THE DECISION-MAKING PROCESS IN

METROPOLITAN PLANNING ORGANIZATIONS

by

Youcef F. Hamroun

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Applied Sciences in Civil Engineering

Summer 2006

UMI Number: 1435819

THE DECISION-MAKING PROCESS IN

METROPOLITAN PLANNING ORGANIZATIONS

by

Youcef F. Hamroun

Approved: ____
Shinya Kikuchi, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved: ____
Michael J. Chajes, Ph.D.
Chair of the Department of Civil and Environmental Engineering

Approved: ____
Eric W. Kaler, Ph.D.
Dean of the College of Engineering

Approved: ____
Daniel Rich, Ph.D.
Provost

ACKNOWLEDGMENTS

Dr. Shinya Kikuchi, for his academic advice and guidance, his vast knowledge, and his support

My wife, Leila, for standing by me in difficult times, and patiently supporting me these past two years

My children, for making me forget hard times

TABLE OF CONTENTS

LIST OF FIGURES

ABSTRACT

Metropolitan Planning Organizations (or MPOs) are at the forefront of the transportation planning process, making decisions about transportation investments at a time when transportation planning goes beyond issues of mobility to influence patterns of growth and economic activity, provide accessibility to land, and address non-transportation-specific issues such as air quality, environmental resources consumption, social equity, ‘smart growth’, or safety and security.

In recent years, local and metropolitan leaders have been demanding more decision-making authority and control over federal funding in order to address these concerns. However, decision-making in metropolitan planning is a sophisticated, complex process that goes beyond the straightforward engineered design approach; it requires active involvement with political, economic and social decision-makers in the community. This complex articulation allows the blending of technical, regulatory, political and civic criteria into spaces, shapes, plans and designs.

This thesis examines the decision-making mechanisms involved in this process. The first chapter provides a review of the history of MPOs and the determining factors and events that led to their current structure. The second chapter details the different structural components and decision-making bodies of MPOs. The third, and final, chapter provides a comparative analysis of the structure and decision-making bodies of a sample of sixty-five MPOs, looking for commonalities or differences.

This thesis notes that although MPOs were created by a federal legal mandate, the *Federal-Aid Highway Act* of 1962, they have been implemented over a multitude of states, geographical terrain and socio-economic backgrounds. Common rules of decision-making, procedures and practice, have been interpreted and enacted differently, with variations in terms of area, population served, physical geography, budgets and funding availability and political representation.

The analysis of the sample MPOs established that two basic premises apply to all MPOs. The first is that they are all structured with professional staff and technical committees, intended to inform the decision-making process in a professional and unbiased way. The second is that bias finds its way into the decision-making process because key decisions are made at the Policy Board level, where elected representatives play a determining role, leaving MPOs subject to the political fluctuations of electoral cycles.

Despite these commonalities, the thesis demonstrates that direct comparisons between MPO decision-making processes are difficult because the process is influenced by other factors, such as local and regional socio-economic conditions, complexity of transportation networks, or availability of multi-modal systems, that can vary widely from one urban area to another. The thesis also notes that in some cases, the MPO is not the only decision-maker in the region regarding transportation planning matters. The thesis recommends that the impact of these variations on the decision-making process be addressed in a future study of a narrow sample of MPOs, with a case-by-case review of specific decisions within a set time frame..

The thesis concludes that as new technologies come into play, the complexity of multi-modal, multi-jurisdictional, and multi-technological systems will only increase, as will the role of Metropolitan Planning Organizations. In order to play that role efficiently, judiciously, and in timely manner, MPOs will have to develop a streamlined, reliable decision-making process, striving toward objectivity but with enough flexibility to take into account not only the disparities and technological complexities of transportation systems, but also the intrinsic political and human nature of their mission.

INTRODUCTION

Transportation is a fundamental component of any society, whatever the level of development or economic strength. Getting from point A to point B is a basic need, be it on foot, by horse-drawn cart, in a car or by high-tech automated subway trains. Transportation systems affect all of us, but are particularly critical to the eighty percent of Americans who live in federally-defined metropolitan areas, and generate over eighty-five percent of the nation's economic output and jobs. [1]

In this context, the Metropolitan Planning Organizations (or MPOs) are key structures, at the forefront of the transportation planning process, with important abilities to plan and make decisions about transportation investments that will keep population and economies moving, at a time when transportation planning goes beyond issues of mobility to influence patterns of growth and economic activity through accessibility to land, and address concerns such as air quality, environmental resources consumption, social equity, 'smart growth', economic development, safety and security. And in recent years, local and metropolitan leaders have been demanding more decision-making authority and control over federal funding in order to address these concerns. But how exactly do they intend to do that?   What decision mechanisms will MPOs implement to ensure that the continuing changes in transportation technology, but also in analytical, planning and design tools, and public attitudes, flexibility and adaptability are incorporated into a planning discourse that will truly benefit those populations most affected by the consequences? Establishing which decision-making mechanisms work in such a context will be key to MPOs' future performances.

Decision-making in metropolitan planning is a sophisticated, complex process that goes beyond the straightforward engineered design approach, to address not only technical problems, but also socio-economic and environmental factors. It is not limited to the drafting table or the calculations, and requires active involvement with political, economic and social decision-makers in the community. Metropolitan planning organizations may call upon fields as diverse as transport management, civil/structural engineering, transportation engineering, urban planning, geographical information systems, data collection/interpretation software, social and environmental sciences, business and economics. They must also take into account all the relevant local, state or federal legislations and policies in the communities where the planning activity occurs, to ensure the feasibility of the plan and pro-actively identify potential legal hurdles. This complex articulation allows the MPOs to develop a vision to best use land and resources, blending technical, regulatory, political and civic criteria into spaces, shapes, plans and designs. This vision develops progressively, taking at times complex and obscure technical and non-technical arguments and turning them into visible scenarios that can be decided upon by the MPO, and presented to, and supported by, civic associations, other elected officials and the general population.

This vision also becomes a stable reference point for future planning activities, when parameters may change, or new unforeseen conditions appear.

Throughout its development, the MPO's planning vision and program have been shaped by decisions made at a number of levels, by technical advisors, through the input of community representatives, by MPO staff. But no decision is as crucial as that which is made at the highest level: the MPO policy board. It is the board that has the final say on whether the plan developed will actually be authorized for implementation.

This thesis aims to be a first step in an examination of these decision-making mechanisms by providing an overview of the planning decision-making process as it has developed historically, and as it is practiced to date through an analysis of the existing decision-making structures. It will do so by reviewing the history of MPOs and the determining factors and events that led to their current structure. It will then examine in further detail the different structural components and decision-making bodies of MPOs. Finally, it will analyze a sample of MPOs to see if and how these differs, and if patterns can be established regarding the factors that may affect the overall scope, reach, composition and decision-making structures of MPOs.

Future work will be required to take the next step: narrow the sample of MPOs and examine on a case-by-case basis specific decisions within a set time frame, through a quantitative and qualitative review of the decision-making process, and the consequences of the decisions taken.

Chapter 1

METROPOLITAN PLANNING ORGANIZATIONS - A BRIEF HISTORY

In the planning process, physical, operational and policy aspects of cities and their transportation systems must be pulled together. Vukan Vuchic notes that this can be done at four levels: planning for the individual facility such as boulevard, intersection, bus line – or Level IV; planning for the single mode network or systems (i.e. a regional rail system, a street network) – or Level III; planning for the multimodal coordinated system, incorporating different transport modes, pedestrian zones, etc –or LEVEL II; and, finally, coordinating the transportation system and the city's physical components, as well as economic, social, environmental conditions – or Level I, "the highest level of planning and operational integration."[2]

By legal mandate, this highly complex level of planning is usually performed by the metropolitan planning organizations (MPOs). At this level of planning, the goal is to address, theoretically and practically, the organization, financing, planning and implementation of transportation systems, coordinated with other activities. In this sense MPOs play a pivotal role in addressing land use, zoning, transportation networks and facilities issues critical to achieving achieve satisfactory levels of transportation system efficiency and overall city livability.

The Early Years of Metropolitan Planning Organizations

Until 1962, states and localities generally conducted their transportation planning in an individual, uncoordinated manner. Attempting to remedy this fragmentation, the *Federal-Aid Highway Act* of 1962 introduced the "3C process." The act defined an *urban* area as one having 50,000 or more population, and mandated that any future federal aid projects in such urban areas be based on a Continuing, Comprehensive, and Cooperative urban transportation process. It required that such a process be in place by July 1st 1965. By taking the planning process from the individual local facility to the regional level, the legislation created a new model, one that would incorporate the variety of factors affecting regional development (economic, social, financial ,environmental, etc); that would remain relevant by undergoing periodic reviews and updates, and that would incorporate both horizontal and vertical coordination between local, state and regional levels, and between the different planning and decision-making entities at each level.

Recognizing the difficulty of ensuring such a cooperative process in a context of multiple jurisdictions, the act called for the creation of *Metropolitan Planning Organizations*. These new instruments were to be funded by allocating 1.5% of all federal highway funds to planning and research. This first step of funding was followed by additional aid in the form of the *Urban Mass Transportation Act* (UMTA) of 1964 that allowed up to two-thirds of federal funding for capital costs of mass transportation projects, including funds for research, development and demonstrations. To bolster the newly formed MPO movement, the 1964 Act imposed a 50% limit on federal funding for those regions that had not implemented the new planning process. The *Urban Mass Transportation Act* of 1964 was the first real effort to provide federal assistance for urban mass transportation; its goal was "to encourage the planning and establishment of area-wide urban mass transportation systems needed for economical and desirable urban development."[3]

The *Federal-Aid Highway Act* (FHWA) of 1968 further supported this approach by establishing the *Traffic Operations Program to Improve Capacity and Safety* (TOPICS). TOPICS was another effort to expand the use of traffic engineering techniques, funded with $200 million dollars, of which the federal matching share was set at 50%. It boosted the MPOs' approach by mandating that TOPICS projects were to result from the 3C urban planning process. This cohesive approach was also bolstered by the *Intergovernmental Cooperation Act* of 1968, which required that federal agencies notify state governments or legislatures of grant-aids to their states to allow them to incorporate such aid into their planning. The resulting Circular No. A-95, "Evaluation, Review, and Coordination of Federal Assistance Programs and Projects", issued by the Bureau of Budget in July 1969, established the process for state and metropolitan area "clearinghouses," empowered under state or local laws to perform comprehensive planning in an area, to review and comment on projects proposed for federal aid in terms of their compatibility with comprehensive plans, and to coordinate among agencies that may be affected by the projects.

This multidisciplinary approach was also at work in other areas, not strictly linked to transportation planning, but overlapping it in its requirements. One such instance was the *National Environmental Policy Act* of 1969 which required that federal agencies use a systematic interdisciplinary approach in the planning and decision-making processes that affected the environment. It was also reinforced over the years in the updates and amendments to the UMTA and the FHWA.

Metropolitan Planning Organizations Regulations Revisions in the 1970s and 1980s

By 1970, there were 270 urbanized areas actively involved in the "3C" urban transportation planning process. In 1975, The UMTA and the FHWA issued the most sweeping regulations to date. These regulations provided for the designation of MPOs by governors, to be established when possible by the state legislature. They provided for representations of the principal elected officials in the MPOs, setting the MPO to become the center of cooperative decision-making by local jurisdictions. These regulations established as a condition for federal funding many of the staple requirements of MPOs to date: preparation of a multi-year planning prospectus, the submittal of an annual Unified Planning Work Program (UPWP) specifying all transportation-related activities, a multi-year Transportation Improvement Program (TIP), and a long-term transportation plan.

In their original configurations, MPOs had a challenge in coordinating multiple political entities, transportation modes, and socio-economic factors, with local governments often pushing for their interests. They also had to contend with the discontent of certain state governments that considered the federal requirements for MPO program-funding a pre-emption of states' rights to self-determination. This tension was to remain for a number of years, although an Urban System Study submitted to Congress in January 1977 found that "planning requirements were being conducted responsibly by all participants (…and) the process was working properly."[4]

The Surface Transportation Assistance Act of 1982 did not make things easier, as it shifted increased latitude to local governments in the use of highway and mass transportation funds. It was followed by government regulations, issued in 1983, that limited federal guidance on the process and focused instead on its goals. The regulations reduced the role of the federal government in urban transportation planning, and limited statutory requirements to a Transportation Plan, a TIP (with an annual or bi-annual component), and a UPWP for areas with populations of 200,000 or more. The process was to be self-certified by the states; details of process or factors to consider in the planning process were removed from federal regulation and left to states to decide. By giving local governments more latitude, and moving away from reinforcing fundamental elements of the urban transportation process nationwide, the 1983 regulations made it more difficult for MPOs to achieve the "Comprehensive" component of the "3C" planning process as local interests and lobbies prevailed.

The Impact of the 1991 *Intermodal Surface Transportation Efficiency Act* and Changes to Date

Although weakened by local competing interests and "3C" planning difficulties, MPOs got a boost from the 1991 *Intermodal Surface Transportation Efficiency Act* (ISTEA). ISTEA focused on a systems approach to transportation, and coordinated intermodal systems. It required a stronger role for MPOs in coordinating regional efforts for achieving optimal solutions, and incorporated flexibility in funding, thus removing the obstacle of strict earmarking of funds for specific modes. ISTEA also allowed for the designation of more than one MPO for an urban area if the governor determined the size and complexity of the area warranted it. It reintroduced the long-term plan, to be updated regularly, requiring that the plan identify transportation facilities as an integrated transportation system, including financial plan, capital investments, enhancement activities, and a demonstration of the effective use of existing transportation systems. It also designated urbanized areas with a population larger than 200,000 as transportation management areas (TMAs) with additional requirements related to congestion management, project selection, and certification; these areas were required to have a congestion management system (CMS) for the effective management of existing and new transportation facilities. Finally, TIPs were to be prepared and updated every two years, with a priority list of projects and funding expectations, to be approved by the governor and the MPO. Projects were to be selected from the TIP by the state, but this had to be done in consultation with the MPO. Finally, ISTEA included throughout the process a mechanism for providing reasonable opportunity for public comment and input into urban transportation planning.

A 1995 study of MPOs by the U.S Advisory Commission on Intergovernmental Relations (ACIR) found that ISTEA affected MPOs by increasing public participation, and enhanced intergovernmental coordination and consideration of intermodal issues. Although MPOs were faced with unrealistic expectations, uncoordinated deadlines, and frictions both within the MPOs and with the state departments of transportation, the overall sentiment of study participants supported the basic concepts and approach of ISTEA.

With the changes implemented by ISTEA, MPOs reflected the evolution in urban transportation planning on issues of growing congestion, environmental quality, and sustainable development. They were at the forefront of an effort to make the planning process more inclusive for public groups and individual citizens. With the continuing changes in transportation technology, but also in analytical, planning and design tools, and public attitudes, flexibility and adaptability became key factors in maintaining the significance of MPOs in the planning discourse.

