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**THE URBAN TRANSPORTATION DECISION-MAKING PROCESS: A
QUALITATIVE EXAMINATION OF OMAHA-COUNCIL BLUFFS
METROPOLITAN AREA**

A Thesis

Presented to the

School of Public Administration

and the

Faculty of the Graduate College

University of Nebraska

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Urban Studies

University of Nebraska at Omaha

by

Aleksandra Georgieva Tepedelenova

December 2005

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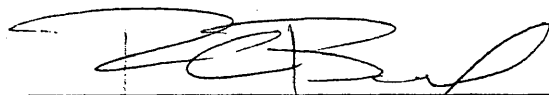


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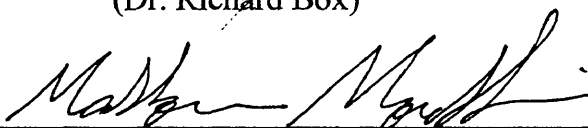
THESIS ACCEPTANCE

Acceptance for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree Master of Science in Urban Studies,
University of Nebraska at Omaha.

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11-28-2005

THE URBAN TRANSPORTATION DECISION-MAKING PROCESS: A
QUALITATIVE EXAMINATION OF OMAHA-COUNCIL BLUFFS
METROPOLITAN AREA

Aleksandra Georgieva Tepedelenova, MS

University of Nebraska, 2005

Advisor: Dr. Robert Blair

This thesis focuses on the transportation decision-making process in urban areas with a Metropolitan Planning Organization (MPO). It recognizes the importance of transportation planning for decision-making, in that planning supports decision-making. This research is a qualitative case study, which examines transportation decision-making in the Omaha-Council Bluffs metropolitan area. The Metropolitan Area Planning Agency (MAPA) is the MPO of the urban area. Responsible parts for transportation planning are the MAPA Transportation Technical Advisory Committee (TTAC) and the MAPA Council of Officials. The researcher conducts a series of interviews with members of the two groups in order to address the research questions. TTAC consists of technical experts who advise the local officials on transportation planning issues. Officials are the ones

who make final decisions about projects, but they are usually not technically oriented. The study found out that officials often follow the recommendations of the technical experts closely and don't challenge the technical information. The research discovered that the interviewees generally consider technical factors to be the most important tools for decision-making. In addition, funding influences decision-making more than other factors. In addition, decision-making in the urban area is generally objective and comprehensive, though sometimes objectivity and comprehensiveness are challenged.

**Dedicated to my husband and best friend Paul, to my sister and brother-in-law
Lilia and Kevin, and to my parents Dora and George and brother Boj in Sofia,
Bulgaria.**

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Introduction and Background of the Study

Urban transportation systems greatly affect people's quality of life. They can help provide convenience to citizens, but they can also hinder the functions of a city. For example, the importance of transportation systems and planning was obvious in Louisiana and Texas during the recent onslaught of hurricanes Katrina and Rita. In the case of Hurricane Katrina, a more effective transportation plan could have ensured the complete evacuation of New Orleans, potentially saving hundreds of lives. In the case of Hurricane Rita, a number of people suffered when virtually the entire city of Houston attempted to evacuate the city in a day's time. This suffering could have been lessened, if proper transportation planning had been applied to the evacuation strategy for the region. Transportation planning and decision-making is the central mechanism through which both these situations could have been addressed.

Urban transportation systems move a great number of people and goods daily and thus provide an essential service for the communities (Meyer & Miller 2001; Wachs 2004). For the most part though, transportation is a derived activity that facilitates other primary activities, i.e. getting to work or school, participating in social activities, etc. (PCUTP 1977; Wachs 2004). In addition, transportation has other functions than just moving people and goods. It is often viewed as a tool for accomplishing a broad range of societal and economic objectives, such as the creation of jobs, reduction of economic inequalities (Wachs 2004; Olson

2000), improvement of air quality (Meyer & Miller 2001; Johnston 2004; Olson 2000), promotion of more sustainable community development (Meyer & Miller 2001), etc. Transportation systems play a role in shaping the urban layout (Rosenbloom & Black 2000; Meyer & Miller 2001). They make up a large part of the urban environment (Wachs 2004). They provide accessibility to land and connect urban areas to other places – nationally and internationally (Meyer & Miller 2001). Transportation systems also comprise a major portion of federal, state, and local government expenditures (Johnston 2004). Clearly, the development and the characteristics of transportation systems are main factors for the economic and social health in the metropolitan area (Meyer & Miller 2001). Therefore, decisions made about transportation have great influence on the quality of community life.

This study focuses on various aspects of decision-making, such as its process, its actors, the factors that play a role, its limitations, its objectivity, etc. The researcher recognizes the critical role of transportation planning, since transportation planning supports decision-making (PCUTP 1977; Meyer & Miller 2001).

