of stakeholders to develop model parameters and design the model structure based upon vision statements from the participants at public meetings. In subsequent public meetings, the modeling process was described to participants and they had the opportunity to manipulate model assumptions through either an Excel model or CommunityViz to understand the model dynamics.

This more participatory approach to creating and using the regional forecasting model gave many of the stakeholders who would be the most likely to have critical questions about the model a front-row seat in seeing how it was structured and the assumptions and data within it. The approach also encouraged MAPC to incorporate issues into their modeling that they did not have experience with before.

Finally, another strong effort at bottom up empowerment from MAPC has been that throughout the MetroFuture process and for the foreseeable future, the agency has worked to get as much of their data online and accessible through the Metro Boston Data Common (http://www.metrobostondatacommon.org/). This enables citizens and municipal planners skilled in GIS to conduct their own analysis of data provided in, or generated by, the MetroFuture process.

However, a weakness in their approach was to delay building any portions of the model until the public visioning process had concluded. Holding off on presenting business as usual model projections was valuable to give an openness and authenticity to the process, however the delay in presenting projections afterward made maintaining participant and media interest in the process more difficult. The first visioning workshop was in October of 2003 and the full baseline projections were not put forward until May of 2005.

An additional weakness in their approach was their reliance upon CommunityViz as the primary tool for engaging participants in the modeling effort. While the software enabled a great deal of flexibility in how parameters generated from the public visioning could be incorporated, its complexity made it very difficult for MAPC staff to get up to speed, rendered it unusable by most public meeting participants, and was ineffective for building local planning capacity in constituent municipalities. While they were able to use it in the final public meetings and many people found the results insightful, they were not able to use it in the real-time dynamic manner that they had planned on.

“I kind of wish we had found a software tool with broader capabilities,” said Amy Cotter. “I think we were the largest scale application of CommunityViz ever really attempted. I don’t know whether any tool available when we bought [it] ... could’ve done quick scenario turn around runs, but that would’ve been useful. Something with a web interface would’ve been useful. Something that that we could now, sort of, clip out a particular municipality to examine their place in
greater detail, yet still have it fit within the regional model would be good. So it did not, in the end, support the kind of participation that we would’ve liked.”

“I would say it’s used zero outside of that process,” said Aaron Henry, the Town Planner for Lexington. “I use GIS, not regularly and I wouldn’t consider myself an expert, but I certainly try to use it as often as I can and I think it’s a helpful tool. I would say CommunityViz is definitely a pro tool and for most … towns [it’s] out of reach.”

The challenge with these criticisms, however, is that there were few alternatives available to them when they were beginning the effort and with the limited budget they had available. They did not have the resources to write their own software or create their own modeling from scratch. CommunityViz is designed to handle town-scale planning and MAPC struggled to use it to effectively model the region. Perhaps with additional testing early on, some of the limitations of the software could have been discovered and solutions found.

Another related problem with how the scenarios were presented to the public was that they did not incorporate any neighborhood-scale visualizations of what the changes would look like. Without this, many of the ideas presented are rather abstract and several interviewees questioned whether or not participants really understood the implications of the decisions they were supporting. CommunityViz Scenario 3D was not available until 2009, but the MAPC staff could have worked with urban designers to create some conceptual imagery of street-level experiences of the different scenarios. “In some ways the visualization work would’ve been more valuable than the kind of online modeling

**Politics**

The scale of participation in MetroFuture was unprecedented for MAPC. In the MetroPlan process, the highpoint of engagement was the work that MAPC conducted with municipal officials to plan 15 Community Development Centers. “To the extent that [MetroPlan] had some outside buy-in process,” said Martin Pillsbury, “which it had much less than MetroFuture did, because It was never conceived to have anything like that process. It was in that area that we did.”

MetroFuture, in contrast, engaged approximately 4500 individuals in the process through a combination of large-scale central meetings, smaller briefings, phone surveys, and online polls. These efforts were focused on trying to continually engage a more diverse and representative sample of the region’s population.

“I think that the workshops that I attended, the MAPC managed to get a very sizable crowd gathered for each of these events,” said Mike Jaillet, the Town Administrator for Westwood. “It was diverse. Did it include completely every type of interest that might be out there – probably not. But I think they did a really
good job of making [sure they had] as broad a perspective as they could and to have a lot of people engaged in that process. Regional planning agencies aren’t ones that generally generate a whole lot of public interest and public support, generally speaking. Given that fact, they did a really good job in getting crowds out to their events.”

Holly St. Clair reiterated the **targeted outreach** prioritized by MetroFuture. “You can see by the demographic questions that we asked who we were conscious of always trying to get – geographic distribution, educational attainment distribution, race/ethnicity, income. We would put up the regional targets and outputs – who’s in the meeting, who’s not in the meeting. Those regional targets were always our targets; we just never got close to half of them. But at least we always had it out there as a yard stick.”

In numerous interviews, people remarked how powerful the **keypad polling devices** were in making the demographics of participants and their feedback transparent. “They had people sit at different tables and you had this way of answering through keypad polling,” said Karen Wiener. “I think it was a way of participating and feeling like your voice was heard, that you had a direct and immediate impact. It allowed everyone’s voice to be heard, not just if you were brave enough to raise your hand or stand up, or whatever. I thought that was different than a lot of public meetings.”

Ron Thomas commented on the **genuine two-way communication** of MetroFuture as one of its greatest strengths. “The other thing I certainly applaud MAPC for that’s still a rarity in regional planning is true public participation. One of the things that we tried to do at NIPC with some success, was to take the experience at the kind of public engagement that happens at the neighborhood planning scale and figure out how to take it to a regional scale – basically a lot more staff and time. So much of the regional planning that does something called public participation is really show and tell. I think MAPC was really committed to making it a two-way communication process. That is still a rarity.”

MetroFuture was fairly successful in **engaging local elected officials** as well. “Many, dozens of local officials, were actively engaged in MetroFuture,” according to Marc Draisen. “Many served on our Steering Committee. Others chose to come to our individual events, but that’s fine – that’s how they contribute. Many of them today are very supportive of implementing the outcomes on a local level.”

“With the **executive branch of government**, I would say, that both the Romney Administration and the Patrick Administration, even though of course they like to draw distinctions between themselves, fundamentally had a pretty good understanding of what we were trying to do and a pretty open door to the regional planning agency doing a plan of this kind,” said Marc Draisen.
“Greg Bialecki, who’s the Secretary of Housing and Economic Development, is very engaged, has been from the beginning. Greg just showed up to one of our little presentations at CHAPA (Citizens Housing and Planning Association); just a little breakfast presentation with, like, 20 people and the Secretary showed up. I didn’t even know who he was yet, and came over and said, ‘Everything you’re trying to do in MetroFuture are the goals of this administration.’ He didn’t have to say that. He didn’t have to come.”