By the late-1990s MPOs had acquired a "quasi-governmental authority" [5] through the mechanisms of ISTEA-1991 and its successor legislation TEA-21 – 1998. They became key players in regional transportation planning, pulling together political representation, financial backing, advanced technical planning expertise, and intricate data collection and analysis in an attempt to bring cost-effective and efficient, scientifically optimized, answers to transportation planning needs such as spatial distribution of facilities and services, development of technologies in various modes of transportation, etc. The fact that each day, the lives of almost all 260 million Americans are affected by our nation's transportation system, means that transportation networks are key the nation's prosperity and quality of life, beyond providing for the mobility of goods and people. Indeed, it can be said that the work of MPOs "influences patterns of growth and economic activity (…), accessibility to land, (…)air quality, environmental resources consumption, social equity, 'smart growth', economic development, safety and security."[6]

The Challenges and Limitations Facing Metropolitan Planning Organizations

In the context described above, the importance of the Continuing, Comprehensive, and Cooperative urban transportation process cannot be underestimated. For MPOs can only be successful if they go beyond transportation professionals and elected officials to engage the business community, community groups, members of the public and other agencies to address non-transportation issues such as the economy, land use, social equity, mobility and accessibility, health and safety, environmental impacts, financial constraints, sustainability, etc. The need for the "3C" process is particularly acute in two aspects that affect an MPO's decision-making process, and have a political corollary: financial planning and public input. It is also critical to helping MPOs overcome the limitations of how they are structured, and the challenge of implementation.

Financial Planning

Transportation planning involves significant financial commitments at the local, state, regional and national levels. Transportation plans do not exist in a vacuum; their implementation requires a consistent, dedicated source of funding, with a financial plan that identifies sources of funding for needed investments, and for the maintenance and operation of the existing transportation system. The financial plan makes assumptions as to the continued availability of funding for a set period of time - such as federal funding – and uses forecasted income from sources such as income tax, sales taxes, tolls, or various fuel taxes.

MPO funding sources for financial planning are diverse, ranging from the federal to the local level, and are often perceived and allocated differently, depending on which level is involved. For example, there is the planning and funding of projects to improve the efficiency of freight movement in the transportation system: at the federal level, ISTEA-1991 and its successor legislation, TEA-21st Century, establish much of the structure of federal assistance for surface transportation projects, with planning and funding of federally assisted projects carried out primarily by local MPOs and by state departments of transportation; however, on the local level, consideration of freight improvement projects as part of the local planning process is limited because the process, at that level, is oriented to projects that clearly produce public benefits, such as passenger-oriented projects.

In the current tight budgetary environment, it is clear that funding challenges will get starker. This has led to a search for funding alternatives, such as expanding financing mechanisms to access new sources of capital and stimulate additional investment, reviewing tolling and pricing strategies, investigating loans and loan guarantees, providing credit assistance to state and local governments for capital projects, and a tax policy that would provide incentives to the private sector for investing. All these options bring into play one of the key, non-transportation-specific factors of MPOs: politics.

Public Input

Transportation planning requires a comprehensive, holistic look at the needs and the future of the region and its inhabitants, including an effective community involvement process that will foster a team approach to the plan and the recommended solutions, making technical implementation and financial backing easier to secure.

Who is the public? It is a diverse group, anyone who resides in the potentially affected area or does business in it, private and public sector providers, community leaders. The least perceptible of these varied voices is that of the low-income or minority households, and the elderly, whose input is too often missed, and should be solicited and encouraged. In the MPO context, gathering public input requires tact and conciliation, as in many instances, there are different individuals or groups involved that may each have a different agenda. This is where MPOs need to pull together transportation planners, elected officials and citizens advisory committees, to coordinate the needs, desires and priorities of the various groups, and incorporate them into the decision-making process, from the setting of goals and objectives, to the generation of scenarios and alternatives, the evaluation of these scenarios/alternatives, and the informed selection of the scenario/alternative to be pursued. This is not only politically desirable; it also enriches the decision-making, and the resulting planning product, by incorporating a key factor: future users or beneficiaries.

Limitations and Challenges

Beyond external factors such as funding and public input, metropolitan planning organizations also have limitations that may be inherent in their structure. They are at risk of fragmentation: because of the intervention of multiple local partners and decision-makers, MPO plans are sometimes at risk of representing a compilation of a variety of independent, at times competing, local plans. Furthermore, with the implementation funding still generally modally-provided, each mode may be planned by a different agency. Although the emphasis of ISTEA on a multimodal approach is helping in part remedy this fragmented situation, there are still strong forces that can potentially prove divisive rather than inclusive.

They also face tough challenges when it comes to the issue of implementation. The pre-eminent role of the MPO at Level I of the classification of planning levels makes it a pivotal component of the long-term sustainable development of metropolitan areas. However, the success of MPOs' interventions is often limited by their inability to bridge the gap between the two facets of any successful planning enterprise: plans on the one side and implementation on the other. Indeed, in many states these regional governmental organizations lack the power to implement plans if individual counties, townships, and other local units do not comply.

Situations vary by state, but more often than not, lacking jurisdiction over local governments, MPOs, in their advisory capacity, may often have little impact, and local interests and political and lobbying pressures can defeat much of Level I planning work. This situation may be changing, however, as more of the local representatives are given a voice through voting membership in policy board committees, and as they come to realize that through MPOs lies an opportunity to receive federal funds for local benefits.

NOTES CHAPTER 1

[1] Population Change in Metropolitan and Micropolitan Statistical Areas: 1990–2003, http://www.census.gov/prod/2005pubs/p25-1134.pdf

[2] Vuchic, Vukan R., Transportation for Liveable Cities, Center for Urban Policy Research, New Brunswick, NJ, 2000: 82

[3] Weiner, Edward, Urban Transportation Planning in the United States – A Historical Overview, Revised and Expanded edition, Praeger, Westport, CN, London, 1999: 42

[4] Weiner, Ibid Note 3: 102

[5] Orfield, Myron, American Metropolitics – The New Suburban Reality, Brookings Institution Press, Washington DC, 2002: 138

[6] *The Metropolitan Transportation Planning Process: Key Issues – A Briefing Notebook for Transportation Decision makers, Officials and Staff*, Transportation Planning Capacity Building Program, FHA-FTA, http://www.planning.dot.gov/documents/BriefingBook/BBook.htm

Chapter 2

METROPOLITAN PLANNING ORGANIZATIONS - STRUCTURE AND DECISION-MAKING PROCESS

The Structure of Metropolitan Planning Organizations

Successful "performance" of an MPO is linked to how all key players interact, cooperate and reach decisions in a context of group decision-making rendered more complex by the incorporation of public input at all stages. In this forum, the decision-making process must involve planning professionals, regional agencies, and local government, but also community representatives and private citizens, each with different levels of planning expertise, and sometimes with differing agendas. It is no longer enough for a professional planner to present his project and ask for an up or down vote from citizens or politicians. MPOs have become the lead planning agencies in rapidly transforming and expanding metropolitan areas; it is critical that their structure and functional mechanisms be evaluated, to ensure that they result in a collaborative decision-making process that transcends individual, short-term interests to address the larger issues at hand.

The collaborative decision-making process is a critical component of the legislative texts governing MPOs: by law, the only structural requirement of an MPO designation is that it clearly identify the policy body that is the forum for cooperative decision-making which will be taking the required approval actions as the MPO (FHWA – 23 CFR §450.306-b). Most MPOs go further, structured not only with a policy board with the ultimate authority and decision-making ability, but also with an executive committee, technical and citizen advisory committees providing input and recommendations, and supporting director and professional staff.

The Policy Board. The policy board is made up of voting elected officials from each local government in the MPO, and non-voting, ex-officio members representing state and local departments of transportation, transit authorities, the federal Highway Administration and Transit Administration, as well as regional transportation actors, such as airports, ports, etc. The policy board adopts final plans, programs and policies, and governs advisory committee activities.

The Executive Committee. The executive committee facilitates the administration of the MPO and is subject to the direction of the policy board; as such, the executive committee's actions cannot conflict with decisions of the policy board. Members of the executive committee usually consist of the Chair, Vice-Chair, Secretary-Treasurer of the MPO, and two or more at-large MPO representatives selected by the policy board.

The Technical Advisory Committee. The Technical Advisory Committee (TAC), sometimes called technical coordinating committee (TCC), is generally made up of voting and non-voting members, technical and/or professional staff from each of the local governments, state and local departments of transportation, transit authorities, federal highway and transit administrations, as well as regional transportation actors, such as airports, ports, etc. The TCC reviews plans, reports, programs and policies; makes recommendations to the board, acting as a technical coordination hub for the multiple partners involved; and may establish subcommittee(s) to address significant areas of interest such as bicycle and pedestrian traffic, environmental issues, public transportation, etc.

The Citizens Advisory Committee. The Citizens Advisory Committee (CAC) serves as a conduit for public input on regional transportation planning issues, gathering local input and submitting community views to the policy board.

The Professional Staff. The MPO professional staff, under the direction of the MPO Director, carries out transportation planning activities, conducts studies, collects data, etc. It supports Policy Board, TCC and CAC activities by providing members with technical assessments and evaluations of proposed transportation initiatives, and may engage consultants for additional data collection as necessary. It plays an essential role as manager of the planning process, ensuring inter-agency cooperation and facilitating public input and feedback.

The articulation of all the participants in the MPO process is set out in an agreement between the different government entities involved, defining the duties and responsibilities of each entity, outlining the organizational structure of the MPO and laying out the cooperative procedures that will be applied throughout the regional transportation planning and programming process (FHWA 23 CFR §450.310). This basic structure is meant to allow MPOs to effectively make planning and programming decisions, following the "3C" process, in the following seven areas set out in TEA-21 (TEA-21 [1203(f)]):

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

- Increase the safety and security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility options available to people and for freight;
- Protect and enhance the environment, promote energy conservation, and improve quality of life;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

Decisions will involve developing and approving:

- a unified planning work program or UPWP;
- a public involvement process or PIP;
- a financial plan;
- a long-range transportation plan, or LRTP;
- and a transportation improvement program, or TIP.

For each of these components, decision-making will be key as it will address not only a vision of where the region is going, but also how funding will be obtained, and – perhaps more importantly – where it will be spent. With MPO investments totaling budgets in the billions of state and federal dollars, the decisions on how and where to invest these funds have vast land use, financial and socio-economic implications.

The basic structure of MPOs presented above is reflected in four major types of MPOs. The most common is the Council of Governments (COG), a cooperative organization of local governments with each local government having one representative with one vote, regardless of the area and/or population they represent. In other MPOs, the MPO's mission is strictly limited to transportation planning, with members of the board appointed by local or state elected officials, or delegates from COGs, again each with full vote regardless of the size of the government they represent. Some of the earlier MPOs were encompassed into one county government, dealing only with that county as planning area; this has become much rarer as metropolitan areas have expanded to include more than one county. Finally, the fourth and rarest type is the MPO as a field office of state government transportation engineers and planners.

The Decision-Making Process

As was established previously, the goal of MPOs is not to produce finished, unchangeable solutions; rather they are to develop solutions from a continuous dialogue between professional planners, financial and political backers and future users. The process is to incorporate the technological expertise of professionals in the field and to be transparent, so as to integrate the diversity of interests and expressions involved in the collaborative process.

The challenge for MPOs is to implement this theoretical participatory ideal into a practical, workable decision-making process. The resulting structure of MPOs is an attempt to implement the principles of a participatory process into a working, effective organization, with a baseline professional staff, supporting Policy Board, Technical Advisory Committees, and Citizens Advisory Committees.

However, the decision-making process is complicated by the regional nature of the organization, and the fact that within each of these groups – political representatives, technical professionals and public representatives – local interests compete, and goals may be at odds. In such a context, the efficacy of an MPO will depend on an effective decision-making process, what should perhaps be called an effective “consensus-building” process.

Key decisions in MPOs are made following a voting process, which is implemented at two levels: the first level is that of the Technical Advisory Committee (TAC), with members voting on recommendations to the Policy Board; the second – and most important - is the Policy Board itself, whose members adopt final plans, programs and policies. MPO professional staff and Citizens Committees provide invaluable support and input, but the decision rests with voting members at these two levels. In reference to the Policy Board, MPOs vary in the authority they confer to the Executive Board, allowing for administrative changes to transportation planning documents without full Policy Board voting either following set criteria (such as a maximum dollar figure) or following a pre-determined memoranda of understanding (MOU).

At these two levels, there are often challenges to get jurisdictions to agree, or to avoid having one major municipality dominating the debates. Staffs from MPOs, state DOTs and transit agencies noted in a recent session on transportation planning and MPOs organized by the FHWA Office of Planning that “just because (members) sit on the same board doesn’t mean they get along,”[1] as witnessed by the difficulties they experienced in getting board members to think beyond their jurisdiction, in regional terms. They also noted that despite best efforts, long-standing political issues did tend to spill into the MPO work. Possible remedies to these drawbacks have been progressively implemented in some MPOs as follows: ensuring all jurisdictions are represented on the board and technical committees, creating a memoranda of understanding delineating roles and responsibilities of participants, developing criteria systems for the TIP to limit the impact of politics in the decision-making, and bringing in local business people, who often have the ear of decision-makers. Other improvements have included increasing the role of State DOTs beyond that of providers of resources and technical support, to act as disseminators of information, and connectors between multiple MPOs. Typically the role of DOTs is often highest right after an MPO's establishment and tends to taper off after a few years; however, DOTs must remain key players in fostering regional thinking and cooperation between jurisdictions.[2]

It must also be underscored that members on the MPO boards and committees are not elected; they are designated, and as such are not subject to federal laws requiring an organizational or voting structure that ensures balance in voting and prevents bias in voting for the allocation of transportation investments. Furthermore, the two most common types of MPOs (COGs or adjunct to COGs) are structured so that each board member's vote carries the same weight. In a system where geographical areas and municipal boundaries serve as basis for board membership and lower-density areas are on a par with high-density urban areas, the absence of any proportional or weighing system based on population means that small governments get equal say in policy-making and allocation with large urban municipalities, often resulting in the under representation of urban centers, and a voting bias that can affect the distribution of transportation investments. An example of such a bias can be found in Nelson, Sanchez, Wolf and Farquhar's analysis of six MPOs,[3] half dominated by suburban representation, the other half with a reasonable relationship between urban population and urban representation on the MPO boards. In the first group, expenditures for public transit ranged from a low of three percent to a high of around ten percent, with roads and highways representing around eighty percent of expenditures. In the second, transit expenditures ranged approximately from forty-nine percent to fifty-five percent. The analysis concluded that "transit expenditures (were) positively correlated with metropolitan population size, (…) the number of suburban board members was negatively correlated with transit expenditures; (…) the impact of an additional suburban voter on transit spending ranged from a one to a nine percent decrease."[4]

This scenario may be changing progressively, as demonstrated in the example of the San Diego Association of Governments, or SANDAG (CA, 1967), where voting is now weighted, based upon membership and the population of each jurisdiction, providing what the *2004-2005 Overall Work Program* describes as a "more accountable and equitable representation of the region's residents."[5] In SANDAG, the board of directors consists of elected officials, a mayor, councilmember or supervisor from each of the region's 18 incorporated cities and the county government. Non-voting representatives from Imperial County, the California Department of Transportation, the U.S. Department of Defense, the San Diego Unified Port District, the San Diego County Water Authority, the Metropolitan Transit Service, the North San Diego County Transit Development Board, and a representative from the Republic of Mexico serve on the Board as advisory members. Amongst the eighteen voting members, a weighted vote distribution reflects population distribution, going for example from a factor of one (1) for the representatives of Coronado, to a factor of five (5) for the representative of Escondido, sixteen (16) for the representative of the County of San Diego, and forty (40) for the representative of San Diego.