Statement of the Problem

Many urban transportation decisions happen on a regional level. Since transportation projects could be very costly, their funding is an important issue that decision-makers face. As Johnston notes (2004), the federal government

requires large and medium-sized urban areas to have a regional plan in order to qualify for federal funding. Metropolitan areas of more than 50,000 people typically have a metropolitan planning agency that is responsible for the preparation, approval, and updating of the Regional Transportation Plan (Wachs 2004). This research is a case study, which examines the transportation decision-making process of a Metropolitan Planning Organization (MPO). Selected for the study is the Metropolitan Area Planning Agency (MAPA) – the MPO of Omaha-Council Bluffs metropolitan area. MAPA has the structure of a regional council of governments (COG). The study identifies the parties participating in urban transportation decision-making and examines their roles and behavior with respect to decision-making. It seeks to find out what data enable decision-makers to reach their decisions. The research identifies the factors that play a role in decision-making and explores their importance. It also examines the objectivity of the decision-making process. In addition, the study explores whether or not transportation plans are in fact comprehensive.

Significance of the Study

The study is significant, due to its contribution to the research in the area of urban transportation decision-making. It refers to the existing theory and explores the decision-making process in practice. For example, some authors (Arroyo 2004; Meyer & Miller 2001) argue that technical and numeric information is important for decision-making. The thesis explores the importance

of technical information (i.e. transportation demand models, traffic impact studies, etc.) for decision-making versus non-technical factors (i.e. political, socioeconomic, etc.). The data for this research is first hand information. It is gathered directly from people involved in the urban transportation planning process as professional experts or city/county officials. Thus, the study attempts to expand existing knowledge by exploring the urban transportation decision-making process from a different perspective.

The study confirms a statement from the literature review (PCUTP 1977) that three general categories of actors play role in transportation planning. City and county officials are responsible for the final decision-making. Technical professionals perform the research and provide officials with professional expertise. Typically, officials are not technically oriented and follow closely the recommendations of the technical experts. Finally, individuals from the general public, personally or collectively affected by projects, give input to planning. The research concludes that technical aspects play a great role in transportation planning, though non-technical aspects should be taken into consideration, too. The study also discovers that funding is the single most important factor for transportation decision-making. Other significant issues, such as safety, highly depend on the ability to fund projects.

The study also discovered that transportation decision-making is largely objective, though there are some potential limitations to it. Finally, decision-

making is territorially comprehensive, in that jurisdictions work together to achieve common goals in the metropolitan area.

The researcher worked as an intern at MAPA for the summer semester of 2004, and at the City of Omaha transit authority Metro Area Transit (MAT) for the spring and summer semesters of 2004. The idea for this study first emerged from a number of conversations and interaction the researcher had with staff members from MAPA and MAT. The following literature review helped develop the idea into a case study proposal.

Review of Related Literature

This literature review briefly examines issues of decision-making theory, local governments, and urban transportation planning in connection to decision-making in urban transportation. The general literature on decision-making theory provides a foundation for understanding the urban transportation decision-making process. In addition, sources on local governments help identify who urban decision-makers are. Transportation planning literature sheds light on the planning process and on the role of planning for decision-making.

Role of Planning for Decision-Making

Decision-making needs the help of planning. In fact, the purpose of planning is to support decision-making (PCUTP 1977; Meyer & Miller 2001). Since planning is decision-oriented, its main purpose is to collect information that decision-makers will use to make a certain decision (Meyer & Miller 2001). The planning process translates community needs and goals into physical projects (PCUTP 1977). Transportation projects make up a large portion of expenditure on all levels of government (Johnston 2004). The decision-making process allocates the resources among the various projects in order to achieve some desired future state of the transportation system. The planning process is an opportunity for participation in the decision-making process, and thus for influencing the allocation of resources. Planning can also link individual

decisions of the many groups and organizations in the area in a common vision (Meyer & Miller 2001).

Further literature discusses the comprehensive approach to transportation decision-making. Arroyo (2004) argues that without a comprehensive approach, municipalities may end up using their resources inefficiently. Therefore, planning decisions should not be made in isolation (Arroyo 2004). Moreover, decision-making should be committed to the system approach (Gates 1976; Murray 1986). The system approach, comments Gates (1976), views organizations as part of a larger environment.

Morash (2000) adds to the discussion by explaining that transportation planning and public policy initiatives influence the private sector. More specifically, they determine “ ‘the 4 C’s of network capacity, congestion, condition, and connection’ ” (p. 12) on which the performance of the private sector largely depends. Market-driven planning and policy promotes what is important to the private sector and creates incentives for specific performance measures.