However, there are a number of political trade-offs that MAPC has dealt with because of their very bottom-up approach. To start, MAPC proceeded with the regional planning effort without securing some form of official state support for the effort, either political or financial, which would signal to participants how they would respond to or support the recommendations. Other regions, such as Envision Utah had this as a precondition for pursuing their effort. This is not to say that they necessarily needed full authority over regional governance given to them by the state, but an endorsement by the Governor, relevant agencies (e.g. MassDOT or DHCD), or some other form of formal validation of the effort by relevant decision makers would have helped. As Kurt Geartner put it, “I don’t think that senior-level officials – Secretaries and their equivalent – really ever were as engaged as I’d hoped.” Perhaps by securing their formal support for the effort, their involvement, and later adoption of the plan recommendations, could have been increased.

As MAPC formed the Steering Committee, they did not conduct a thorough stakeholder assessment and populated the Steering Committee mostly with public agencies and NGOs who are regularly active in planning issues (see Appendix VI for the list). There was very little representation of businesses, the real estate industry, or other local leaders representing large and/or influential constituencies in the region. Even within the organizations that were participating, the representatives were not the Executives or Presidents, but were lower ranking staff.

“We had hoped to develop this core of champions in a variety of sectors, in a variety of places where their opinion would be influential, and we never really got there,” said Amy Cotter. “Our Steering Committee comprised a lot of usual suspects. I don’t really know how we could’ve done that differently, but that’s the way it played out.”

Failing to effectively engage local non-elected leaders hurt the planning efforts in two ways. First, it reduced the potential influence of the Steering Committee with peer leaders in the region (i.e. a Steering Committee of top executives will likely have more influence with other top executives). Second, it neglected to engage those people most able to mobilize constituencies in support of implementation after the planning process concluded.
“The business community, which in so many other metro regions has led regional conversation and discourse about the future – Envision Utah, Metropolis 2020, and others – and they’re often in the lead,” said Amy Cotter. “Here it’s been a tough sell to get them involved.”

From a November 2004 MetroFuture report to the Barr Foundation:

*Involving business in a long-term project. Ironically, the longer the planning process, the more difficult it is to attract certain segments of the community who are uncomfortable with long time frames. The business community, for example, typically seems interested in time frames that do not exceed six months. While many business leaders have committed themselves to the MetroFuture project, others have been “turned off” by a process that will take several years to complete. They frequently press us to cut short elements of public participation and come up with “quick results” that can be implemented on a shorter time frame.*

“I think the other thing is we tried in this process, and I don’t think we got as far as we could have or should have, was engaging communities of color and low-income communities,” said Cynthia Silva Parker. “We got further than MAPC had gotten before, but not as much penetration as [we] … hoped.”

Additionally, the participatory approach **neglected to engage local expertise in providing alternative ways of understanding the opportunities and risks for the region.** Although the “Imagine” scenario was eventually included in the effort after steering committee members advocated for its inclusion, the process had not been designed to encourage and enable interested and able stakeholders to put forward coherent alternative visions or scenarios. Leading local academics, advocates, or developers could have debated competing visions at public forums. Local planning firms or universities could have proposed alternative conceptions of how to develop the region with more radical interventions. The resulting Winds of Change plan may still have been the one that would have been preferred by participants and adopted. However, there was an opportunity that was missed to solicit leading edge and controversial thinking on these issues and, in doing so, to educate participants and stakeholders on a broader range of perspectives and possible approaches available to potentially incorporate into a regional vision. The over 30% support that the “Imagine” scenario received in voting demonstrates an appetite for this kind of thinking. Perhaps a more libertarian and low-density scenario may have garnered public interest and possibly support if advocates supporting those views had been included and able to offer a compelling alternative.

A critical point in which **a robust multi-stakeholder negotiation effort should have occurred was in developing the implementation strategies** for the MetroFuture plan. The strategies were largely developed by MAPC staff and a few close allies. These are the critical policy changes that need specific vetting and endorsement by influential actors in the region for MAPC to be able to claim it has public support to advocate for those policy changes. Delineating how they
are consistent with broader goals and objectives that were publicly endorsed is not enough.

**Not securing endorsements of the plan by key local officials** seems to have undermined the effort as well. Several town-level interviewees commented on the fact that their colleagues are mostly not talking about or referencing MetroFuture. That’s not to say that there isn’t talk of smart growth, but it doesn’t as seem conversations on smart growth at the town level are, for the most part, directly building upon MetroFuture. The reasons the interviewees attributed for this are a combination of MAPC’s not going from town to town after the plan’s conclusion to get local endorsement and adoption of the plan, and not downscaling the plan so that MetroFuture Lexington, for example, is a clear concept. Municipalities do not yet have clear guidelines or checklists to use to test how much a particular proposal conforms to MetroFuture.

“I think, as much as there was substantial participation on the local level, I think it would’ve been nice, and if I could rewrite it again, I think I would like to have more formal endorsements by leadership on the local level and the state level,” said Jay Ash. “That’s not to say that they weren’t supportive, but that probably could’ve helped and probably would help as we go into this implementation phase to already have people on board.”

Comparable regional planning efforts, such as Bay Area’s FOCUS process or Central Florida’s Heartland 2060, had the advantage of a county structure with staff and leadership organized at that level. Metro Boston, in contrast, has 101 municipalities and only MAPC’s own sub-region designation between them and the regional scale. Because so few leaders organize themselves along sub-regions and the sub-regions have no authority, engaging relevant local leadership is even more challenging than in other contexts.

Finally, there is widespread agreement that the MetroFuture process **took too long.** “I think eight years is too long,” said Marc Draisen. “Yet, it’s hard to know with the resources we had exactly how I would’ve shortened that duration, because every time you want to do something faster, you either need more money and more people to do it, or you need to jettison certain activities.” MetroFuture’s funding was severely limited. The original process design called for $1M. They ended up with only $250k. MAPC had to spend a lot more the agency’s budget than they’d planned on, which made work take longer as few staff could work on the project full-time.

**Organization**

The bottom-up approach to planning used throughout the MetroFuture process has strongly influenced the culture of the organization. Through the MetroFuture process, MAPC had all of their staff go through an Interaction Institute for Social
Change (IISC) facilitation training and their core leadership and senior staff go through an IISC facilitative leadership training. Through interviews and my own observations, this seems to have helped create a culture in the organization to support more participatory approaches with external actors and a space for more reflection and feedback at the end of meetings (e.g. adopting plus / delta as a standard practice for the end of most meetings).

This internal culture change is being incorporated into their consulting work with cities and towns. For example, they now incorporate public participation into proposals whether it’s asked for or not. They also have continued to use keypads and CommunityViz at the town level to enable more transparent participation.