NOTES CHAPTER 2

[1] *9th National Conference on Transportation Planning for Small & medium-Sized Communities, Colorado Springs, Colorado – Session 2: MPOs: Who, What and How,* 22 September 2004, http://www.planning.dot.gov/Documents/TransPlanning/FHWA_MPO_Workshop.htm: 2

[2] Ibid: 3-7

[3] Nelson, Arthur C., Thomas W. D. Snachez, James F. Wolf and Mary Beth Fraquar, *Metropolitan Planning Organization Voting Structure and Transit Investment Bias: Preliminary Analysis with Social Equity Implication*, Draft, October 20, 2003 – http://www.mi.vt.edu/uploads/MPOs.pdf

[4] Nelson, Arthur C., Thomas W. D. Snachez, James F. Wolf and Mary Beth Fraquar, Ibid: 8-9

[5] *FY 2004-2005 Overall Work Program,* San Diego Association of Governments (SANDAG), June 25, 2004: 19

Chapter 3

METROPOLITAN PLANNING ORGANIZATIONS – SAMPLE ANALYSIS

The following analysis is based on an existing table of one hundred metropolitan planning organizations,[1] updated for the purposes of this thesis. The data summarized in the table includes year of designation, area, UZA population, number of professional staff members, policy board membership, technical advisory committees' membership, executive board membership, number of registered committees and 2005 unified planning work program. For data analysis purposes, the table was reduced to the sixty-five MPOs for which the information in all of the above-mentioned categories was available. (See Appendix)

The sample of sixty-five MPOS covers a thirty-year span (from 1964 to the mid-1990s) and a vast range of populations, areas and budgets: UZA population varies from approximately 51,000 (Dover/Kent MPO in Delaware) to over 13.8 million (South California Association of Governments); 2005 UPWPs go from slightly over $130,000 (Lincoln, Nebraska) to nearly $43.5 million (San Diego Association of Governments, California).

The MPO data was first analyzed following basic criteria, such as year of designation, area, UZA population and 2005 UPWP, to provide a broad comparative overview of the sample and help establish its representativity, and to reaveal a preliminary indication of the links, if any, between these criteria. It was then analyzed based on criteria that deal more directly with the organizational structure of the MPOs - policy boards and committees - comparing them between MPOs, relating them to the basic criteria above, and attempting to establish what factors, if any, consistently affect the composition of MPO decision-making structures and their supporting organizations.

General

The MPOs subjected to analysis were organized between 1964 and 1993, providing a representative range of the overall history of the evolution of MPOs (Figure 1). The data shows that the 1960s were tentative years, with a rate of one to two MPOs organized per year. By the early 1970s, the rhythm increased to peak with nearly half of the MPOs studied (thirty) having been created between 1974 and 1977, a result of both the *National Environmental Policy Act* of 1969, and the sweeping UMTA and FHWA regulations update completed in 1975. This period also corresponds to the creation of the largest areas in terms of area and UZA population, reflecting the need for regional planning in highly urbanized or suburbanized metropolitan areas. This activism was followed by a period of four years of relative stagnation, then a rebound, with a quarter of the MPOs (fourteen) established over two years - 1982 and 1983 - a surge that corresponds to the Surface Transportation Assistance Act of 1982 and its 1983 regulations. These regulations shifted increased latitude to local governments in utilizing highway and mass transportation funds, and in determining the nature of the urban transportation process. This shift is reflected in the high percentage of smaller UZA population MPOs created during the period: fifty-seven percent of all MPOs created between 1982 and 1983 had a UZA population of less than 100,000 (two notable exceptions: the New York Metropolitan TC - UZA population 10,930,132 - and the North Jersey Transportation Planning - UZA population 5,113,880).

Area. In terms of overall area, the MPOs cover a large range, from twenty-six to over 9,000 square miles, with one outlier: the South California Association of Governments (SCAG) that covers an area of over 38,000 square miles (Figure 2). Three-quarters of the MPOs have areas less than 4,000 square miles, including approximately forty percent of MPOs with an area less than 1,000 square miles, and about thirty percent less than 500 square miles. Four out of the seven MPOs above 5,000 square miles are in California, a reflection of the highly urban nature of much of this state. However, two of the remaining three are in Arizona, in this case, a reflection of a lower density, more widespread urbanization. An analysis of MPO UZA populations and areas also reflects the impact of urban density (Figure 3): although there is some population increase with area size, the most densely populated MPOs (with the exception of the SCAG) do not correspond to the largest areas. For example, the Gulf Regional Planning Commission in Mississippi ranks fifteenth in terms of area, covering 2,568 square miles, and the New York Metropolitan TC ranks eighteenth, with 2,345 square miles. Both areas are similar in size; however, the first serves a UZA population of around 239,000, while the second has a population close to 11 million.

Uniform Planning Work Programs. In terms of 2005 Uniform Planning Work Programs (UPWP), forty-one percent have a UPWP of less than one million dollars, twenty-seven percent have a UPWP between one and three million dollars, and sixteen percent have a UPWP between three and ten million dollars (Figures 4 and 5). The last sixteen percent have a UPWP above ten million dollars, of which half are under twenty million dollars, and the rest in the twenty million (one MPO), thirty million (two MPOs) and mid-forty million dollars range (two MPOs).

There appears to be some correlation between increased UZA population and higher UPWP, yet with a wide range in the per capita ratio within this escalation, following an exponential variation (Figure 6). Half the MPOs have a per capita UPWP under five dollars, including twenty-five percent of MPOs with a per capita UPWP of less than one dollar. The remaining per capita UPWPs are widely distributed from tens of dollars to over $200; with two outliers reaching the $600 range.

The relation is not as clear in terms of area and UPWP, even in the higher spectrum of area and UPWP (Figure 7). There are significant exceptions to direct links between rising UZA population and/or area and rising UPWP; for example, the San Diego AOG has the highest UPWP ($43,486,681), but it ranks fifteenth in terms of UZA population and fifth in terms of area. The Mid-America RPC (Missouri) has the third highest UPWP ($32,710,856) yet ranks fourteenth in terms of population and fifteenth in terms of area. The same can be said for the middle range of UPWPs, such as the Pima AOG (Arizona) which ranks second in terms of area, but is twenty-third in terms of UZA population, and eleventh in terms of UPWP ($5,893,206).

There also does not appear to be a link between current UPWP and year of designation. Indeed, the MPO with the highest UPWP, the San Diego AOG, was organized in 1967, while the most “recently” organized MPO in the sample, the South Jersey TPO, (1993), has the thirty-third UPWP ($1,547,714). Even within clusters of dates (1973 or 1983) there is considerable variation, the UPWP of MPOs created in 1973, for example, varying by a factor of 100, from $132,540 to $13,253,179.

Metropolitan Planning Organizations Decision-Making Structures

Policy Board Membership

The Policy Board membership varies from a minimum of three members (Capital Region COG, Connecticut) to a maximum of forty-four, with one outlier MPO at seventy members (SCAG). Twenty-four percent of the MPOs have a board membership of less than nine (9) members; forty-two percent have a policy board with 10 to 19 members; another nineteen percent have twenty (20) to twenty-nine (29) members. Ten percent have a membership of thirty (30) to thirty-nine (39), and only five percent have a membership exceeding forty (40) (Figure 8).

Factors affecting policy board size are not clearly defined. There appears to be a general trend towards higher membership with increased MPO area (Figure 9) - many of the largest MPOs have memberships which vary between sixteen (16) and twenty (20); however, the second largest MPO (Pima AOG) has one of the smallest boards, with only seven (7) members. There also appears to be no consistent direct link between UPWP and number of board members (Figure 10). The second to last MPO in terms of board membership (Anchorage MATS – five (5) members) is ranked twentieth in terms of its UPWP of $3,263,979, while the Green River ADD, with the smallest policy board (three (3) members), is also ranked second to last in terms of UPWP with $159,159. The San Diego AOG and the New York Metropolitan TC, respectively first and second highest UPWP (approximately $43 and $41 million), are ranked in the mid-thirties in terms of board membership – at sixteen (16) members, their policy boards are half the size of that of many MPOs with UPWPs in the $5 million range. It would appear that there is also no direct correlation between policy board membership and UZA population (Figure 11) or number of counties in the MPO jurisdictional area (Figure 12).

One common factor appears to be a decrease in policy board membership over the years. All of the MPOs with over thirty (30) members in the policy board were designated between 1974 and 1977, a peak period when over fifty percent of the sample MPOs were designated (Figure 13). MPOs designated in the mid-1980s, have a board membership that varies between nine (9) and twenty-five (25) members; numbers are further reduced in the MPOs designated more recently, in the early-1990s, with seven (7) to eleven (11) members. This may reflect the fact that over time, and in view of past experience, MPOs have developed a more streamlined decision-making process, requiring less involvement at the policy board level. It may also reflect the fact that when MPOs got a strong impetus in the mid-1970s, there was a more politically charged atmosphere, with local entities and organizations less willing to be seen as losing "territory" by renouncing participation in the policy board. As was noted in the earlier chapters, in their original configurations, MPOs had a challenge in coordinating multiple political entities, transportation modes, and socio-economic factors, with local governments often pushing for their interests. They also had to contend with the discontent of certain state governments that considered the federal requirements for MPOs program-funding a pre-emption of states' right to self-determination. Broadening the policy board could have been a way to bring more consensus and acceptance for this new planning entity.

Registered Committees

In terms of working committees, the breakdown in MPOs varies from a minimum of one (1) committee to a maximum of ten (10) committees. The most common structure is the MPO with two committees, as is the case in fifty percent of the studied MPOs (Figure 14); another twenty-five percent function with three committees. The number of committees in the remaining MPOs varies between one (1), four (4), five (5), or six (6) committees, in approximately five to six percent increments, with two outliers having respectively nine (9) and ten (10) committees. The factors impacting committee registration are not clearly defined (Figure 15). The MPO with the highest number of committees, the Pikes Peak Area COG in Colorado (ten (10) committees) was designated in 1977, is in the fortieth percentile in terms of UPWP (over $1,100,000), the thirtieth percentile in terms of area, and has low urban density. By contrast, the MPO with the second highest number of committees, the Delaware Valley Regional Planning Commission (DVRPC 1965), covering Bucks, Chester, Delaware, and Montgomery Counties and the City of Philadelphia in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer Counties in New Jersey, has the fifth highest UPWP (over $20 million), and an area about five times that of the Pikes Peak Area COG. Finally, the MPO with the highest UPWP, the San Diego AOG (1967) in California ($43 million), one of the older MPOs with an area twice that of the DVRPC, functions with only five registered committees. For some MPOs, all of the advisory work goes through formal committees, reporting to the MPO policy board; in other cases, fewer committees are complemented by additional organizational structures, which act as forums for discussion and outreach, and provide input without committee status.

These variations are illustrated in the following breakdown and composition of the committees of three representative MPOs, one in the top range, with nine (9) committees; one in the intermediate range, with five (5) committees; and one in a lower range, with three (3) committees, a more "textbook" structure:

<u>Delaware Valley Regional Planning Commission (DVRPC).</u> The DVRPC notes in its *Fiscal Year 2005 Planning Work Program* that one of its primary roles is "to coordinate its planning programs, and those of its member governments, with citizens residing in the region."[2] To accomplish this objective, its eighteen member policy board established nine committees to address the regional issues of transportation, land use, air quality, housing, airports, goods and freight movement and citizens' concerns; the UPWP underscores that the objective is to "enhance the regional forum provided by the Board and extend it so that all interested and involved parties can discuss and set policy on regional planning in the Delaware Valley." All of the committees have a designated chair and staff coordination, but participation and membership can vary with the subject matter at hand. They include the following:

- *Policy Analysis Committee* (PAC), which is an ad-hoc committee of the DVRPC Board members that provides an opportunity for extended review and discussion regarding current issues and projects;
- *Regional Transportation Committee* (RTC), which advises the DVRPC Board on transportation planning issues;
- *Regional Air Quality Committee* (RAQC), which serves as a regional forum for air quality issues and as a guide for transportation and air quality activities;

- *Regional Citizens Committee* (RCC), which provides citizens access to, and participation in, the regional planning and decision-making process;
- *Land Use and Development Committee* (LUDC), which functions as a forum for planners, developers and environmentalists to share ideas and formulate regional land use policies;
- *Information Resources Exchange Group* (IREG), which provides a forum for the exchange of ideas and experiences among regional data managers;
- *Regional Housing Committee* (RHC), which brings Board members together with state and local housing agencies, non-profit housing providers, and other citizen advocates to review and formulate a regional housing agenda;
- *Goods Movement Task Force* (GMTF), DVRPC's official freight planning and coordinating committee, which affords a wealth of freight transportation expertise from a wide spectrum of interests;
- *Regional Aviation Committee* (RAC), which provides technical and policy guidance concerning regional airport systems to the states, DVRPC and the Federal Aviation Administration.

The work of these committees is further enhanced by two additional structures: the *Tri-County Water Quality Management Board* (WQMB), which serves to coordinate water supply and wastewater treatment planning for Burlington, Camden and Gloucester Counties and maintain the Tri-County Water Quality Management Plan, and the *Intelligent Transportation Systems Coordinating Council* (ITSCC), which develops and maintains the region’s ITS architecture and guides the implementation of intelligent transportation systems.