Decision Theory

Decision theory literature broadly discusses and gives different classifications to decision-making approaches. The main approaches described, though, are the rational, incremental, and “garbage can” approaches. The rational approach, also called rational-comprehensive, economic or classical, follows six

steps: (a) problem recognition, (b) agreement on facts and overall objectives, (c) identification of alternative solutions, analysis of the alternatives, and assessment of the consequences (both short- and long-term) following from each, (d) choice, (e) implementation, and (f) evaluation (Morgan & England 1996). Planners and decision-makers “marshal all the relevant information” (Szyliowicz 2003, p. 190). They select the option that assures the accomplishment of the organizational goal, that maximizes the important values, or, at the minimum, that solves the problem situation at the lowest cost (Murray 1986).

The alternative to the rational-comprehensive approach is the incremental (Morgan & England 1996), or political (Murray 1986) decision-making approach. It suggests that the allocation of government goods and services results from the interaction of competing groups in the city. Politics is the process of bargaining and compromising until equilibrium between the competing interests is achieved (Morgan & England 1996). Decision-makers consider only a limited number of alternatives – usually those that are only marginally different from the existing policy (Morgan & England 1996; Murray 1986). All consequences of the decisions cannot be known and not all consequences are evaluated. The political decision-making process often makes changes that citizens might immediately need. The political method is preferred not because it is perfect, but simply because it works (Murray 1986). Some decision-makers use a mixed approach, which tries to combine the best features of the rational-comprehensive and the incremental approaches (Morgan & England 1996).

The “garbage can” theory argues that the rational-comprehensive and the incremental approaches are unrealistically orderly. In reality, decisions are made by oversight; by flight, postponement, or buck-passing; and by resolution (Morgan & England 1996). The “garbage can model” provides a transition between the pure rational and the pure political models. It suggests that if “things are not exactly what they appear to be does not imply that they are necessarily the opposite” (Murray 1986, p. 31). A decision-making process that is not orderly is not necessarily chaotic. There is a broader range of conditions and characteristics that lay between the two extreme opposites.

Meyer and Miller (2001) note that transportation decision-makers use two additional approaches – the satisficing and the organizational. The satisficing approach suggests that decision-makers do not look for the optimal alternative, but “choose alternatives that satisfy some minimum level of acceptability or that induce the least harm or disturbance while conveying some benefit” (p. 61). The organizational process approach realizes “that most individuals belong to organizations and that decision making is therefore influenced by the formal and informal structures of the organization, channels of communication, and standard operating procedures” (p. 63). Szyliowicz (2003) argues that rational decision-making, the traditional decision-making approach in transportation requires “complete and unambiguous information, large amounts of time and monetary resources, control over the external environment” (p. 190), etc. Therefore, this approach is often impractical. Other approaches, such as incrementalism,

satisficing and organizational behavioral perspectives, mixed scanning bureaucratic politics models, cognitive and cybernetic paradigms, and multiple perspectives, are not subject to these limitations of the rational approach. Moreover, they are more adaptive to new conditions and more flexible. Regardless of the approach they take towards decision-making, decision-makers need to make an informed decision. Kaufman (1991) notes that making a decision requires having knowledge of and forming judgments based on four classes of information: (a) options available, (b) preferences and their importance, (c) events that cannot be controlled and that could affect the decision, and (d) likelihood that certain consequences will follow. He maintains that decision-makers do not have perfect knowledge and information in all four categories. Therefore, they relate to their perceptions as knowledge, and substitute guesses for the missing information. As a result, decisions are made in an environment of uncertainty (Newman 1971; Thomas, 1972; March, 1997). Howard Thomas (1972) explains that uncertainty in decision-making “exists if a process can lead to *several* possible outcomes” (p. 4). In order to deal better with uncertainty in transportation planning, argue Zegras, Sussman & Conklin (2004), planners can develop different scenarios for the possible outcomes. Scenarios, however, “are not ‘a group of quasi-forecasts;’ instead, they are stories, which intend to ‘describe different worlds’ *not* ‘different outcomes of the same world’” (p. 3). Decision-making theory also uses the decision-tree concept to analyze decision

problems. The concept shows that decisions have a multistage logic and that actions taken today affect our future decisions (Thomas 1972).