MAPC has not yet settled on a model for how to position itself to support bottom-up action in implementation. The stakeholders involved in the Steering Committee do not seem to have made commitments to take on components of MetroFuture implementation or to have constituencies to mobilize in taking action on MetroFuture priorities. Efforts to build local planning capacity have been limited. MAPC staff “launched” three implementation campaigns in June of 2009, but very little action has happened on them over the past year. The campaigns, according to Amy Cotter, “haven’t really gotten off the ground yet”, due to a lack of clear definition, funding, staff capacity, and discomfort with advocacy within the agency.

The bottom-up approach helped legitimize the MetroFuture plan and changed the MAPC staff culture to support public participation in their work, but it did not succeed in building a constituency with the capacity to drive implementation. Because the constituency building effort was largely unsuccessful, MAPC is now left in the awkward position of being both technical advisor for planning in the region and advocate for municipalities to adopt the MetroFuture approach. Without a state mandate for municipalities to conform their plans to the regional plan, or a strong independent advocacy movement supporting smart growth in the region, the MAPC will be continually in the position of trying to both recruit municipalities to adopt the regional objectives and recruit them as fee-for-service clients.

Recommendations to Other Agencies

Based upon the strengths and weaknesses of the MetroFuture process, I make these recommendations for other regional agencies or civic organizations contemplating a similar effort:

- Develop an initial process design and then seek state endorsement of the effort. Leverage these and strong fundraising staff to identify potential
funder prospects and to fundraise. Take the time to secure these plans, endorsements, staff, and funding before beginning public outreach.

- Adopt the open visioning approach of MetroFuture, which engaged constituents in visioning before showing them projections. However, be sure to concurrently begin developing core components of the regional “business-as-usual” model so that you can complete the model shortly after the visioning work has ended and begin sharing forecasts and developing scenarios.

- Learn about the state of the art in public participation and decision support technologies from in other regions early on. Test these tools early on with intensive data and your expected users to ensure they meet your requirements. Be sure to take both of these steps before making significant investments in technology. There is no perfect tool for supporting these kinds of complex decisions with such diverse audiences. Be clear on what features and functions are most important and make plans to deal with the shortcomings of whatever tool(s) you end up with. Create as many diverse methods for engagement as is feasible – cell phones, social networking, etc. – with dedicated staff to support them as resources permit. Hold public meetings during times when most people are able to make them: evenings and weekends are better than weekdays.

- Balance ambitions for large-scale participation with the need to effectively engage the most influential local leaders. It is possible to effectively sequence involvement from both the grassroots and the grasstops and external public participation specialists can help design effective processes for this. Conduct a stakeholder analysis to identify the right balance of interests and influence to populate the project steering committee.

- Identify the demographics of your region, set goals to match those in public meetings, and hire experienced community outreach staff to conduct targeted recruitment through existing social networks (e.g. churches, schools, civic organizations, etc.). Keypad polling devices can help to both enable real-time feedback in large public meetings and see who is in the room on comparison to the regional profile. This accountability at the beginning of public meetings is a great mechanism to demonstrate transparency early in the process.

- Structure public meetings and the overall process to capture, value, and build upon public input. Provide trained facilitators at each table and trained computer operators if technology is being used. Large meetings can use a themeing process to quickly summarize qualitative statements across the room.
• Engage diverse thought leaders (e.g. academics, columnists) and interest groups throughout your region in putting forward their own visions and alternative scenarios for the future of the region and enable them to present these concepts in public. Holding debates between multiple contrasting views can help educate attendees about different perspectives on the opportunities and risks for the region and stimulate creative thinking. Some meeting formats can allow for alternating panel discussions and attendee discussions with summary conclusions being shared from one to the other.

• When the plan begins to get specific about policy changes, fiscal impacts, or other specific implementation steps, it is crucial that a robust multi-stakeholder negotiation process be convened to develop them. Such an effort should be held to the publicly-endorsed goals and objectives, but the detailed policy discussions are the point that key interests throughout the region will be most concerned and yield the most value – both in developing effective strategies and in influencing decision-makers to enact them.

• Finally, create mechanisms to secure endorsements of the resulting plan by key decision-makers. Securing an endorsement at the outset sets this up, although the actors involved in implementation may be more numerous than those you approached for initial support.
Comprehensiveness Vs. Incrementalism

A key shift in the New Regionalism has been to take a more comprehensive approach to regional planning as opposed to the issue specific approach of previous generations. Here is an evaluation of how MetroFuture fairied in its effort to be more comprehensive.

**Modeling**

The modeling challenge with this more comprehensive approach is that models aren’t readily available for many of the issues brought up in the visioning phase of the project by public participants. Envision Utah, for example, only included land use, transportation, air quality, and infrastructure costs into their modeling. The conventional view of comprehensiveness is more limited than what MetroFuture aspired to, which included education and other topics.

Despite these challenges, as well as severe funding limitations, the MAPC staff and the Inter-Issue Task Force worked for over a year to create a **comprehensive rule-based model** that could be used to generate a business as usual projection and alternative scenarios. The result is that this enabled participants to connect many more issues to the way in which the region grows. This clearer interrelationship between a broad diversity of issues and regional growth potentially enables much broader interest in and, potentially, support for a regional growth agenda.

According to Marc Draisen, “The other thing isn’t something I’d change, but was certainly a difficulty and a slow down, which is that we went in to do a land use plan and we opened it up to the public and they kept telling us you have to do other things – you have to do public health, you have to do public safety, you have to do public education. It wasn’t as simple as saying people care about those things, so they mentioned them. They would come to us and say pretty obvious and intelligent things like, “Well you want people to live in the city, you better fix the schools. Or else, they won’t live in the city, whatever you say.” So we got into those things and that slowed us down because we’re not experts in those things. But I wouldn’t necessarily change that. I think it was the right decision.”

The comprehensive modeling effort enabled participants to get a sense of some of the **trade-offs between alternative planning proposals**. Participants used the Excel-based “red cells” model to react to the business as usual scenario and to generate alternative preferences that shaped the scenarios. It’s called “red cells” because participants would get red cells if they chose an impossible combination in allocating population, land, etc. Based upon my review of the model, it is effective in conveying the limits in the region and trade-offs between choices. As Ken Snyder put it, “One of the attractions to the CommunityViz model, of the models they were looking at, it was perhaps one of the more transparent. You can more easily make the assumptions a part of the process.
People can look and see what assumptions you’re using to make those calculations.”

“People had the ability to hypothesize something and then take a look and figure it out,” said Amy Cotter. “They’re forced to confront trade-offs that you aren’t really forced to confront unless you have the numbers attached. That was a very powerful learning tool through MetroFuture and I’m convinced that if we replicate that in a stripped down way at the local level, we’ll start to see smart-growth outcomes at the local level much more prevalently.”

The integrity of the modeling effort is partially shown by the fact that the plan’s preferred alternative projections have been adopted as the basis for the MPO’s transportation plan. The Boston MPO’s 2030 transportation plan explicitly states that it relies upon the population, household and employment forecasts from the MetroFuture preferred scenario.