San Diego Association of Governments (SANDAG). The San Diego Association of Governments (SANDAG), functions with five policy advisory committees that make policy recommendations to the full SANDAG Board of Directors; all of the agency’s other involved groups are called “working groups,” where interested individuals and organization representatives offer their suggestions, advice, and work products to a particular policy committee for the elected officials’ review. The policy committees then, in turn, can offer policy recommendations to the SANDAG Board of Directors. SANDAG policy advisory committees are as follows:

- *Executive Committee* (six members): sets agenda; provides oversight for budget and work program; reviews grant applications; makes recommendations on legislative proposals and agency policies. The committee consists of six voting members, representing North County Coastal, North County Inland, East County, South County, and the representative, or the representative’s alternate in their absence, from the City of San Diego and the County of San Diego;
- *Transportation Committee* (nine members): policy recommendations on planning and programming; strong focus and commitment to meet public transit needs. The committee consists of nine voting members, six elected members representing North County Coastal, North County Inland, East County, South County,

and the mayor or councilmember from the City of San Diego, a supervisor from the County of San Diego, one member each from the Boards of the San Diego Metropolitan and North San Diego Transit Development Boards, and a member of the San Diego County Regional Airport Authority;

- *Regional Planning Committee* (six members): policy recommendations on Regional Comprehensive Plan development and implementation. The committee consists of six elected voting members representing North County Coastal, North County Inland, East County, South County, and the mayor or councilmember from the City of San Diego, and a supervisor from the County of San Diego;
- *Borders Committee* (seven members): policy recommendations on interregional programs and projects. The committee consists of seven voting members, representing North County Coastal, North County Inland, East County, South County, and the mayor or councilmember from the City of San Diego, a supervisor from the County of San Diego, and a mayor, councilmember, or supervisor from Imperial County;
- *Public Safety Committee* (fifteen members): provides oversight and advice to the Board on matters concerning the Automated Regional Justice Information System and Criminal Justice Division, and consists of eleven voting and four advisory members. Six voting members are Policy Board members or

alternates, representing North County Coastal, North County Inland, East County, South County, and the mayor or councilmember from the City of San Diego and a supervisor from the County of San Diego. The five voting Associate Members are two members from the County Chiefs'/Sheriff's Association, and a member selected by the County Sheriff, Regional Homeland Security Committee, and State public safety agencies. The four nonvoting Advisory Members are two members selected by Federal public safety agencies, a member selected by the San Diego County District Attorney's or Probation Department Offices, and a member selected by the courts.[3]

Beyond these five committees, SANDAG also has forty-seven (47) working groups, used to channel and incorporate the broadest range of public, technical and advisory input (such as Automated Regional Justice Information System, Business, Technical, Users, and Crime Analysis working groups; Automatic Vehicle Classification (AVC) Working Group, Bayshore Bikeway Advisory Committee, Bi-State Transportation Technical Advisory Committee, Bicycle-Pedestrian Advisory Working Group, Border Energy Issues Group (BEIG), Congestion Management Program Working Group, etc.) The formation and use of working groups at SANDAG is based upon the objective of providing opportunities for involvement in regional programs by citizens, elected officials, agency staff, and representatives of civic and community groups. Working groups are established on an ad hoc basis to assist with specific projects. Although some of the workgroups still function under the name of committee because of the public's familiarity with this previous title, SANDAG has a stated goal to make a distinction between these public involvement structures that will be labeled "working groups," and elected officials groups making policy recommendations to the SANDAG Board of Directors that will be labeled as "committees,"[4] thus clarifying respective responsibilities and the chain of decision mechanisms.

Dover/Kent County MPO (DKC). The Dover/Kent County MPO has what could be called a more textbook structure:[5]

- A policy making body, the *Council*, which consists of six voting members representing the Governor of the State of Delaware, the Mayor of the City of Dover, the President of the Levy Court of Kent County, the Delaware Department of Transportation, the Delaware Transit Corporation, and a representative of Kent County Municipalities. The council also has two non-voting members: the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA);
- A *Technical Advisory Committee* (TAC) which consists of technicians from all D/KC MPO participating agencies. The TAC performs analyses and makes recommendations concerning transportation and land use issues to the Council for its approval. Its fourteen members include representatives from the Delaware Departments of Natural Resources and Environmental Control, Transportation, Agriculture, the Delaware Transit Corporation, the Kent County Planning Department, the City of Dover Inspections

and Planning Department, the Delaware Economic Development Office, the Kent Soil Conservation District, the City of Dover Engineer, the Dover Air Force Base, an elected Representative of Kent County Municipalities, the City of Milford, and a member of the Delaware Statewide Planning Office, representing the Governor. There are also four non-voting members: Norfolk Southern, the Delaware Motor Transport Association, the Federal Highway Administration, and the Federal Transit Administration.

- A *Public Advisory Committee* (PAC) with local citizens appointed by the D/KC MPO Council, each serving for a period of two (2) years, representing business and civic groups from Kent County. The PAC's fourteen members include three city appointees, seven county appointees and four state appointees. They provide advice and comments on current and future issues concerning the citizens' perspectives on the impact of the transportation plans and programs in the MPO area. The PAC also provides a forum for the public to express their concerns about all transportation and land-use related activities.

Voting Versus Non-Voting Board and Committee Members

The breakdown between voting and non-voting members will determine which voices can effectively and pragmatically affect the course of the planning activities. After having gathered input and recommendations from technical committees, citizen participation forums and staff, the ultimate decision lies with the members of the policy board. In a sense, beyond technical issues, it is now a political process that takes precedence, one where a proposed planning decision must gather enough support from “voters” to move forward. Having a consultative voice may allow an agency or elected officials to present original ideas or defend certain approaches and solutions, but it does not give them a definitive say. Only voting membership carries the potential for an actual consequence: approving and funding a specific policy and/or plan.

As was noted previously, policy board membership varies from MPO to MPO; however, three components are generally constant: elected municipal and county (if applicable) representatives, and state department of transportation representatives. Beyond some variations in this composition, what sets different boards apart is which members can cast a vote. In all but two cases, at least one elected official has voting membership. A slim majority of the MPO sample (thirty-nine) give all three major components of the policy board a voting voice. Eleven percent (seven) give local and county elected officials a vote, and limit the state DOT to non-voting member status. Another eleven percent (seven) give the mayor and state DOT voting membership, but limit county representatives to non-voting membership. Seven percent (three) give the county representative and DOT voting membership, limiting the mayor to non-voting membership.

Despite these variations, it is clear is that in the vast majority of the cases, the three key players in the planning process, elected local and county representatives and state departments of transportation, do have the capacity to make their voices heard: putting all of the above numbers together, mayors have voting membership in eighty seven percent of the cases, state DOTs in eighty-one percent of the cases, and county officials in seventy-seven percent of the cases. Instances where one or the other of these members is not allowed to vote vary, and should be analyzed on a case-by-case basis to see if there are any common factors. The fact that a higher percentage of MPOs exclude county representatives as voting members may be a reflection on the urban nature of many MPOs, and the particularly sensitive roles the MPOs plays in urban planning. Then again, in some of the larger metropolitan areas, precedence may be given to counties if it is seen that there is one dominant dense urban unit whose concerns may widely diverge from the regional ones, and whose voice may skew the debate. The exclusion of certain elected officials from the voting process may also reflect a situation where the MPO has become a quasi-agency with professional staff representing and making decisions for the local elected officials.

Professional Staff

MPO professional staffing is the backbone of much of what is achieved in an MPO. The availability or limitation of staff members can be the difference between well-informed decisions and proper oversight, and ill-informed decisions and limited oversight; sufficient competent staff is a key factor in the issue of poor implementation that has sometimes plagued even the most articulately enunciated transportation plans.

In the sample studied, staffing ranges from one (1), such as the Johnson County COG in Iowa (thirty square miles, $392,562 UPWP), to a maximum of 150 for the California MTC (7,000 square miles, over $13 million UPWP). But reducing these statistics to a proportionate relationship between area or UPWP would be simplistic. Rather, the figures reflect how the MPO is organized, and whether it relies on sister agencies, or whether it carries its own staff in house. For example, the Mid-America Regional Planning Council in Missouri has a significant UPWP in excess of

$32 million, and a staff of 105, while the San Diego Association of Governments (SANDOG) with a UPWP topping $43 million, has eighteen staff members. However, the latter relies not only on its professional and clerical staff, but also on contract consultants and on staff on-loan from other agencies for specific projects. At the other end of the spectrum, the Green River ADD in Kentucky, with a traditional structure (policy board, technical advisory committee and citizens' advisory committee) and a UPWP of approximately $160,000, has two-full time staff members.

Jurisdiction

As we have seen previously, the decision process is made more complex when more than one jurisdiction is in play. And, indeed, in the sample of MPOs studied, only ten percent are "mono-jurisdictional"; twenty percent cover two jurisdictions, and the remaining seventy percent cover three to four jurisdictions. These jurisdictions may be multi-city, multi-county, or even multi-state, such as the Delaware Valley Regional Planning Commission, covering the City of Philadelphia and Bucks, Chester, Delaware, and Montgomery Counties in Pennsylvania, plus Burlington, Camden, Gloucester, and Mercer Counties in New Jersey. The more jurisdictions covered, the more there is a chance of diverging interests and goals, as well as issues of political influence, with different elected officials wanting to be perceived as defending their constituency's interests, even if these officials are aware of larger issues at play.

In this context, consensus building becomes key: an ideal situation, with a unanimous vote, may be hard to achieve, and majority decisions may be resented and difficult to implement. With consensus, objections of members are taken into account, resulting in a solution that can be backed by all.

Summary Of Analysis

A review of the basic and organizational criteria analyzed in the previous section reflects how the fundamental premise of metropolitan planning organizations has resulted in a wide range of structures, all based on the same requirements yet implemented in a manner reflecting local parameters such as area, urban density, UZA population, available funding, legislative jurisdictions and boundaries, etc.

Although there are many variations, a few predominant characteristics can be recognized:

- Fifty percent of the MPOs were designated between 1974 and 1977, following NEPA 1969 and the UMTA and FHWA regulations updates completed in 1975. These years also correspond to the creation of the largest MPOs in terms of UZA population, reflecting the need for regional planning in highly urbanized or suburbanized areas;
- Fifty percent of the MPOs designated between 1982 and 1983 have a UZA population of less than 100,000, reflecting1982 STAA's shift of increased prerogatives and control to the smaller unit of local government;
- Seventy-five percent of the MPOs cover an area less than 4,000 square miles (forty percent of all MPOs have jurisdiction over less than 1,000 square miles);
- Despite the notion of vast metropolitan organizations, fifty-five percent of MPOs have a 2005 UPWP of less than $2 million, and three-quarters of them have a UPWP of less than $1 million;

- Seventy percent of the MPOs cover more than three administrative jurisdictions;
- Sixty-six percent of MPO policy boards have less than 19 members;
- Fifty percent of the MPOs are structured with two committees;
- Over fifty percent of MPOs' policy boards give voting membership to municipal, county and state DOT representatives;
- Municipal officials have voting membership in eighty-seven percent of the policy boards, state DOT representatives have voting membership in eighty-one percent of the policy boards, and county officials have voting membership in seventy-seven percent of the policy boards.

FIGURES CHAPTER 3

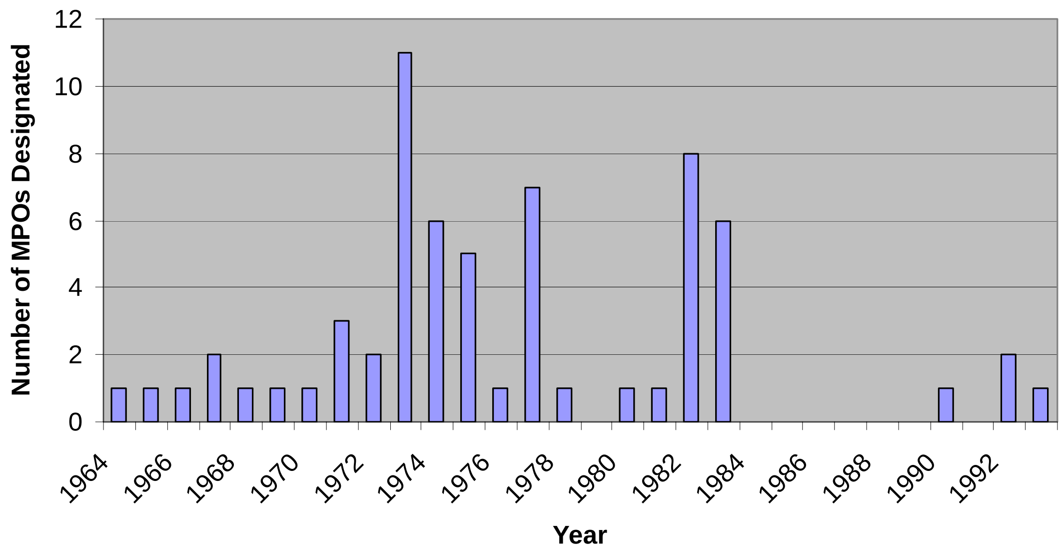


Figure 3-1 – Distribution of Metropolitan Planning Organizations Year of Designation

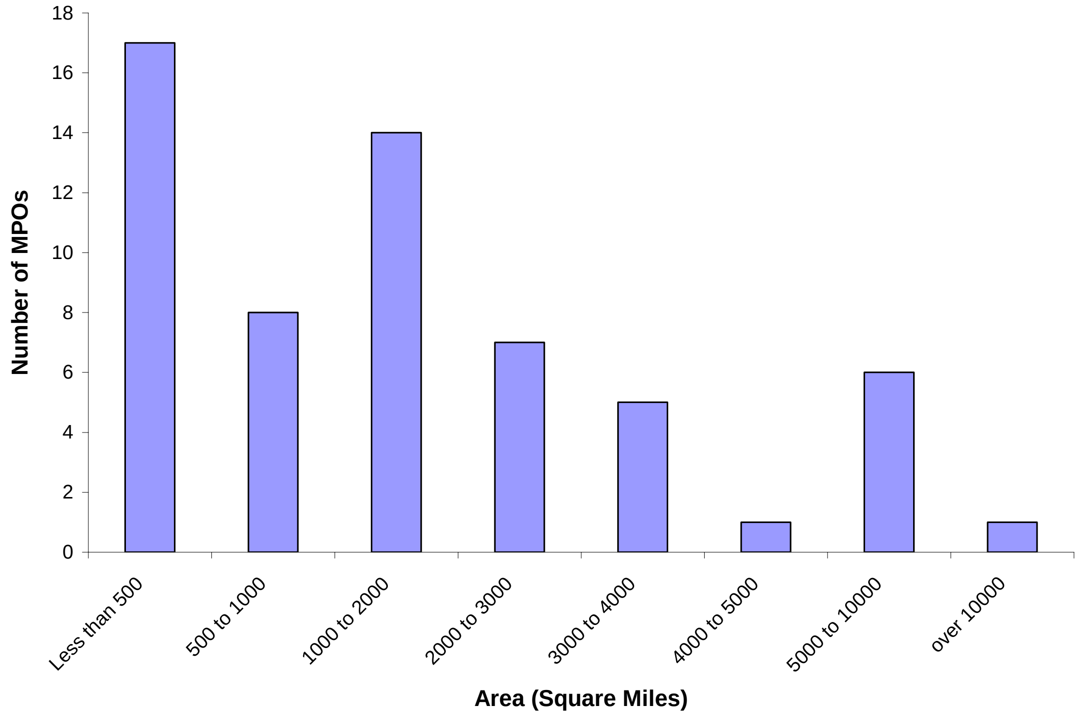


Figure 3-2 – Distribution of Metropolitan Planning Organizations Jurisdictional Areas