Transportation Decision-Making and Local Governments

Governments on national, state and local levels play important roles in transportation planning (Brand 1980; Meyer & Miller 1991; Johnston 2004; Wachs 2004). The transportation system is a product of the interaction of governments on all levels. This interaction does not have a hierarchical structure with the federal government on the top and local governments on the bottom. Rather, it has “local, regional, state, and federal interests all mixed together through multiple programs in which different governments cooperate, compete, regulate, and represent their unique interests and concerns” (Wachs 2004, p. 145). Local governments, however, play a critical role in urban transportation decision-making. The federal government’s job is to formulate national transportation policy and enforce its program goals, but it is on the local level that transportation facilities are built and operated (Brand 1980). Decisions about changes in the human environment, which involves transportation, are the tasks of regional and urban planning (PCUTP 1977). The local government is “the government of the community”, “the social, economic, and political ordering of people’s activities where they live and work”, and an “interaction among neighbors for the common good” (Banovetz 1998, p. 3).

Morgan and Kirkpatrick (1972) argue that the urban decision-makers are “political actors occupying authority roles” (p.190) and include primarily city councils and municipal executives and administrators. City council positions are filled with “amateurs conducting city business in their spare time” (p.192). Moreover, “municipal policy initiation and leadership is frequently supplied by groups and agencies other than the city council which merely ratifies, modifies, or rejects proposals generated from other sources” (p. 193). However, city councils play important roles in the political process, since they have the final authority to adopt and reject. Municipal executives, administrators, and bureaucrats “are continually involved in converting demands, putting decisions into effect, and supervising their implementation” (p. 194). They “are responsible for the basic public services the governments provide” (Banovetz 1998, p. 4) and know how to acquire and analyze information that policy makers need. They are expected to serve equally all members of the local government and are accountable to the public. Accountability is acquired through public hearings, open meetings, publication requirements, etc. (Banovetz 1998).

Different groups can participate in the planning process and thus influence decision-making. Moreover, they can form representative committees with clearly defined roles. For example, Executive Committees include officials, Technical Advisory Committees consist of professionals, and Public Participation Committees include public or interest groups representatives (PCUTP 1977, pp. 5-6). Tepper (2004) emphasizes the importance of meetings, such as special

commissions, task forces, roundtables, working groups, summits, etc., for decision-making in the policy process. He suggests that “many commissions, task forces and advisory groups produce new research, informed analysis and debate-defining reports, upon which policy alternatives may be constructed” (p. 530).

MPOs and Regional Council of Governments

In 1962, the Federal Aid Highway Act introduced new issues to transportation planning, such as the comprehensive, continuing, and cooperative (“3C”) planning process (Meyer & Miller 2001; Weiner 1999). The 1963 Federal Highway Act required urban areas to apply this process in order to be eligible for federal funds. Urban areas became divided into regions and regional modeling was adopted as a standard procedure. Currently, most urban areas have a MPO that plays a key role in transportation investment decisions regionally (Jones 2005). MPOs serve the metropolitan statistical areas (MSAs), designated by the U.S. government. Each MSA contains one or more counties (cities and towns in New England) and has a central city (Rosenbloom & Black 2000). MPOs play an important role in the long and short term planning in the metro areas. They lead the development of the Constrained Long Range Plan (CLRP) and the Transportation Improvement Program (TIP). Projects in the CLRP are planned over a 20-year period of time, while the TIP is updated every 3-5 years (Wolf & Fenwick 2003; Zegras, Sussman & Conklin 2004).

MPOs were created in the 1950s (Olson 2000) and designated “as the agencies responsible for coordinating urban transportation among state and local officials” (Rose 2003, p. 221) in the 1970s. In 1991, their functions were significantly reconsidered by the Intermodal Surface Transportation Efficiency Act (ISTEA). The act envisions MPOs “to be comprised of local elected officials and metropolitan planning experts who would cooperatively develop long-term regional transportation plans in cooperation with community groups and state planners” (Olson 2000, p. 155).

According to Wolf and Fenwick (2003) and Meyer and Miller (2001), the regional Council of Government (COG) is a common form of MPO. COG “is a voluntary organization of local governments established to foster interlocal cooperation and to develop programs for solving problems that are intergovernmental in nature” (UNL 1972, p. 1). However, COG “is not a new level of government,” but “a voluntary association of existing units” (NSOPP 1973, p. 2). Although COGs solve regional problems, they allow communities to keep their autonomy. They open communication for governmental bodies in the region they cover,

by providing a forum where local elected officials representing member governments may directly discuss and study common problems, exchange ideas and information, and develop coordinated plans and recommendations for solutions to region-wide problems, thereby preventing waste of public funds through overlapping and duplication of services. (NSOPP 1973, p. 2)

Harris (1975) points out that funding is the reason for local governments to form COGs. The author argues that if federal programs and funds were removed from COGs, many jurisdictions would not see any benefit of participating. He points out that “the majority of the COG member governments consider it a useful and expedient channel through which they can gain certain benefits without relinquishing anything of real importance to them” (p. 13). The reviewed literature revealed also some problems connected to COGs. The regional council of governments has been described as the single “coordinated voice” (Harris 1975, p. 9) of the whole region. However, due to “their voluntary nature, limited involvement in major policy matters, lack of enforcement powers, and general dependence upon goodwill” (Harris 1975, p. 9), COGs do not solve the problem of government fragmentation. In addition, the representation and voting methods used may create problems in some regions. Most COGs use the one unit-one vote method. With this method, though, the areas with larger population, such as the central city, are underrepresented. At the same time, the areas with smaller population are overrepresented. Alternative to the one unit-one vote method are the method based on population size, and the modified method, according to which larger units have more votes than smaller units (Harris 1975).