Although a lot of work went into developing a comprehensive model and a comprehensive datasets to populate it, there are three areas that the comprehensive modeling effort fell short. The first is that despite the modeling effort’s comprehensiveness, it did not account for exogenous variables (e.g. real estate market fluctuations, gas prices, etc.) that could shape the impact of the various interventions proposed, or even the likelihood of adoption of those measures. Without addressing a basic set of major exogenous factors, it will be hard to use the model in the future to evaluate the relative impact of various strategies under new circumstances.

The second shortcoming of the modeling effort is that they did not apparently conduct a sensitivity analysis on the various factors in the model to identify the highest leverage implementation steps. The model could be analyzed to backcast from the chosen Winds of Change scenario to identify the rules and population assumptions that created that scenario. Without conducting this kind of sensitivity testing, it is difficult to rank the relative importance of the rules and, in turn, the implementation steps that MAPC and others are pursuing. It also makes it incredibly challenging for people to get their heads around the scenarios presented during MetroFuture and the resulting plan given the large number of recommendations.

Conducting this kind of analysis could reveal that, for example, property tax reform has one of the most significant impacts upon planning outcomes and could build the case for doing so. Conducting this kind of analysis during the planning process and getting public feedback and endorsement to pursue the highest leverage changes could be incredibly powerful.

Politics
How the planners seek to use the plan to affect change determines the nature of the political challenge created by comprehensiveness. MetroPlan was, in many ways, a change agenda for the agency and, given that purpose, had a fairly limited set of recommendations largely focusing on what the agency was capable of doing itself in a decade.

In contrast, MetroFuture sought to be a change agenda for the region. In the final implementation strategies document, of the over 400 actions recommended for different actors, MAPC was only responsible for a minority. Many more said other actors (e.g. the Federal Government, the Governor, state agencies, the legislature, municipalities) “should” take particular actions. This frames the agency not as a dispassionate provider of technical support, but as an advocate for changes in policy within and beyond the borders of their region.

The strength of this approach is that it more accurately represents the numerous actors that influence the region and provides clear recommendations for action by these actors to improve the state of the region. “I think it’s, frankly, easier now to sell MetroFuture to potential champions,” said Amy Cotter, “because we can be much more concrete now. We can focus on a segment rather than the whole. Through the planning process, … the whole was the point and that was very difficult for people with an appreciation for short-term return.”

However, one tradeoff with this approach is that the reader is left with an unclear sense of priorities or what’s most important to achieve the MetroFuture goals. In reviewing the Implementation Strategies, it is clear that the planning process did not create a mechanism to have stakeholders and/or the broader public prioritize them. Without priorities, it’s challenging to articulate specific takeaways or most important action items from the plan. This challenge in characterizing the plan in a meaningful way may have inhibited media coverage and action in implementation. It also may give the agency a false sense of public support for the plan recommendations because the list is so long that the public may not understand what they are.

For example, if the plan had highlighted and focused on the need for state enabling legislation to give MAPC more influence over municipal plans, then the effort may have garnered a constituency in support of that specific policy change. Instead, the region is left with public support for a general vision for the future, but it would be a stretch to say that there is overwhelming support for every implementation step in the regional plan.

The other lost opportunity with this comprehensive approach is that MAPC has not yet, two years after publishing the goals and objectives, created a public mechanism for tracking implementation. Specifically, there is apparently no transparent method to evaluate congruence of municipal plans and activities with the regional plan. Aaron Henry, the Senior Planner for Lexington, is enthusiastic to understand MetroFuture’s ambitions for that area, but has been
unable to determine it from the regional maps and reports that have been provided to date.

MAPC staff are currently working with the Boston Foundation to create a set of nested regional indicators that enable the same indicator to be used to assess progress on MetroFuture goals and objectives at different scales (e.g. town, subregion, and region-wide). It is unclear how stakeholders will be involved in helping to identify appropriate indicators, how data will be gathered from 101 cities and towns, and how the results will be used afterward. Amy Cotter described the regional indicators as being “in line with the Boston Indicators program”. The Boston Indicators (http://www.bostonindicators.org/) are primarily measurements of numerous aspects of quality of life. They are not metrics to evaluate implementation of specific action by public officials or agencies.

Organization

Although comprehensiveness creates a clear implementation challenge for an organization of limited staff and resources, MAPC has worked to realign the organization to match the task of driving implementation throughout the region. The recent reorganization of the agency resulted in the creation of a new position, Director of Regional Plan Implementation, assigned to ensure that staff at MAPC are doing what they can to implement the plan’s recommendation, as well as to oversee the agency’s advocacy activities to encourage action on implementation steps outside of MAPC’s direct control.

The staff shared with me a tracking spreadsheet they are using to compare, on a quarterly basis, the work that each division of the organization with the relevant goals and recommendations in MetroFuture to encourage their alignment. This is new to the organization and gives a measure of internal accountability to ensure the plan does not just sit on a shelf.

The great challenge with an extremely comprehensive plan is that of mission creep. The organization is now trying to fulfill so many different roles in the region - think tank, consulting organization, nonprofit advocacy organization, government agency – that there is a clear risk of over-extending beyond the capacity of the organization or beyond what member municipalities are paying it for. Based upon interviews, it’s not clear what they say no to so long as it somehow fits in MetroFuture. To quote Amy Cotter, the Director of Implementation, “Every week something arises, ‘Oh, that’s in MetroFuture. We should comment on that.’” Given the breadth of MetroFuture, it’s hard to see when they wouldn’t be commenting on something happening in the region.

The issue areas that MetroFuture delved into much more so than MetroPlan, such as education, are pulling the organization to develop new programs in
those areas. “I’m not sure if we’re the right organization for that, but it is something that needs to be done,” said Marc Draisen. “We have to be clear about what we as MAPC can do about this and what the rest of the community has to do about this.”

Recommendations to Other Agencies

Based upon the strengths and weaknesses of MetroFuture’s efforts to support and implement a comprehensive approach, I make these recommendations for other regional agencies or civic organizations contemplating a similar effort:

• Stakeholder engagement in group model building of comprehensive rule-based models is achievable and desirable. It can simultaneously inform the development of a more robust and meaningful model and open up the “black box” to questions and critiques, which is healthy and valuable. Shaping the modeling effort based upon the values and principles of the broader constituency is also an essential first step.

• Make trade-offs between alternative planning proposals clear and explicit using scenario sketch models (e.g. CommunityViz), Excel worksheets, or other tools as appropriate to your scale and scope. Presenting trade-offs should come after visioning and forecasting business-as-usual in order to allow for alternative proposals to emerge that may reconceptualize conventional notions of trade-offs to identify possible win-wins.

• Take account of exogenous variables in formulating models. This can enable true scenario planning, not only the alternative futures planning of MetroFuture and other regions.

• Backcast from your preferred alternative future to identify the highest leverage and most urgent implementation steps. Such priority setting can help create a more coherent narrative for participants, stakeholders, and the media. Provided public participation is robust and there is broad support for the preferred alternative, then this can be built upon to support difficult policy changes in support of the regional vision.