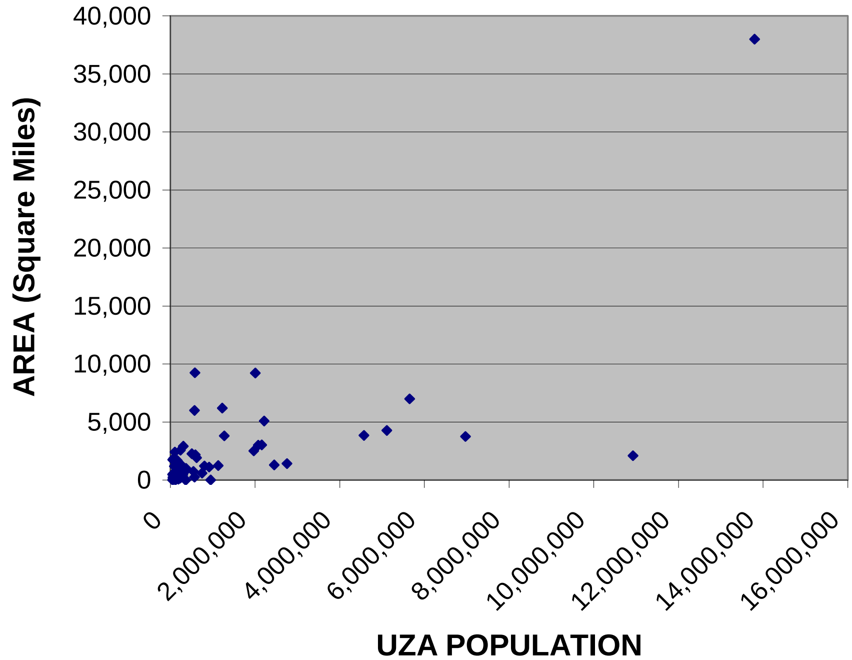


Figure 3-3 – Distribution of Metropolitan Planning Organizations Jurisdictional Areas by UZA Population

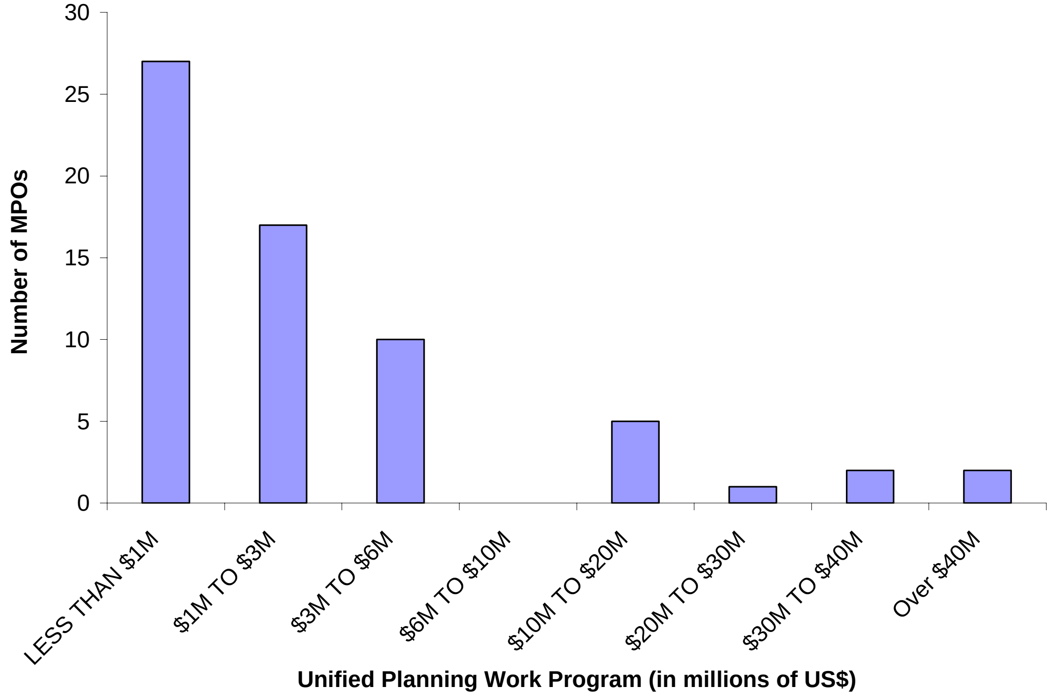


Figure 3-4 – Distribution of Metropolitan Planning Organizations Unified Planning Work Program

Figure 3-5 – Distribution of Metropolitan Planning Organizations Unified Planning Work Programs

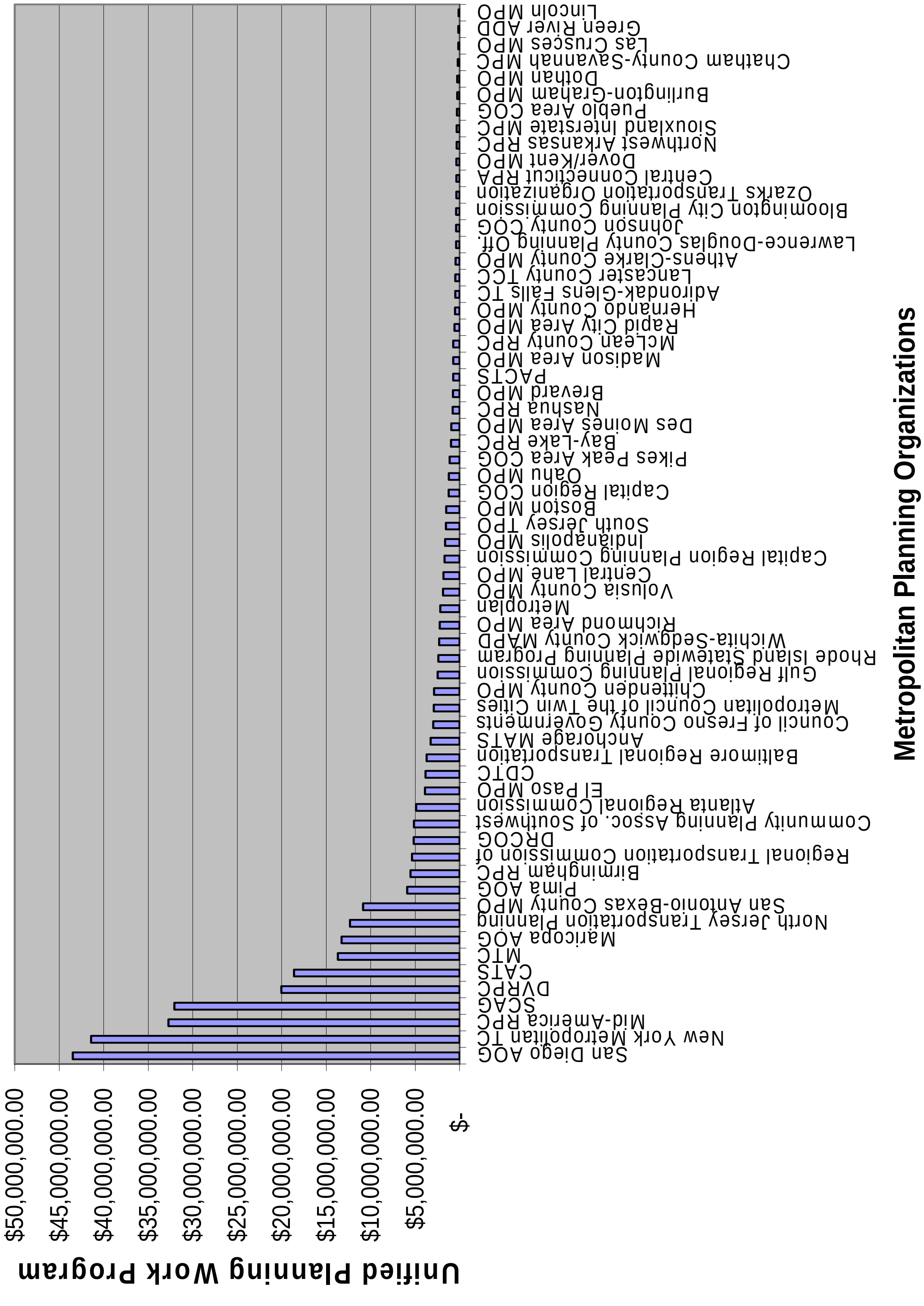
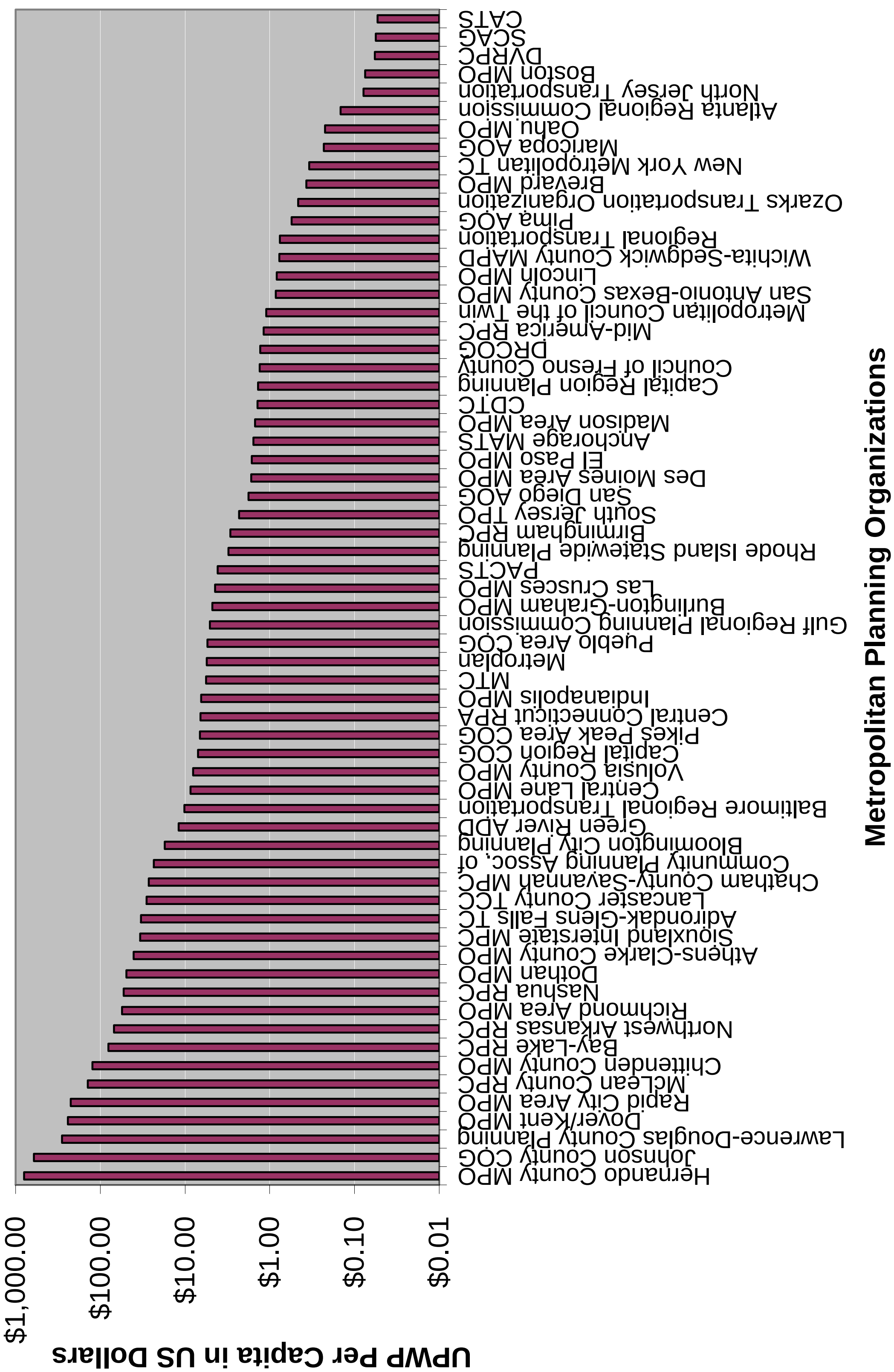

Unified Planning Work Program
$50,000,000.00
$45,000,000.00
$40,000,000.00
$35,000,000.00
$30,000,000.00
$25,000,000.00
$20,000,000.00
$15,000,000.00
$10,000,000.00
$5,000,000.00
$-
Metropolitan Planning Organizations
San Diego AOG
New York Metropolitan TC
Mid-America RPC
SCAG
DVRPC
CATS
MTC
Maricopa AOG
North Jersey Transportation Planning
San Antonio-Bexas County MPO
Pima AOG
Birmingham RPC
Regional Transportation Commission of
DRCOG
Community Planning Assoc. of Southwest
Atlanta Regional Commission
El Paso MPO
CDTC
Baltimore Regional Transportation
Anchorage MATS
Council of Fresno County Governments
Metropolitan Council of the Twin Cities
Chittenden County MPO
Gulf Regional Planning Commission
Rhode Island Statewide Planning Program
Wichita-Sedgwick County MAPD
Richmond Area MPO
Metroplan
Volusia County MPO
Central Lane MPO
Capital Region Planning Commission
Indianapolis MPO
South Jersey TPO
Boston MPO
Capital Region COG
Oahu MPO
Pikes Peak Area COG
Bay-Lake RPC
Des Moines Area MPO
Nashua RPC
Brevard MPO
PACTS
Madison Area MPO
McLean County RPC
Rapid City Area MPO
Hernando County MPO
Adirondak-Glens Falls TC
Lancaster County TCC
Athens-Clarke County MPO
Lawrence-Douglas County Planning Off.
Johnson County COG
Bloomington City Planning Commission
Ozarks Transportation Organization
Central Connecticut RPA
Dover/Kent MPO
Northwest Arkansas RPC
Siouxland Interstate MPC
Pueblo Area COG
Burlington-Graham MPO
Dothan MPO
Chatham County-Savannah MPC
Las Crusces MPO
Green River ADD
Lincoln MPO

Figure 3-6 – Distribution of Metropolitan Planning Organizations Unified Planning Work Programs Per Capita



UPWP Per Capita in US Dollars
$1,000.00
$100.00
$10.00
$1.00
$0.10
$0.01
Metropolitan Planning Organizations
Hernando County MPO
Johnson County COG
Lawrence-Douglas County Planning
Dover/Kent MPO
Rapid City Area MPO
McLean County RPC
Chittenden County MPO
Bay-Lake RPC
Northwest Arkansas RPC
Richmond Area MPO
Nashua RPC
Dothan MPO
Athens-Clarke County MPO
Siouxland Interstate MPC
Adirondak-Glens Falls TC
Lancaster County TCC
Chatham County-Savannah MPC
Community Planning Assoc. of
Bloomington City Planning
Green River ADD
Baltimore Regional Transportation
Central Lane MPO
Volusia County MPO
Capital Region COG
Pikes Peak Area COG
Central Connecticut RPA
Indianapolis MPO
MTC
Metroplan
Pueblo Area COG
Gulf Regional Planning Commission
Burlington-Graham MPO
Las Cruces MPO
PACTS
Rhode Island Statewide Planning
Birmingham RPC
South Jersey TPO
San Diego AOG
Des Moines Area MPO
El Paso MPO
Anchorage MATS
Madison Area MPO
CDTC
Capital Region Planning
Council of Fresno County
DRCOG
Mid-America RPC
Metropolitan Council of the Twin
San Antonio-Bexas County MPO
Lincoln MPO
Wichita-Sedgwick County MAPD
Regional Transportation
Pima AOG
Ozarks Transportation Organization
Brevard MPO
New York Metropolitan TC
Maricopa AOG
Oahu MPO
Atlanta Regional Commission
North Jersey Transportation
Boston MPO
DVRPC
SCAG
CATS