Traditional Transportation Planning Process

Rosenbloom and Black (2000) argue that some of the basic tasks of transportation planners are the study and estimation of future demand for

transportation facilities or services. Planners estimate future traffic by using the traditional transportation planning process, which has four steps: trip generation, trip distribution, mode choice, and trip assignment. The output of one step is the input for the next step. Regions are divided into traffic analysis zones. The trip generation step estimates the number of trip origins and destinations for each zone. In the trip distribution, trips that originate in each zone are distributed among the trip destinations in the other zones. In the mode choice step, trips are divided between those using private and those using mass transportation. In the last step, trip assignment, “each trip is routed over the appropriate network, either street or public transit” (p. 204).

Policy Issues in Transportation Planning

Transportation planning has been a reflection of the policy issues of its time. In addition, policy decisions made in the past influence the future condition of the transportation system. For instance, in the 1950s elected officials made it a national priority to accommodate the greatly increased automobile use and to utilize the federal money available for highway construction (Meyer & Miller 2001; Taylor 2000). As a result of this policy, auto usage boomed and brought congestion, while mass transit ridership declined. In the 1970s, highway construction declined and government subsidies were poured into mass transit transportation. This policy resulted in “a highway system strained to the limits and a transit system with adequate capacity, but declining ridership” (Kuemmel

1991, p. 281). Due to the lack of proper land use control, an extensive urban sprawl has occurred. Urban sprawl is difficult to serve with transit (Kuemmel 1991) and non-motorized transportation modes (Wilkinson 1997). Moreover, urban sprawl is destructive to quality of life in urban areas. It is largely responsible for the decline of public service delivery, since it is a limiting factor to the effectiveness of certain public policies (Boschken 2000). However, notes Dueker (2002), urban sprawl and the auto should not be viewed as enemies. In addition, he argues that public policy and investments should try to reflect the positive sides of low-density development and personal transportation, while “taming” their negative aspects.

The literature widely discusses the Highway Act of 1956, the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and the Transportation Equity Act for the 21st Century (TEA-21) of 1997. The Highway Act of 1956 marked the beginning of the so-called “golden age” in highway building (Rose 2003). During this period, planners did not work together with elected officials and citizens (Meyer & Miller 2001; Rose 2003), but instead concentrated on perfecting the techniques they used to solve transportation problems (Meyer & Miller 2001). Though the need and the prospect of building a national highway system has been discussed before, it was the Highway Act approved by President Eisenhower that provided the necessary funding and allowed the construction to start (Olson 2000; Rose 2003; Taylor 2000). This legislation provided that the federal government would fund ninety percent of the cost of the Interstate

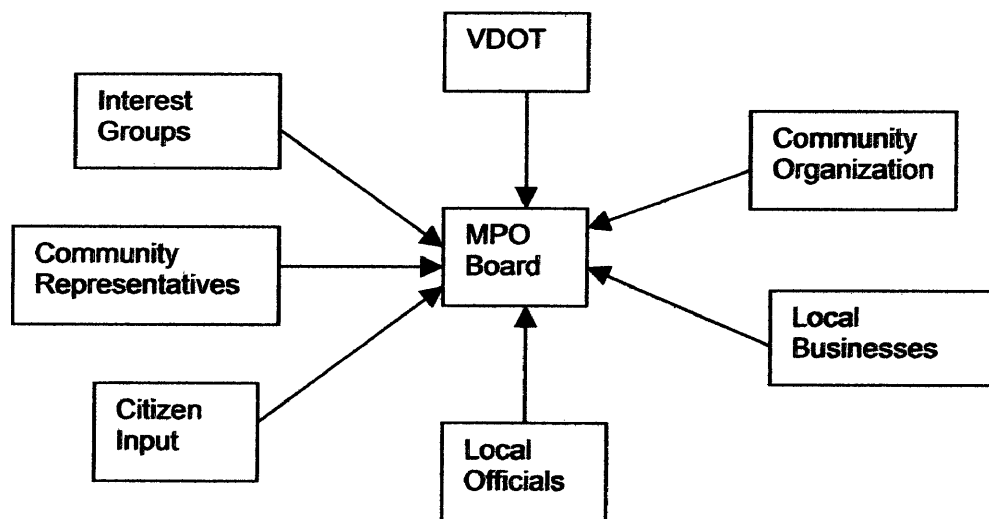
highway system (Kuemmel 1991; Olson 2000; Rose 2003, Taylor 2000). The Act “raised federal motor fuel taxes and fees and created a Highway Trust Fund” (Taylor 2000, p. 205). In this connection, Wachs (2003) notes that today federal and state fuel taxes are lower than they should be. Fuel taxes, he notes, should be a popular funding source for highway projects. Raising them instead of finding other funding options, would be the right thing to do, since the real users of the highways would be charged.