• Articulate recommendations, no matter how numerous, in clear language that assigns responsibility for the recommendation and gives specific targets for implementation (e.g. funding levels, authority changes, etc.).

• Establish transparent mechanisms to track implementation of the regional plan (e.g. such as CitiSTAT at the municipal level), including metrics on your agency’s performance, the level of adoption of plan recommendations by other actors, and the current state of the region relative to the trend and preferred alternative scenarios. Drawing upon the
work of Robert Behn and others on measuring public performance, agencies seeking to develop regional indicators should consider some of the following factors during their development:

- Will the indicators enable citizens to evaluate their town’s performance to regional goals?
- Will performance to the indicators affect how budgets are allocated or grants given?
- Will the indicators enable stakeholders to learn what strategies are proving effective and where there are barriers to be overcome?
- Are the indicators likely to motivate a race to the top among cities and towns, or will they be discounted and ignored?

• As the plan begins to emerge, assess your organization’s capacity and competence to shepherd implementation. Take steps to realign or build the organization if necessary, but exercise caution in taking on a strategic direction that is not appropriate given your authorizing and financial environment. Seek out partners to adopt implementation steps more suited to driving those issues if necessary.
Convenor and Advisor Vs. Advocate and Organizer

Throughout most of the MAPC’s history, the agency took a fairly non-adversarial role in their interactions with member municipalities. Trust in their expertise became one of their greatest strengths (Rosen PhD) and made them a reliable source of technical advice and planning expertise. This role was attractive to staff who sought such a dispassionate, yet influential position.

However, given the challenges that MAPC has had in implementing smart growth policies and goals, it is understandable that the agency has taken a more outspoken stand on smart growth issues. The design of the MetroFuture planning process helped to support a more advocacy-based approach to planning, wherein public education on smart growth principles was implicit, the organizers sought large participation in order to mobilize participants afterward, and the agency leadership created new roles in the organization to drive implementation.

Modeling

Among interviewees, there was widespread agreement that one of the greatest strengths of MetroFuture was the public education of smart growth principles. According to Mike Jaillet, the Town Administrator for Westwood, MA, “They accomplished getting everyone to understand, really, where we’re heading and [how] just allowing market conditions, … politics, … and the individual communities’ efforts [to continue] are all bringing us to a place that we have to agree isn’t where we should be or ought to be going… I think they did a great job in presenting that and why that’s not going to be in our best interest.”

Similarly, Karen Wiener said, “I think they did a really good job of compiling a lot of data and finding a way to visually show people what exists now and show them, not scare them, that if you let things go as they’re going now, it’s not good for the environment, for society, for quality of life. I think they did a really good job with that.”

As mentioned earlier, the combination of participants learning about the historic and current trends, combined with tools to engage in evaluating alternative futures, created a powerful learning environment that helped participants understand smart growth principles, which many in-turn supported.

In addition to the public education value of the business as usual trends, town planners and MAPC staff both commented on how the creation and public discussion of alternative futures has helped to frame the debate in the region around growth. “The strongest, most valuable thing we did, is we established the continuum of what is smart growth and what is not,” said Holly St. Clair. “Whether you agree with it or not, it’s a reference point and that was incredibly
powerful. I think it’s powerful for towns too, because they have some cover and they can say… ‘It’s not that we’re the early leader or we’re doing smart growth and no one else is; we’re doing what the regional plan says.’”

**Politics**

The primary evidence for MetroFuture’s impact as an advocacy vehicle is the early adoption of elements of the plan by several other organizations. Two of MAPC’s closest partners, the Boston Region Metropolitan Planning Organization and the Massachusetts Smart Growth Alliance, have embraced the plan and it is shaping their future work. Some town planners are also working to incorporate the recommendations into their work.

By organizing the effort to be based in large-scale public participation, the MetroFuture team was able to identify widely supported policy proposals and to create a strong sense of legitimacy for the final plan. This legitimacy helped build local public and political support for a variety of actors in the region who supported smart growth. Now the plan has “oddly calm support”, according to Holly St. Clair. She thinks this is because they did the right thing.

“I don’t have trouble finding legislators to sponsor the critical pieces of MetroFuture that we are pushing up on the hill,” said Marc Draisen. “That doesn’t mean that we win on every bill. Sometimes we have opponents, it’s often the business community – not always, but often. I don’t really have trouble finding supporters up there. I think that the understanding of smart growth among state legislators and local officials is dramatically better today than it was ten years ago and, I think, one of the reasons is that there’s been more press attention to it. I think MetroFuture deserves a little credit, but I honestly think the main reason is that the two administrations – Romney and Patrick – in their own language, they have different language, have both talked about it all the time. Legislators sometimes love to harp about governors, but governors still do set an intellectual agenda, which legislators eventually begin to repeat.”

“I was in Norwood … for a legislative breakfast with five active legislators who all came – that does not include the legislators who sent staff. They stayed for two hours, not one of them left. And they engaged us in conversations about our legislative priorities – all of which are out of MetroFuture. So I don’t really lament the legislature that much.”

However, it may be that the reason why Holly and Marc are not seeing a lot of resistance is because they are not yet advocating for the greatest leverage points for change. Many interviewees readily acknowledged the limitations of any of MAPC’s work due to the lack of state enabling legislation granting the agency more authority over municipal land use and/or other plans. They also readily acknowledged the systemic challenge of having municipalities
overwhelmingly reliant upon property taxes as creating a major incentive for them to reactively support more development without necessarily prioritizing smart growth principles. MetroFuture does not seem to have been used to build consensus on how best to change these policies and the agency will continue to experience the “glass ceiling” Martin Pillsbury described until they do.

Organizational Change

To support these efforts toward incremental, and potentially high-leverage, change, Marc Draisen and other leaders in the agency have clearly worked to change the agency to be more of an explicit advocate for smart growth in the region and the state. “The biggest spurt of change occurred after Marc Draisen came on,” said Martin Pillsbury. “It was probably the convergence of two things, Marc coming in and us embarking on this new plan.”

In interviews, staff recounted talking to people at Envision Utah, for example, about the dramatically different role the two organizations see for themselves after the conclusion of their planning efforts. In Utah, the organization has continued to only serve as a convener for regional conversations and has not taken any role to encourage implementation of their plan. In contrast, the MAPC leadership see themselves as needing to be much more outspoken advocates for implementation of the plan and have been organizing themselves to support that.

The organization’s February 2010 Strategic Plan Update for 2010 to 2015 shows a clear intention to drive implementation through advocacy. The organization has created a Director of Regional Plan Implementation to ensure that MAPC’s work supports MetroFuture implementation and to mobilize others in supporting action on the plan’s recommendations as well. The organization has also developed a robust government affairs and state policy advocacy program in support of the state-level MetroFuture recommendations, which fall under the Deputy Director.