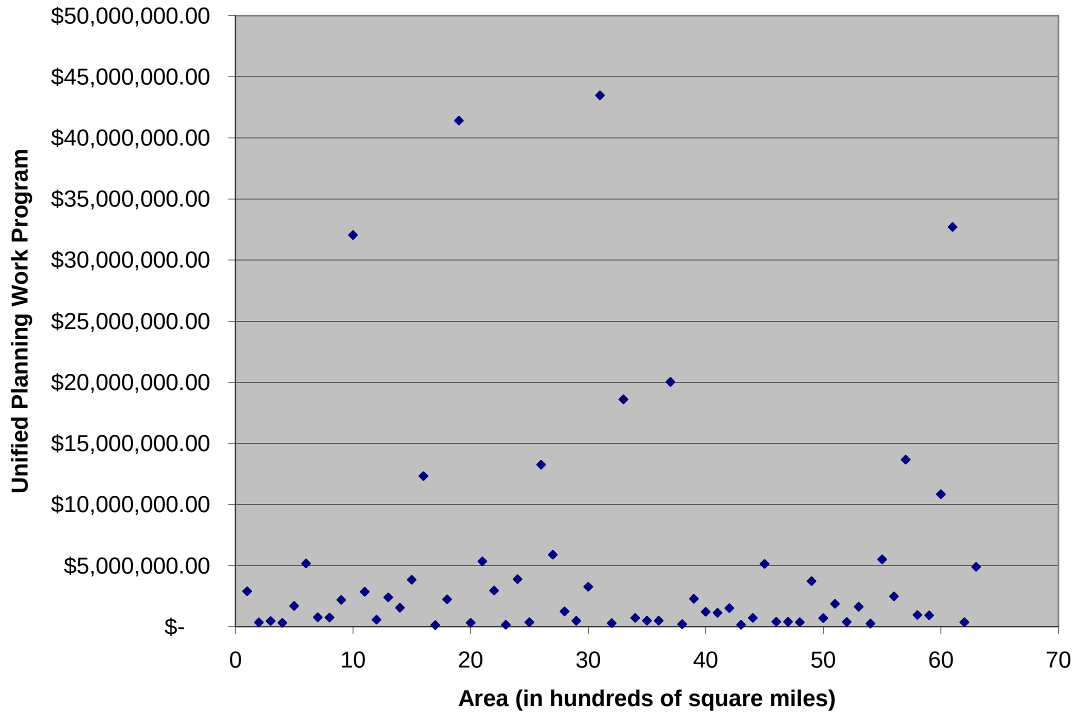


Figure 3-7 – Distribution of Metropolitan Planning Organizations Unified Planning Work Programs by Jurisdictional Areas

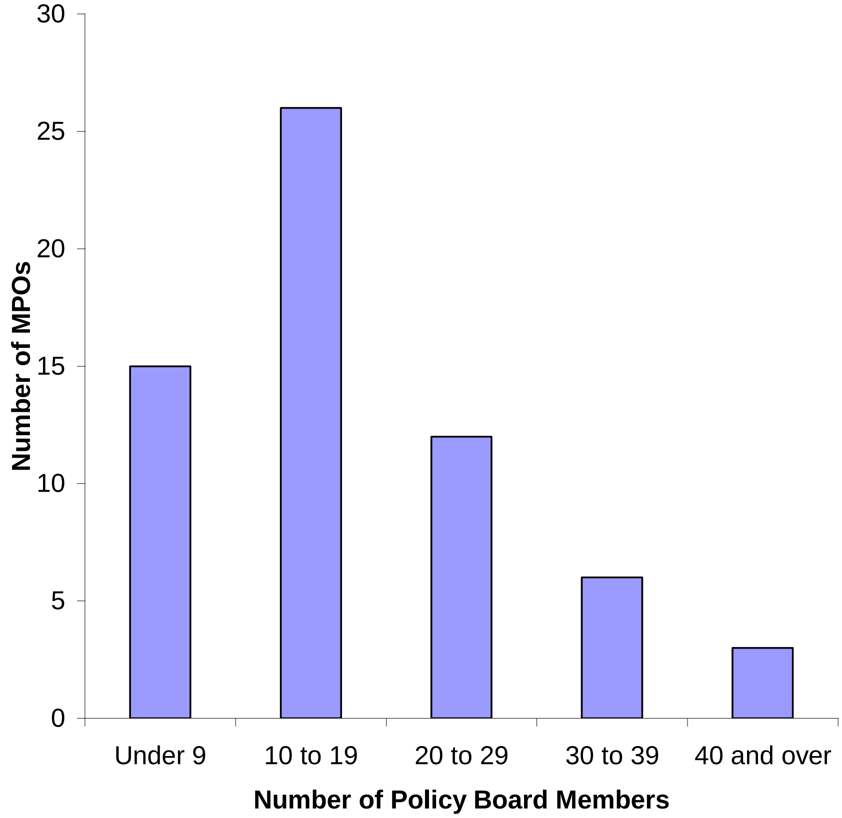
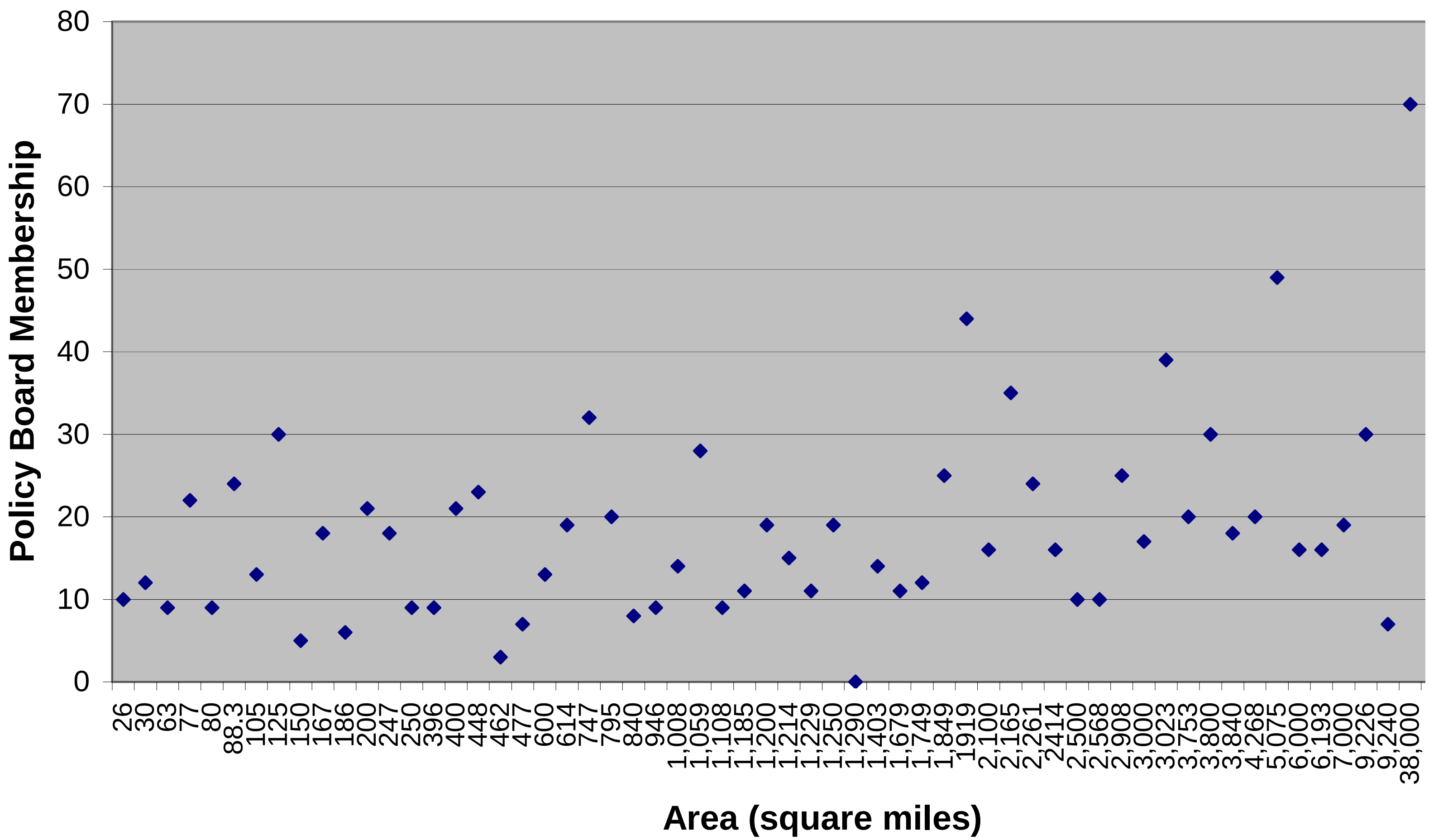


Figure 3-8 – Distribution of Metropolitan Planning Organizations Policy Board Membership

Figure 3-9 – Distribution of Metropolitan Planning Organizations Policy Board Membership by Jurisdictional Area


Policy Board Membership
0
10
20
30
40
50
60
70
80
26
30
63
77
80
88.3
105
125
150
167
186
200
247
250
396
400
448
462
477
600
614
747
795
840
946
1,008
1,059
1,108
1,185
1,200
1,214
1,229
1,250
1,290
1,403
1,679
1,749
1,849
1919
2,100
2,165
2,261
2414
2,500
2,568
2,908
3,000
3,023
3,753
3,800
3,840
4,268
5,075
6,000
6,193
7,000
9,226
9,240
38,000
Area (square miles)

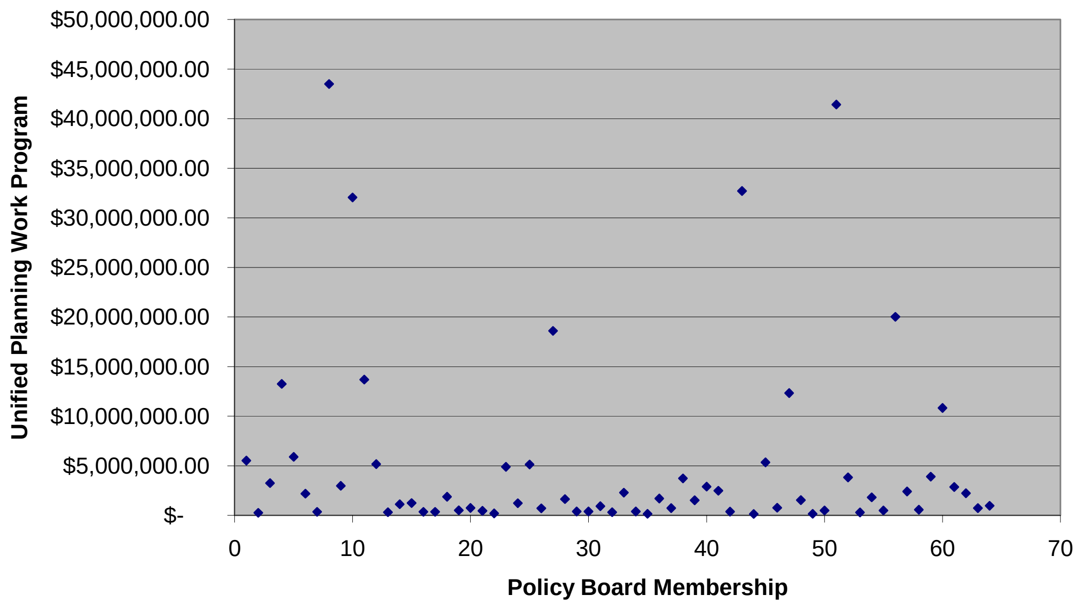


Figure 3-10 – Distribution of Metropolitan Planning Organizations Unified Planning Work Program by Policy Board Membership

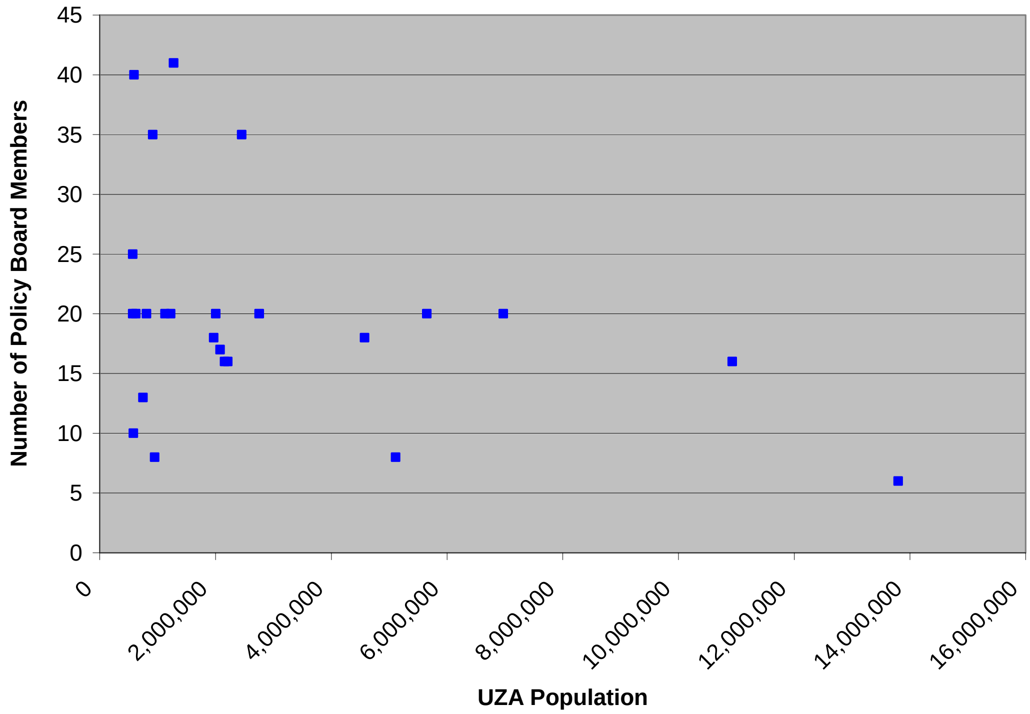


Figure 3-11 – Distribution of Metropolitan Planning Organizations Policy Board Membership by UZA Population