In 1990, Samuel Skinner, the Secretary of Transportation from President Bush’s cabinet, proposed that different transportation modes work together, rather than compete for funds. He suggested that politicians pursue modal mixes that best fit the needs in their areas, rather than emphasizing highway, or even transit development (Rose 2003). In 1991, ISTEA was signed. The act gave a new direction to transportation planning, which TEA-21, for the most part, also followed. ISTEA emphasized intermodal transportation planning and established that air quality goals should be achieved through the transportation plan and program (Meyer & Miller 2001; Johnston 2004). For the first time it was required for transportation plans and programs to be constrained and they were assigned realistic funding sources (Meyer & Miller 2001). ISTEA and TEA-21 further developed a tradition started by the National Environmental Policy Act (NEPA) in 1969. NEPA introduced the opportunity for the public to participate in state-level transportation planning, by opening the project development process for public input. Under ISTEA and TEA-21, not only state DOTs, but also MPOs

were required to involve interested citizens. Transportation planning agencies on state and local levels constructed citizen participation plans (Stich & Eagle 2005). The public was given the opportunity to participate in the development and amendment of the long-range and the transportation improvement local and state plans (Stich & Eagle 2005; Szyliowicz 2003). Decision-making became a function of elected local politicians, rather than federal and state engineers (Rose 2003).

Stich and Eagle (2005) show the decision-making process in the state of Virginia. According to Figure 1, input comes to the MPO Board from various sources, such as community organizations, local businesses, local officials, citizen input, community representatives, interest groups, and the VDOT (Virginia Department of Transportation).

Figure 1. Current Decision-making process in Virginia.



Source: Stich & Eagle (2005).

The literature review revealed controversial opinions about the role of the state governments after ISTEA and TEA-21. According to Brown (2002), the two acts have reconsidered the role of the state in transportation planning. They have granted the MPOs a significant planning and financial independence from the state. The state Departments of Transportation (DOTs) have lost a lot of their power and have become “a statewide coordinator of metropolitan area plans, overseer of rural and inter-city transportation projects, and complier of separate plans into one 20-year, statewide planning document” (p. 58). MPOs however, argues Dueker (2002), have been criticized for their poor leadership and inability to formulate regional vision. Moreover, Olson (2000) maintains that MPOs have failed to achieve their purpose namely because of the lack of independence from the state. Before ISTEA, projects were funded by federal money, but planned by the state governments. The states, notes Olson (2000), have “traditionally favored road-building rather than alternative transportation systems that would better meet... the needs of the metropolitan area” (p. 148) and they still support highway building. Wolf and Fenwick (2003) note that states have maintained their power to control the direction of policy and important transportation decision. Though ISTEA tried to address the real needs of the urban areas through the MPOs, the state DOTs still have the final say in planning. Namely, once the MPOs create the TIPs, the state DOTs can decide on which projects will be actually funded and implemented (Olson 2000).

Literature Review Summary

The traditional and most wide spread decision-making approach in transportation is the rational, though nowadays other approaches might be more applicable. Prior to decision-making, information has to be gathered. Transportation planning provides decision-makers with the necessary information for the decisions they are facing. Transportation planning has to be comprehensive, since decision-making follows the system approach. Transportation decision-making is happening on all government levels, but local governments are responsible for the specific projects. Under recent legislation, local governments in urban areas take a regional approach, construct regional plans, and try to work together on transportation issues. State DOTs, however, have the ultimate say on whether specific projects will be implemented. Most urban areas have Metropolitan Planning Organizations (MPOs). A common form of an MPOs is the Council of Governments.

Transportation planning uses models to study and estimate the future transportation demand. In addition, transportation planning reflects the policy issues of its time. In the past, transportation policy promoted the use of the automobile. In recent years, however, policy forwards a multimodal approach.

Methodology and Procedure

The research takes a case study approach. This chapter describes the study context and its methodology and procedure.