In interviews with MAPC staff, it was clear that many of them recognize the need to acknowledge and engage a plurality of values and visions among stakeholders in the region – the “multiplicity of values” as Tim Reardon put it. In fact, MetroFuture was organized to try and engage these multiple values and to find common ground between them.

However, now that the plan was finalized and long-term goals turn into short-term decisions, the dilemma between being open and inclusive of a broad range of values and advocating implementation of the plan could become very real. The more the organization shifts into a principled advocacy role, the more some actors may begin to question the credibility of MAPC’s analysis (i.e.
that they may be shaping the analysis to support their preconceived smart growth conclusions).

From interviews, it is clear that many people at MAPC are uncomfortable with the advocacy work and that many in the organization are not yet clear on how to effectively balance the advocacy role with that of a neutral convener and expert consultant.

MAPC has trained many of their senior staff in facilitative leadership in order to support more inclusive and participatory planning. Holly, Amy, and others are now discussing the possibility of training some staff in community organizing, so that they might help organize communities of smart growth advocates in municipalities throughout the region. Perhaps this is not a contradiction, but it remains to be seen how this will play out.

Amy Cotter’s current implementation work includes efforts to maintain and build a constituency based upon the list of people who were involved in creating MetroFuture (i.e. the “Friends of MetroFuture”). She has organized speaking events and kicked off three campaigns to engage local residents in advocating for smart growth, clean energy, and other policies in their towns and cities that were recommended in the MetroFuture plan. It remains to be seen whether this new organizing and advocacy approach will be successful.

Without municipal leader endorsement of the plan and this approach, there is a risk that local leaders will see this as MAPC meddling in their local affairs, that MAPC has become yet another interest group that they have to deal with rather than a partner that they find support from. However, the more neutral and incentive-only approach of the previous generation of MAPC is probably far too limited and makes them even less relevant to local planning decisions. How to effectively balance the roles of partner and advocate will be a challenging dynamic over the coming years, particularly as more funding is potentially available for advocacy and the agency relies upon fee-for-service work less and less. If MAPC had been able to garner individual municipality endorsement of the plan, then they would be in a stronger position to hold those towns accountable for implementation and to empower local residents and NGOs to do the same, while maintaining a fairly non-adversarial role.

Recommendations to Other Agencies

Based upon the strengths and weaknesses of MetroFuture’s efforts to become a stronger advocate for smart growth in the region, I make these recommendations for other regional agencies or civic organizations contemplating a similar approach:
• Convene deliberation on policy options to address problems during the planning process and in implementation. This is not a neutral act. By posing the particular issue as a problem that needs to be addressed, or relying upon a previous plan to do so, the agency can engage others in identifying workable solutions and effective methods of implementation.

• The organizations that are closest to your planning process are the ones most likely to implement its conclusions. Conducting a stakeholder assessment before each planning iteration can enable you to bring together the most relevant and influential actors necessary to make change (Susskind, 1999). Securing commitments by those organizations to adopt the outcomes of the process can help drive implementation and build momentum if the plan seeks to influence stakeholders beyond those that were directly engaged.

• Use modeling and joint fact-finding among stakeholders to identify the highest leverage policies to achieve the goals of the plan. Use later stakeholder and public convenings to support deliberation between these high-leverage options to identify which specific policy changes are workable for participants. Keep in mind that policies that change authority or responsibility may create new mechanisms for resolving conflicts (e.g. regional agency review of local plans), but do not necessarily resolve the fundamental conflicts themselves (e.g. conflicts between short-term local interests versus long-term regional interests).

• Provide excellent information, tools, and training for stakeholders to use in advocating for the plan’s implementation. These artifacts and engagements can be quite powerful if collaboratively developed and if they clearly reflect the objectives of the agreed upon plan.

• Develop sequential processes to shift the planning effort between scales. A regional plan may receive broad support, but be opposed at the local level because the conceptual regional ideals become acute local changes. Your planning effort should have means to effectively engage relevant stakeholders at each scale and to work towards their alignment.

• Shift from the “expert consultant” framework to a “process consultant” framework whenever possible (Schein, 1990). This positions the agency as a partner for constituent municipalities and organizations, more than an authority that could evoke competing claims of legitimacy.

• Continue to acknowledge and engage a plurality of values and visions throughout implementation. The diversity of these does not disappear after an agreement has been made.
Final Thoughts

Given an increasing urban population around the world and burgeoning efforts to address climate change, regional equity, and other inter-jurisdictional issues, comprehensive planning for metropolitan regions is likely to increase in relevance in the coming years. This work is challenging to conduct and even more challenging to implement, particularly in areas without a strong regional authority.

MAPC’s experience conducting MetroFuture demonstrated some best practices worthy of widespread adoption and some shortcomings to be overcome. Their inclusive outreach, open visioning process, alignment of work with that vision, opening up of the “black box” of forecasting models, making choices and trade-offs explicit, and relentless pursuit of implementation are admirable and the combination is unprecedented. Their challenges with top-level buy-in, fundraising, and maintaining engagement through implementation are understandable given their lack of authority. Their task now is to figure out how to build upon their strengths to overcome those challenges and a more rigorous application of multi-stakeholder negotiation (Susskind, 1999), “process consulting” (Schein, 1990), and engagement with “vertical power” may be effective methods to bridge the gap and enable the “virtuous cycle of reform” posited by Margaret Weir and others (Weir et al., 2008).
Appendix

Appendix I: Interview Questions

- I’m evaluating the different elements of the MetroFuture process and identifying key lessons for future regional planning efforts.
- What role did you play in MetroFuture?

Key 6 questions (5 on substantive issues in 40 minutes, 3-4 more if time):

- **From your perspective, can you describe for me what the MetroFuture’s process was?** What was the purpose? What did it involve?
- **What do you think of MAPC’s use of modeling & build-out analyses in MetroFuture?** I’m told they did much more …
- **What did you observe about participation that was different?** Did you see groups involved that you normally don’t? Did you see them involved in a way that they’re not usually?
- **Do you think that MetroFutures got at more planning issues than other regional planning processes or that MAPC dealt with in the past?** What do you think got incorporated that went beyond previous efforts?
- **When I look at the plan it shows four different scenarios, do you remember that?** Do you think these were relevant and representative?
- **What did it accomplish?** Do you know of anyone using MetroFuture in their current decision-making?

- If time permits:
  - What do you think was the motivation for it? Who was behind it?
  - What would you’ve done differently?
  - To what extent do you think MetroFuture demonstrates a new way to do regional planning?
Appendix II: List of Interviewees

Jay Ash – Jay is the City Manager for the City of Chelsea, MA, and is the current President of the Metropolitan Area Planning Council (MAPC). He was very involved throughout the MetroFuture process.

Amy Cotter – Amy is the Director of Regional Plan Implementation for the Metropolitan Area Planning Council (MAPC). She was part of the leadership team for MetroFuture throughout the project.