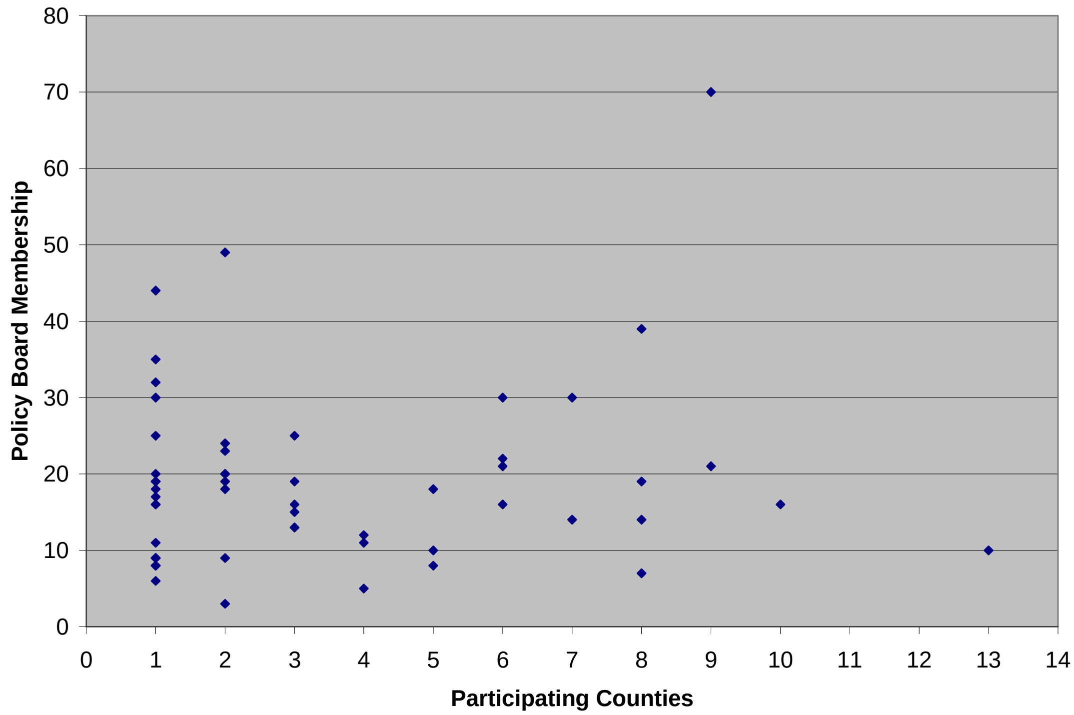


Figure 3-12 – Distribution of Metropolitan Planning Organizations Policy Board Membership by Participating Counties

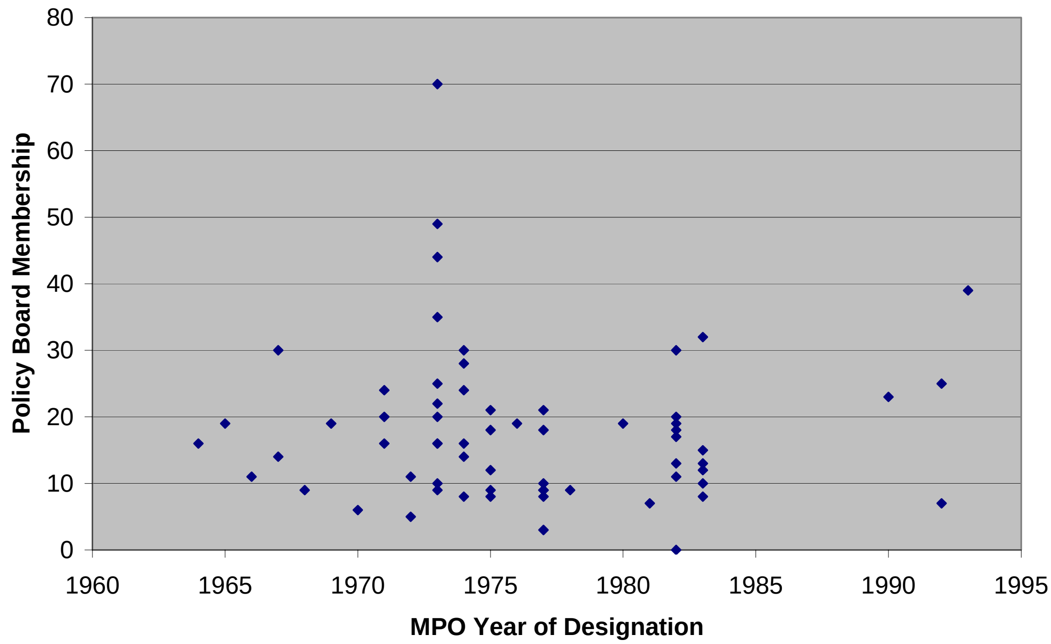


Figure 3-13 – Distribution of Metropolitan Planning Organizations Policy Board Membership by Year of Designation

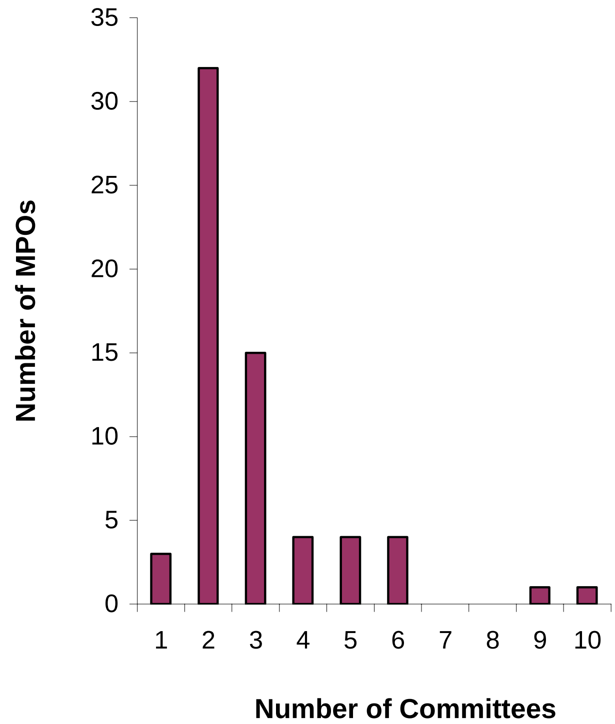


Figure 3-14 – Distribution of Metropolitan Planning Organizations Number of Committees

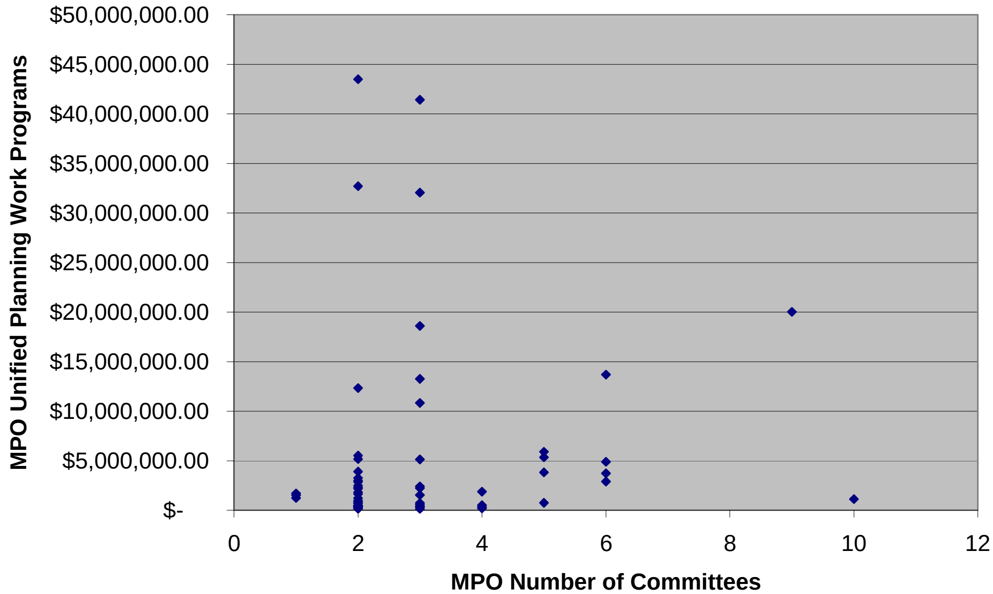


Figure 3-15 – Distribution of Metropolitan Planning Organizations Unified Planning Work Programs by Number of Committees

NOTES CHAPTER 3

[1] Catherine, Adam, The Character of Metropolitan Planning Organizations: A Quantitative Approach, Term Paper, May 2005, Appendix A

[2] *Fiscal Year 2005 Planning Work Program*, Delaware Valley Regional Planning Commission: 2 - 8

[3] Ibid: 25 - 26

[4] *FY 2004-2005 Overall Work Program*, San Diego Association of Governments (SANDAG), June 25, 2004: 24

[5] Unified Planning Work Program For the Dover/Kent County Metropolitan Planning Organization, Fiscal Year 2005, July 1, 2004 through June 30, 2005, adopted May 5, 2004: 5 - 7

CONCLUSION

The goal of this thesis was to provide an overview of the planning decision-making process as it has developed historically, and how it is practiced to date, including a review of the organizational structures of MPOs that have interpreted a basic legal and organizational framework in a wide range of ways.

Metropolitan Planning Organizations were created by a legal mandate, the *Federal-Aid Highway Act* of 1962, to provide a complex level of transportation planning in urban areas nationwide. The goal was to address theoretically and practically the organization, financing, planning and implementation of transportation systems, the multiple associated issues that impact their level of performance, and the resulting livability of the urban environment they serve.

These mandates and regulations have been implemented over a multitude of states, geographical terrains and socio-economic backgrounds. The structures that have evolved follow a common set of rules for decision-making, procedures and practice, but their interpretation and enactment may differ. In some cases, similarities in scope or organization prevail; in other cases, wide variations occur. These similarities and differences can be perceived on multiple levels:

- First level: general characteristics such as area, UZA population, geography, etc. These do not impact the decision-making process directly, although they may shape some of the decision-making components;

- Second level: budgets and funding availability. Financial considerations are key in shaping the options that will be presented to decision-makers, but they also have a relatively limited impact on the functioning of the decision-making process directly, other than perhaps shaping some of its components such as availability of professional staff;
- Third level: input from technical committees, citizens' committees or staff. This is an essential part of the planning process that must be taken into account by Policy Board members, and thus has a direct impact on the decision-making process;
- Fourth and last level: administrative jurisdiction, political representation, policy board membership composition, and voting versus non-voting membership. This is the structural level of the decision-making process, the level that is truly at the heart of the matter.

The U.S. Department of Transportation's 2003 *Transportation Planning Capacity Building* (TPCB) program was designed to help MPO decision makers resolve complex issues they face when addressing transportation needs in their jurisdictions by providing practical information, training, and technical assistance. Based on feedback from MPOs, the TPCB has already determined that potential improvements to the decision-making process could result from the following proposals:

- Developing and implementing MPO organizational strategies, including ways to integrate strategic planning mechanisms and tools such as organizational measures of effectiveness;
- Tailoring the MPO process for different customers and clearly defining the role of key players;
- Effectively managing the agenda of the MPO Policy Board—and making effective use of other MPO committees;
- Conducting surveys and using survey results in the MPO decision-making process;
- Adapting the above to variations in the sizes of the MPOs.

In the sample of MPOs analyzed for this thesis, whatever the size, scope and organization of the MPO, two basic premises in the decision-making process can be recognized. The first is that all MPOs are structured with professional staff and technical committees that should provide competent and unbiased analysis, and inform the decision-making process in a professional and unbiased way. The second is that bias will definitely be incorporated in the decision-making process because key decisions are made at the Policy Board level, where elected representatives play a determining role, leaving MPOs subject to the political fluctuations of electoral cycles. Despite the incorporation of mechanisms such as vote-weighing and public input forums, political influence will always be a factor to be dealt with.

Beyond these two common factors, direct comparisons between MPO decision-making processes are difficult because the process is influenced by a variety of factors, such as local and regional socio-economic conditions, the complexity of the transportation networks, or issues of multi-modal systems, that can vary widely from one urban area to another. Further complicating the matter is the fact that in some cases, the MPO may not be the only decision-maker in the region regarding transportation planning matters.

Examining and quantifying the extent to which these different factors impact the decision-making process can be accomplished by taking the work of this thesis one step further, narrowing the sample of MPOs and examining on a case-by-case basis specific decisions within a set time frame. After a quantitative and qualitative review of the decision-making process, the consequences of the decisions taken can be evaluated. Such work should include extensive interviews with, and feedback from, participants in the process.

In a context of increasing urban population and the need for economic growth to sustain it, transportation systems will continue to be a critical component of every urban and suburban American's daily life, and a key factor in the nation's economic health and competitive performance. As new technologies come into play, the complexity of multi-modal, multi-jurisdictional, and multi-technological systems will only increase, as will the role of Metropolitan Planning Organizations. In order to play that role efficiently, judiciously, and in a timely manner, MPOs will have to develop a streamlined, reliable decision-making process, striving toward objectivity but with enough flexibility to take into account not only the disparities and complexities of the transportation systems, and technological requirements, but also the intrinsic political and human nature of their mission.

APPENDIX

METROPOLITAN PLANNING ORGANIZATIONS DATA TABLES

MPO	State	Jurisdictions	Year Designated	Area (square miles)	UPWP
Birmingham RPC	Alabama	Jefferson, Shelby	1977	1919	$ 5,515,166.00
Dothan MPO	Alabama	Dale, Henry, Houston	1983	200	$ 263,024.00
Anchorage MATS	Alaska	Anchorage	1968	150	$ 3,263,979.00
Maricopa AOG	Arizona	Mesa, Maricopa, Pinal,	1973	9,226	$ 13,253,179.00
Pima AOG	Arizona	Pima	1973	9,240	$ 5,893,206.00
Metroplan	Arkansas	Faulkner, Lonoke, Pulaski	1974	2,908	$ 2,187,658.00
Northwest Arkansas RPC	Arkansas	Benton, Washington	1982	1,849	$ 346,582.00
Council of Fresno County Gover	California	Fresno	1972	6,000	$ 2,968,661.00
MTC	California	Alameda, Oakland, Marin	1970	7,000	$ 13,680,470.00
San Diego AOG	California	El Dorado, Placer, Sacramento	1967	6,193	$ 43,486,681.00
SCAG	California	Los Angeles	1975	38,000	$ 32,054,845.00
DRCOG	Colorado	Adams, Arapahoe, Boulder,	1977	5,075	$ 5,167,608.00
Pikes Peak Area COG	Colorado	El Paso, Teller	1977	795	$ 1,132,284.00
Pueblo Area COG	Colorado	Pueblo	1977	2414	$ 314,266.00
Capital Region COG	Connecticut	Hartford, Tolland	1975	747	$ 1,241,107.00
Central Connecticut RPA	Connecticut	Hartford, Litchfield	1975	167	$ 363,660.60
Dover/Kent MPO	Delaware	Kent	1990	-	$ 361,263.00
Brevard MPO	Florida	Brevard	1983	-	$ 751,523.00
Hernando County MPO	Florida	Hernando	1992	477	$ 503,891.00
Volusia County MPO	Florida	Volusia	1977	1,200	$ 1,875,646.00
Athens-Clarke County MPO	Georgia	Clarke, Oceonee	1969	186	$ 462,933
Atlanta Regional Commission	Georgia	Barlow, Cherokee, Clayton,	1971	3,023	$ 4,894,610.00
Chatham County-Savannah MPO	Georgia	Chatham	1983	400	$ 206,240.00
Oahu MPO	Hawaii	Honolulu	1975	600	$ 1,216,181.00
Community Planning Assoc. of S	Idaho	Ada, Canyon	1977	1,059	$ 5,135,411.00
CATS	Illinois	Cook, Du Page, Kane, Kendall	1974	3,753	$ 18,598,100.00
McLean County RPC	Illinois	McLean	1967	1,185	$ 712,271.00
Bloomington City Planning Com	Indiana	Monroe	1982	62.5	$ 390,567.50
Indianapolis MPO	Indiana	Boone, Hamilton, Hancock,	1978	1,108	$ 1,629,588.00
Des Moines Area MPO	Iowa	Dallas, Polk, Warren	1983	448	$ 931,330.00
Johnson County COG	Iowa	Johnson	1980	30	$ 392,562.00