Setting of the Case Study

The urban area selected for the study is the Omaha-Council Bluffs metropolitan area in the states of Nebraska and Iowa. The MPO in the region, the Metropolitan Area Planning Agency (MAPA), is a council of governments. The purpose of MAPA is to bring together local officials from its member governments and address mutual issues, transportation being an important one. MAPA does not have regulatory powers and does not levy taxes. The agency prepares the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP) of the area. The LRTP gives the broad picture of transportation planning in the future, while the TIP lists specific projects. According to MAPA's website <http://mapacog.org/>, the agency has 64 members: five counties, 39 towns, 19 special purpose governmental entities and one city council. Any government entity in the 5 participating counties (Douglas, Sarpy, and Washington counties in Nebraska, and Mills and Pottawattamie counties in Iowa) can be a member. The population of the five counties is as follows: Douglas – 463,585; Sarpy – 122,595; Washington – 18,780; Mills – 14,547, and Pottawattamie – 87,803. However, not all governments within the counties

participate. The cities with the largest population in the urban area are Omaha (390,007) and Council Bluffs (58,268), but there are also other participating cities with populations of more than 5,000 people – Bellevue (44,382), Papillion (16,363), La Vista (11,699), Blair (7,512), Ralston (6,314) and Elkhorn (6,062) in Nebraska and Glenwood (5,358) in Iowa.

In the last years, there have been attempts for a more comprehensive approach and sustainability in city development in Omaha. The Joslyn Castle Institute for Sustainable Communities has prepared the *Flatwater Metroplex/ sixty mile radius survey report* (2004). The work examines different aspects of life in the region with the City of Omaha as the center. The Flatwater Metroplex, the area studied in this report, includes the urban-rural region roughly sixty miles in radius around its center. The report explains that the automobile is the predominant mode of transportation, and it has shaped the planning trends in the city. The report recommends that investigation work for transit options should begin as soon as possible.

The development of all the counties in the region is low-density. Low-density urban development has introduced a number of problems to the area, such as absorption of fertile agriculture land by low-density development. According to the report, whether there is one house or 70 houses in ten acres of land, a road has to be built or maintained and utilities extended to accommodate the development (p. 28). Low-density development also influences urban growth in the area. It threatens to block the future urban development of some counties in

the Flatwater Metroplex. In addition, urban sprawl and the auto-oriented lifestyle pose a threat for the natural environment.

The report gives the population growth projections for 2050. MAPA has forecasted that the population in the three core counties of the Flatwater Metroplex – Douglas, Sarpy, and western Pottawattamie (or the area this study is examining) – will grow by 24.2 percent between 2000 and 2050. More specifically, according to MAPA the population will increase from 662,900 in 2000 to 823,300 in 2050 (p. 7). The growth rate in the different counties will not be the same. It will be 18 percent in Douglas County (from 449,300 to 530,200); 12.5 percent in Pottawattamie (from 87,300 to 98,200), and 54.3 percent in Sarpy County (from 126,200 to 194,800). Simultaneously with its growth, the population will age significantly, which will influence future planning. The Bureau of Business Research (BBR), says the report, projects even bigger population growth for the same period of time. According to the BBR, the population in Douglas County will grow by 43.1 percent and in Sarpy County – by over 100 percent. The BBR also offers “alternative projections” according to which the population growth in Douglas and Sarpy County will be respectively 66 and 114 percent. According to these projections, population growth will be dramatic, and will present a great challenge to city planners. They will inevitably need to take great measures in order to accommodate the additional population.

According to the report, there will be an increase of the commuter numbers from the communities and counties outside the metro area to the Sarpy

and Douglas counties. The daily commuters into Omaha's core areas in year 2000 were over 45,000 (16,500 were from Council Bluffs alone, or about 45 percent of that town's working population.) According to the projections, by 2025 this number will be nearly 80,000, and in less than 50 years it will reach over 230,000. Thus, the statistics show a tremendous variance between the numbers of the population that will live in the core counties, and the population that will work in them. This phenomenon will require that more road infrastructure be provided to accommodate the needs of the commuting households. Also, in 2000 there was a considerable movement between the two core counties – over 36,000 residents of Sarpy County commuted daily to Douglas County, while nearly 12,000 people commuted daily from Douglas to Sarpy County.

Research Questions

Based on the review of related literature, this study addresses the following research questions:

1. What data are critical for urban transportation decision-making?
2. What factors and issues play roles in transportation decision-making in Omaha-Council Bluffs Metropolitan Area? How important are they?