Rick Dimino – Rick is President and CEO of A Better City, a nonprofit business association that represents its members’ interests in Boston-area transportation, land use, and infrastructure decisions. He was the previous President of the MAPC Executive Committee and was very active in the MetroFuture Steering Committee.

Marc Draisen – Marc is the Executive Director of the Metropolitan Area Planning Council (MAPC). He helped to lead almost all phases of MetroFuture.

Joe Ferreira – Joe is a Professor of Urban Planning and Operations Research in the Department of Urban Studies and Planning at MIT. He was a technical consultant to the MetroFuture modeling effort.

Kurt Gaertner – Kurt is the Assistant Director of Grants and Technical Assistance at the Massachusetts Executive Office of Energy and Environmental Affairs. He is also a member of the MAPC Executive Committee and was active in MetroFuture.

Aaron Henry – Aaron is the Senior Planner for the Town of Lexington, MA. He participated in several MetroFuture meetings as a facilitator and participant.

Mike Jaillet – Mike is the Town Administrator for the Town of Westwood, MA. He was also a member of the MetroFuture Steering Committee.

Cynthia Silva Parker – Cynthia is a Senior Associate at the Interaction Institute for Social Change (IIISC). She was an early consultant who helped lead the MetroFuture design process (i.e. Phase 0).

Martin Pillsbury – Martin is the Environmental Division Manager for the Metropolitan Area Planning Council (MAPC). He was an active leader in both the MetroPlan and MetroFuture regional planning processes.

Charlotte Kahn – Charlotte is the Director of the Boston Indicators Project at the Boston Foundation. She was active in the MetroFuture Steering Committee and Inter-Issue Task Force.
**Tim Reardon** – Tim is a Senior Regional Planner at the Metropolitan Area Planning Council (MAPC). He was involved in most phases of MetroFuture and was the author or editor for most of the published documents.

**Ken Snyder** – Ken is the CEO and President of PlaceMatters, a nonprofit consulting organization that supports planning efforts around the country in using technologies for public participation in planning. Ken was an early advisor of the MetroFuture process.

**Holly St. Clair** – Holly is the Data Services Director for the Metropolitan Area Planning Council (MAPC). She was part of the leadership team for MetroFuture throughout the project.

**Ron Thomas** – Ron was formerly the Executive Director at the Northern Illinois Planning Commission. He was an early advisor to the MetroFuture process.

**Karen Wiener** – Karen is the Deputy Director of the Citizens’ Housing and Planning Association (CHAPA), the non-profit umbrella organization for affordable housing and community development activities throughout Massachusetts. She was a participant in several of the MetroFuture meetings and is an active member of the Massachusetts Smart Growth Alliance.

**Wig Zamore** – Wig is a founding member of the Somerville Transportation Equity Partnership (STEP), a grassroots transportation equity and environmental justice organization, and the Mystic View Task Force, a smart growth advocacy organization in Somerville, MA. Wig was active in the MetroFuture Steering Committee throughout the process.
### Appendix III: Visioning Workshops Organized and Facilitated by MAPC

<table>
<thead>
<tr>
<th>Subregional Visionings</th>
<th>Date</th>
<th>Venue</th>
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<tbody>
<tr>
<td>Southwest Area Planning Committee (SWAP)</td>
<td>9/25/03</td>
<td>Dean College, Franklin</td>
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<tr>
<td>North Suburban Planning Council (NSPC)</td>
<td>11/19/03</td>
<td>Shamrock Elementary School, Woburn</td>
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<tr>
<td>Inner Core Committee</td>
<td>11/24/03</td>
<td>Belmont High School</td>
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<tr>
<td>Inner Core Committee</td>
<td>12/2/03</td>
<td>Northeastern University, Roxbury</td>
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<tr>
<td>MetroWest Growth Management Committee</td>
<td>12/3/03</td>
<td>MassBay Community College, Framingham</td>
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<tr>
<td>North Shore Task Force (NSTF)</td>
<td>12/4/03</td>
<td>Endicott College, Beverly</td>
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<tr>
<td>Inner Core Committee</td>
<td>12/9/03</td>
<td>Revere City Hall</td>
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<tr>
<td>Minuteman Advisory Group on Interlocal Coordination (MAGIC)</td>
<td>12/11/03</td>
<td>Littleton High School</td>
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<tr>
<td>South Shore Coalition (SSC)</td>
<td>1/10/04</td>
<td>South Shore Natural Science Center, Norwell</td>
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<tr>
<td>Three River Interlocal Council (TRIC)</td>
<td>1/24/04</td>
<td>Gillette Stadium, Foxborough</td>
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<tr>
<th>Region-Wide Visioning Event</th>
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<tbody>
<tr>
<td>Boston College Citizens Seminar</td>
<td>10/29/03</td>
<td>Hyatt Hotel, Boston</td>
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<tr>
<th>Special Interest Group Visioning</th>
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<tr>
<td>Tellus Institute</td>
<td>4/16/04</td>
<td>Tellus Institute Offices, Back Bay</td>
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<tr>
<td>Move Mass (Multi-Sectoral Transportation and Land Use Forum)</td>
<td>5/7/04</td>
<td>Brown Rudnick Berlack Israels, Boston</td>
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<tr>
<td>National Park Service and Stakeholders</td>
<td>6/14/04</td>
<td>NPS offices, Charlestown</td>
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<tr>
<td>Transportation Agency Officials</td>
<td>9/29/04</td>
<td>State Transportation Building, Boston</td>
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<tr>
<td>Transit Riders and Transit Advocates</td>
<td>9/30/04</td>
<td>Tufts Administration Building, Somerville</td>
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<tr>
<td>Recent Immigrants and their Advocates</td>
<td>10/13/04</td>
<td>United South End Settlements, South End</td>
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<tr>
<td>Regional Transportation Advisory Council</td>
<td>11/10/04</td>
<td>State Transportation Building,</td>
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<tr>
<td>Institution</td>
<td>Date</td>
<td>Location</td>
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<tr>
<td>Chambers of Commerce and Small Businesses</td>
<td>12/9/04</td>
<td>Federal Reserve Bank, Boston</td>
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<tr>
<td>Metro Mayors Coalition</td>
<td>1/4/05</td>
<td>Newton City Hall</td>
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<tr>
<td>Neponset Valley Chamber of Commerce</td>
<td>1/11/05</td>
<td>Analog Devices, Norwood</td>
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Appendix IV: Summary of Visioning Phase Activities

MetroFuture staff spoke to 1,000 people throughout the region at the following events:

- 10 Subregional Visioning Workshops
- 8 “unconventional” visioning events (one in each subregion)
- 9 Special Interest Group Visionings or Leadership Dialogues
- 1 Regionwide Visioning Event (Boston College Citizens Seminar)

MetroFuture staff collected:

- 1050 (and counting) vision statements about the future of the region
- 1000 statements about the region’s strengths
- 1000 statements about the region’s weaknesses

MetroFuture staff surveyed:

- 400 people through a telephone poll conducted by UMass Boston
- 500 people through the MetroFuture survey administered informally at events and through newspapers.