MPO	State	Jurisdictions	Year Designated	Area (square miles)	UPWP
Johnson County COG	Iowa	Johnson	1980	30	$ 5,515,166.00
Siouxland Interstate MPC	Iowa	Plymoth, Woodbury,	1966	80	$ 263,024.00
Lawrence-Douglas County Pl	Kansas	Douglas	1982	26.2	$ 3,263,979.00
Wichita-Sedgwick County MA	Kansas	Witchita	1976	1,008	$ 13,253,179.00
Green River ADD	Kentucky	Daviess	1974	462	$ 5,893,206.00
Capital Region Planning Com	Louisiana	Ascension, Baton Rouge,	1972	-	$ 2,187,658.00
PACTS	Maine	Cumberland, York	1975	-	$ 346,582.00
Baltimore Regional Transpor	Maryland	Anne Arundel, Balitmore, Howard	1992	2,500	$ 2,968,661.00
Boston MPO	Massachusetts	Suffolk, Boston	1973	1,403	$ 13,680,470.00
Metropolitan Council of the T	Minnesota	Anoka, Carver, Chisago, Dakota,	1973	3,000	$ 43,486,681.00
Gulf Regional Planning Comi	Mississippi	Hancock, Harrison, Jackson	1973	2,568	$ 32,054,845.00
Mid-America RPC	Missouri	Cass, Clay, Jackson, Platte	1974	3,800	$ 5,167,608.00
Ozarks Transportation Organ	Missouri	Christian, Greene	1971	1,290	$ 1,132,284.00
Lincoln MPO	Nebraska	Lincoln	1973	840	$ 314,266.00
Regional Transportation Con	Nevada	Clark	1983	-	$ 1,241,107.00
Nashua RPC	New Hampshire	Merrimack	1,973	125	$ 363,660.60
North Jersey Transportation	New Jersey	Essex	1982	4,268.10	$ 361,263.00
South Jersey TPO	New Jersey	Atlantic, Cape May, Cumberland,	1993	1,679	$ 751,523.00
Las Crusces MPO	New Mexico	Dona Ana	1982	396	$ 503,891.00
Adirondak-Glens Falls TC	New York	Saratoga, Warren, Washington	1982	1,749	$ 1,875,646.00
CDTC	New York	Albany, Rensselaer, Saratoga,	1973	2,261	$ 462,933
New York Metropolitan TC	New York	Bronx, Kings, Nassau, New York,	1982	2,100.00	$ 4,894,610.00
Burlington-Graham MPO	North Carolina	Alamance	1973	105	$ 206,240.00
Central Lane MPO	Oregon	Lane	1973	76.59	$ 1,216,181.00
DVRPC	Pennsylvania	Bucks, Chester, Philadelphia,	1965	3,840	$ 5,135,411.00
Lancaster County TCC	Pennsylvania	Lancaster	1964	946	$ 18,598,100.00
Rhode Island Statewide Plan	Rhode Island	Bristol, Kent, Newport,	1974	1,214	$ 712,271.00
Rapid City Area MPO	South Dakota	Pennington	1981	250	$ 390,567.50
El Paso MPO	Texas	El Paso	1973	247	$ 1,629,588.00
San Antonio-Bexas County M	Texas	San Antonio, Bexar	1977	1,250	$ 931,330.00
Chittenden County MPO	Vermont	Chittenden	1983	614	$ 392,562.00

MPO	State	Jurisdictions	Year Designated	Area (square miles)	UPWP
Richmond Area MPO	Virginia	Charles City, Chesterfield, Henrico,	1974	2,165	$ 2,234,077.00
Bay-Lake RPC	Wisconsin	Sheboygan	1982	88.31	$956,764
Madison Area MPO	Wisconsin	Madison	1971	1,229	$ 722,623.00

MPO	# of Staff	Policy Board	Policy Board Members Voting Status			TAC TTC	Policy/ Executive Committee	Committees
			Mayors	County Representative	DOT Representative			
Birmingham RPC	12	44	Voting	Voting	Voting	50	20	2
Dothan MPO	3	21	Voting	Voting	Voting	50	20	2
Anchorage MATS	5	5	Voting	Voting	Voting	7	5	2
Maricopa AOG	1	30	Voting	Voting	Voting	34	20	3
Pima AOG	27	7	Voting	Voting	Voting	20	10	5
Metroplan	15	25	Voting	Voting	Voting	30-40	5	2
Northwest Arkansas RPC	6	25	Voting	Non Voting	Voting	31	10	2
Council of Fresno County Go	21	16	Voting	Voting	Voting	20	20	2
MTC	150	19	Non Voting	Voting	Voting	20	20	6
San Diego AOG	18	16	Voting	Voting	Voting	31	20	2
SCAG	41	70	Voting	Voting	Voting	56	6	3
DRCOG	8	49	Voting	Voting	Voting	26	16	2
Pikes Peak Area COG	20	20	Voting	Voting	Voting	24	20	10
Pueblo Area COG	1	16	Voting	Voting	Voting			4
Capital Region COG	19	32	Voting	Voting	Voting	29	--	1
Central Connecticut RPA	8	18	Voting	Voting	Voting	14	16	3
Dover/Kent MPO	4	8	Voting	Voting	Voting	22	11	2
Brevard MPO	6	19	Voting	Non Voting	Voting	44	3	5
Hernando County MPO	1	7	Voting	Non Voting	Voting	20	7	4
Volusia County MPO	8	19	Voting	Voting	Voting	25	25	4
Athens-Clarke County MPO	3	6	Voting	Voting	Voting	7	18	2
Atlanta Regional Commissio	18	39	Voting	Voting	Voting	28	16	6
Chatham County-Savannah M	15	21	Voting	Voting	Voting	15	15	4
Oahu MPO	7	13	Non Voting	Non Voting	Voting	13	13	2
Community Planning Assoc.	19	28	Voting	Voting	Voting	40	40	3
CATS	50	20	Voting	Voting	Voting	26	20	3
McLean County RPC	6	11	Voting	Non Voting	Voting	--	11	2
Bloomington City Planning C	12	9	Voting	Non Voting	Voting	20	13	3
Indianapolis MPO	8	9	Voting	Voting	Voting	35	35	2
Des Moines Area MPO	8	23	Voting	Non Voting	Voting	33	38	2

MPO	# of Staff	Policy Board	Policy Board Members Voting Status			TAC/TTC	Policy/ Executive Committee	Committees
			Mayors	County Representative	DOT Representative			
Johnson County COG	1	12	Not Applicable	Not Applicable	Not Applicable	--	--	2
Siouxland Interstate MPC	4	9	Voting	Voting	Non Voting	20	18	3
Lawrence-Douglas County Pl	16	10	Voting	Voting	Voting	12	11	2
Wichita-Sedgwick County MA	30	14	Voting	Voting	Non Voting	10	--	2
Green River ADD	53	3	Voting	Voting	Voting	12	--	2
Capital Region Planning Com	13	8	Voting	Non Voting	Non Voting	--	10	1
PACTS	2	16	Voting	Non Voting	Voting	25	28	3
Baltimore Regional Transpor	42	10	Voting	Voting	Voting	20	18	6
Boston MPO	60	14	Voting	Voting	Voting	--	20	1
Metropolitan Council of the T	10	17	Non Voting	Non Voting	Voting	40	17	6
Gulf Regional Planning Comi	14	10	Voting	Voting	Voting	--	18	2
Mid-America RPC	105	30	Voting	Voting	Voting	41	41	2
Ozarks Transportation Organ	6	-	Voting	Voting	Voting	28	35	2
Lincoln MPO	21	8	Non Voting	Non Voting	Non Voting	9	9	3
Regional Transportation Con	9	8	Voting	Voting	Non Voting	32	8	5
Nashua RPC	13	30	Voting	Non Voting	Non Voting	20	20	2
North Jersey Transportation	34	20	Voting	Voting	Voting	25	8	2
South Jersey TPO	8	11	Voting	Voting	Voting	11	10	3
Las Crusces MPO	5	9	Voting	Voting	Non Voting	13	9	2
Adirondak-Glens Falls TC	3	12	Voting	Voting	Voting	16	15	2
CDTC	1	24	Voting	Voting	Voting	--	--	5
New York Metropolitan TC	75	16	Non Voting	Voting	Voting	16	16	3
Burlington-Graham MPO	4	13	Voting	Non Voting	Voting	17	24	2
Central Lane MPO	27	22	Voting	Voting	Non Voting	12	13	2
DVRPC	44	18	Voting	Voting	Voting	40	18	9
Lancaster County TCC	40	9	Non Voting	Non Voting	Non Voting	29	8	2
Rhode Island Statewide Plani	22	15	Voting	Voting	Voting	25	20	3
Rapid City Area MPO	10	9	Voting	Voting	Voting	16	10	3
El Paso MPO	17	18	Voting	Voting	Voting	25	25	2
San Antonio-Bexas County M	8	19	Voting	Voting	Voting	14	20	3
Chittenden County MPO	8	19	Non Voting	Voting	Voting	20	20	2

MPO	# of Staff	Policy Board	Policy Board Members Voting Status			TAC/TTC	Policy/ Executive Committee	Committees
			Mayors	County Representative	DOT Representative			
Richmond Area MPO	24	35	Voting	Voting	Voting	40	40	3
Bay-Lake RPC	11	24	Voting	Voting	Non Voting	24	13	2
Madison Area MPO	7	11	Voting	Voting	Non Voting	18	12	2

REFERENCES

Books

Citizen's Guide to Transportation Planning in the WILMAPCO Region, Wilmapco, Newark, DE, 1996

The Portland Edge – Challenges and Successes in Growing Communities, Ozawa, Connie P., editor, Portland State University, Island Press, Washington, Covelo, London, 2004

Urban-Suburban Interdependencies, Greenstein, Rosalind, and Wim Wiewel editors, Lincoln Institute of Land Policy, Cambridge, MA, 2000

Wilmapco's Public Guide to Transportation Planning – YOU Can Make a Difference, Wilmapco, Newark, DE, Summer 2003

Orfield, Myron, American Metropolitics – The New Suburban Reality, Brookings Institution Press, Washington DC, 2002

Sanoff, Henry, Community Participation Methods in Design and Planning, John Wiley & sons, Inc., New York, 2000

Vuchic, Vukan R., Transportation for Livable Cities, Center for Urban Policy Research, New Brunswick, NJ, 2000

Weiner, Edward, Urban Transportation Planning in the United States – An Historical Overview – Revised and Expanded Edition, Praeger, Westport, CN, London, 1999

Yu, Jason C., Transportation Engineering: Introduction to Planning, Design and Operations, Elsevier, New York, 1982

Reports, Articles and Essays

9th National Conference on Transportation Planning for Small & Medium-Sized Communities, Colorado Springs, Colorado – Session 2: MPOs: Who, What and How, 22 September 2004, http://www.planning.dot.gov/Documents/TransPlanning/FHWA_MPO_Workshop.htm

Capacity Building Needs, National Metropolitan Planning Organization Peer Exchange 5 – Proceedings, Duck Key, Florida, May 20-21, 2003, Transportation Research, Number E-C066 June 2004, http://trb.mtc.ca.gov/metroplan/ec066.pdf

Context Sensitive Solutions, California Department of Transportation Director Policy, 29 November 2001, http://www.dot.ca.gov/hq/oppd/context-solution.pdf

Discussion: Effectiveness of MPO Decision Making, National Metropolitan Planning Organization Peer Exchange 5 – Proceedings, Duck Key, Florida, May 20-21, 2003, Transportation Research, Number E-C066 June 2004, http://trb.mtc.ca.gov/metroplan/ec066.pdf , p.: 4

Freight Transportation Strategies Needed To Address Planning and Financing Limitations - Report to the Committee on Environment and Public Works, U.S. Senate, United States General Accounting Office –GAO, December 2003

MPO Capacity – Improving the Capacity of Metropolitan Planning Organizations to Help Implement National Transportation Policies, U. S. Advisory Commission on Intergovernmental Relations, ACIR A-130, May 1995

Population Change in Metropolitan and Micropolitan Statistical Areas: 1990–2003, http://www.census.gov/prod/2005pubs/p25-1134.pdf

The Decision-Support Process, Community and Quality of Life: Data Needs for Informed Decision-Making, National Academy of Sciences, 2002, pp. 103-128, http://www.nap.edu/openbook/0309082609/html/103html.copyright2002

The Metropolitan Transportation Planning Process: Key Issues – A Briefing Notebook for Transportation Decisionmakers, Officials and Staff, Transportation Planning Capacity Building Program, FHA-FTA, http://www.planning.dot.gov/documents/BriefingBook/BBook.htm

Working Together on Transportation Planing: An Approach to Collaborative Decision Making, National Association of Regional Councils in Association with Program for Community Problem Solving, National Transportation Library, Report No. FTA-DC-26-6013-95-1, May 1995, http://ntl.bts.gov/DOCS/574.html

Catherine, Adam, *The Character of Metropolitan Planning Organizations: A Quantitative Approach,* Term Paper, May 2005

Dempsey, Paul Stephen., Andrew Goetz and Carl Larson, *Metropolitan Planning Organizations: An Assessment Of The Transportation Planning Process - A Report To Congress*, University Of Denver Intermodal Transportation Institute & The National Center For Intermodal Transportation - University Of Denver And Mississippi State University, http://www.ie.msstate.edu/ncit/NCIT_WEB_UPDATE/MPO.htm, 2003

Khisty, C. J. and Kikuchi S., *Dealing with Group Decision-Making Qualitatively and Quantitatively*, Submitted for presentation at the 2004 Annual Meeting of Transportation research Board, and publication consideration in the *Transportation Research Record*

Nelson, Arthur C., Thomas W. D. Sanchez, James F. Wolf and Mary Beth Farquhar, , Metropolitan Planning Organization voting structure and Transit Investment Bias: Preliminary Analysis with Social Equity Implication, Draft, October 20, 2003, http://www.mi.vt.edu/uploads/MPOs.pdf

Puentes, Robert, and Linda Bailey, *Improving Metropolitan Decision Making in Transportation: Greater Funding and Devolution for Greater Accountability*, The Brookings institution Series on Transportation Reform, October 2003, p. 8

Slater, Rodney, and Gordon Linton, *A guide to Metropolitan Transportation Planning Under ISTEA – How the Pieces fit Together*, U.S.D.O.T., p. 01 http://ntl.bts.gov/DOCS/424MTP.html

Texts and Regulations

FHWA – 23 CFR §450.306-b

FHWA 23 CFR §450.310

TEA-21 [1203(f)] – http://www.fhwa.dot.gov/////tea21.htm