MetroFuture staff reviewed:

- 250 municipal planning documents and vision statements from 101 communities.

MetroFuture staff organized events specifically targeted for:

- High school students from Foxborough Charter School
- Planning Students at Salem State College
- Seniors Citizens in Lexington
- Recent immigrants and their advocates at the United South End Settlement House
- Transit Riders
- Small business owners
- Mayors and municipal officials
Appendix V: Vision Themes from “A Tapestry of Visions” Report

CIVICS AND GOOD GOVERNANCE
• Regional-mindedness—Individuals and communities think, work, and play regionally.
• Growth is not haphazard—it is guided by informed, proactive planning efforts.
• Enlightened political leaders represent our diversity and practice “open door politics.”
• Efficient governments have the resources they need to provide excellent services.
• A truly civil society—everybody votes and volunteers to improve their community.
• A shared tax base and strategic tax policies free communities from dependence on local property taxes.

DIVERSITY AND OPPORTUNITY
• Commonwealth Justice—social equity, access to resources, and equal opportunity.
• The region embraces diversity and integration, and provides people of every race and culture with opportunities to succeed.

BUILDING COMMUNITY: RELATIONSHIPS AND RESOURCES
• Every school gets adequate funding, and every student gets a top-notch education.
• Schools will provide expansive education opportunities, through innovative lessons and partnerships.
• Communities help young people to grow up as healthy adults and responsible citizens.
• Young and old share the region’s resources, and they respect and learn from each other. Communities respect their elders and provide for the frail.
• Opportunities for higher education and lifelong learning keep the region thinking.
• Arts and culture are woven into the fabric of daily life in the region.
• We all protect and take pride in our historical heritage.
• Cities and towns are distinct from one another and each has a special community spirit.

THE BUILT ENVIRONMENT, HOUSING, AND LANDSCAPE
• Well-built town centers and main streets regain prominence as centers of community life.
• Families are drawn to vibrant, well-maintained urban neighborhoods with good schools.
• The region has more compact, mixed use developments and fewer sprawling subdivisions.
• We have more housing, more diverse housing, and more affordable housing.
• Everybody lives in a great, stable neighborhood that they call home.
• Our diverse regional landscape includes open spaces and working farms.

NATURAL RESOURCES
• Natural ecosystems are healthy and wildlife are abundant.
• Clean, renewable energy powers the region, and we save resources through conservation and recycling.
• The environment is clean because pollution is minimized and polluted areas are restored.
• Clean water is plentiful because supplies are protected and it is used wisely.

WELLNESS AND RECREATION
• Residents support and enjoy a regional ‘Emerald Necklace’ of connected parks and playgrounds.
• Healthy surroundings and healthy choices produce active, healthy residents.
• Affordable health care is accessible to all.
• Everybody feels secure and is safe from crime.

TRANSPORTATION
• Communities make a plan for a regional transportation system and stick to it.
• There is a magnificent public transportation system and people actually use it.
• People get around by walking or biking because it is convenient and safe.
• People live closer to where they work, shop, play, and go to school.
• There is less traffic because people use their cars less.
• Residents with disabilities enjoy the same access and opportunities as everyone else.

ECONOMIC OPPORTUNITY, CORPORATE RESPONSIBILITY
• The region leads the ‘creative economy’ without abandoning its industrial roots.
• Workers at all skill levels can find a good job that pays a living wage and provides an opportunity for upward mobility.
• Corporations are responsible for their actions and committed to our communities.
• University and institutions are assets to the region and good neighbors to their communities.
• Residents enjoy low taxes and a low cost of living.
**Appendix VI: MetroFuture Active Steering Committee Members**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
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<tbody>
<tr>
<td>Christine Araujo</td>
<td>Boston Connects</td>
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<tr>
<td>George Bailey</td>
<td>Town of Sharon</td>
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<td>Ed Bates</td>
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<td>Richard Canale</td>
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<td>John Ciccarelli</td>
<td>UMass Boston</td>
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<td>Michelle Ciccolo</td>
<td>Town of Hudson</td>
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<td>Eva Clarke</td>
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<td>Buzz Constable</td>
<td>A.W. Perry, Inc.</td>
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<td>Gloria Cross Mwase</td>
<td>Jobs for the Future</td>
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<td>Marcy Crowley</td>
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<td>Xavier de Souza Briggs</td>
<td>Massachusetts Institute of Technology</td>
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<tr>
<td>Pablo de Torres</td>
<td>MIT Industrial Liaison Program</td>
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<tr>
<td>Rick Dimino</td>
<td>A Better City</td>
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<tr>
<td>Betty Sullivan</td>
<td>A Better City (Rick’s Assistant) (not a member)</td>
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<td>Lynn Duncan</td>
<td>City of Salem</td>
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<td>Tom Ennis</td>
<td>Massport</td>
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<td>Joe Ferreira</td>
<td>Massachusetts Institute of Technology</td>
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<tr>
<td>Ben Fierro</td>
<td>Lynch &amp; Fierro LLP</td>
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<tr>
<td>Doug Gillespie</td>
<td>Chair METROWEST</td>
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<td>James Goldstein</td>
<td>Tellus Institute</td>
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<tr>
<td>Nancy Goodman</td>
<td>Environmental League of Massachusetts</td>
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<td>Aaron Gornstein</td>
<td>Citizens’ Housing and Planning Association</td>
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<td>Vineet Gupta</td>
<td>Boston Transportation Dept.</td>
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<tr>
<td>Ginny Hamilton</td>
<td>Fair Housing Center of Greater Boston</td>
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<tr>
<td>David Harris</td>
<td>Charles Hamilton Houston Institute for Race &amp; Justice</td>
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<tr>
<td>Bennet Heart</td>
<td>Noble &amp; Wickersham LLP</td>
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<td>Jan Henderson</td>
<td>MASCO</td>
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<td>Donna Jacobs</td>
<td>MetroWest Growth Management Committee</td>
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<td>Michael</td>
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<td>Wig</td>
<td>Zamore</td>
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Appendix VII: Inter-Issue Task Force Members

- Jay Ash, City of Chelsea
- Caroline Connor, 128 Business Council
- David Dixon, Goody Clancy
- Jim Gomes, ELM
- John Ciccarelli, UMass Boston
- Dennis DiZoglio, MBTA
- Michael Goodman, Donahue Institute
- Charlotte Kahn, The Boston Foundation
- Sarah Kelly/Vivian Li, Boston Harbor Association
- Kathy Kottaridis, Mass DBT
- Helen Lemoine, Leadership MetroWest
- Jeff Levine, Town of Brookline
- Paul Reville, Rennie Center
- Bob Reyes, MassPort
- Jim Stockard, Harvard GSD
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