3. How do transportation decisions happen in the Omaha-Council Bluffs Metropolitan Area? Who are the decision-makers and who plays critical roles for decision-making?
4. To what extent is decision-making objective? Objective, in this case, should be understood as fair, or uninfluenced by emotions or personal prejudices.
5. To what extent is decision-making comprehensive? The term “comprehensive”, for the purposes of this study, takes two issues into consideration. First, how much coordination takes place between cities in regards to transportation planning? Do they take into consideration the other cities’ plans when deciding on projects? The researcher has called this phenomenon territorial comprehensiveness. Second, does transportation decision-making take into account other elements of the environment, such as environmental concerns, economic impact, protection of historical areas, social considerations, etc? Are transportation decisions isolated? This phenomenon was called structural comprehensiveness.

Expected Findings

Considering the literature review, the study expects to find that:

1. Numeric data are critical for transportation decision-making.
2. Federal funding is very important to decision-making.

3. City officials are the final decision-makers on transportation projects. They use technical reports as an input to their decisions. However, they often do not have transportation backgrounds and seldom challenge the information planners and experts report to them.
4. Decision-making is very objective.
5. Due to the MPO, transportation projects are well coordinated between the cities. In this sense, decision-making is territorially comprehensive. It is unclear, though, if planning is structurally comprehensive, namely if it includes all elements of the environment.

Research Design of the Case Study

In order to address the research questions, the researcher conducts a series of interviews. The interview is used as a methodological approach to gather information about the decision-making process. Data is also collected by observation – through attending transportation meetings. However, interviews provide the main source of data.

The data for the proposed study is collected by following the steps shown below:

1. Identification of the MPO in Omaha-Council Bluffs Metropolitan Area. Contact the MPO and ask for a list of officials and professionals

involved in transportation planning in the Omaha-Council Bluffs Metropolitan Area.

2. Development of interview protocols for the interviews with officials and transportation professionals.
3. Writing of a cover letter to the potential interviewees. This step can occur simultaneously with step 2.
4. Submission of an exempt application to the Institutional Review Board (IRB) and receiving an approval of the application. This step is required due to the involvement of human subjects in the study. Information about the application is found on <http://www.unmc.edu/irb/>.
5. Meet with MPO staff and address the questions from the interview protocols.
6. Contact the potential interviewees on the phone or via email and ask for an interview. This step can occur only after the application from step 4 has been approved. The individuals contacted are provided with a copy of the cover letter stamped by IRB and with a copy of the interview questions.
7. Interview the individuals who agreed to participate in the study. According to the preference of the interviewees, the interviews could be conducted in person or over the phone.

Research Tool of the Case Study

The research tool of the study is in the form of interview protocols. The interview protocol is developed in two variations for the two different groups of subjects – transportation professionals and elected and appointed officials. The interview questions are listed in Appendix A.

Population of the Study

The population of the study is the total number of members of the MAPA Council of Officials involved in transportation planning and of the Transportation Technical Advisory Committee (TTAC). The MAPA Council of Officials consists of sixty-four members (nine of them are voting members of the MAPA Board of Directors). However, thirteen of them are not considered as potential interviewees, since they represent special purpose governmental entities that are non-transportation, i.e. schools districts, utilities districts, fire districts, etc. The Transportation Technical Advisory Committee (in the beginning of the study) consists of nineteen voting members, but it has sixteen associate non-voting members, who also count in the population. Two of the members of TTAC are also members of the Council of Officials and have to be subtracted. The total population is then eighty-four.

The researcher plans to interview between ten and twenty subjects. It is assumed that ten to twenty different interviews would provide the study with sufficient information

Assumptions and Limitations

Both the assumptions and the limitations of the study are connected to the use of the interview as a research tool.

The research requires that an application to the Institutional Research Board (IRB) be completed. One of the application questions asks for the maximum number of subjects that will be included in the study. An assumption is made that it is unrealistic that more than twenty subjects be interviewed. This assumption is made because of the following limitations to the research tool. First, officials and planners might be busy or unavailable to participate in the study. Second, they might not be willing to participate. Third, they might not be easily reachable and might fail to return messages and answer emails. It is also assumed that any number of interviews between ten and twenty would give enough information to the research and would provide a representative sample.

In addition, it is assumed that it would be more valuable to interview officials and planners from local governments with larger population and close to the urban area core. It is assumed, for the purpose of this study, that their point of view would better represent the reality in the urban area.

Delimitation of the Study

MAPA has provided the researcher with member lists of their Council of Officials (which includes MAPA Board of Directors), and Transportation Technical Advisory Committee (TTAC). The researcher realizes that the entities

and organizations individuals in the lists represent may have a number of other experienced and well-informed professionals and officials. However, only individuals from these two lists are considered for the study. An exception could be made if a particular person whose name is on the lists has recommended another person from the same entity, who can provide valuable information for the research.

Data Collection

First Meeting with MAPA Staff

Before the interviews with TTAC members and officials were conducted, the researcher met with a MAPA staff member. The questions from the interview protocol were used as a framework of the meeting. The information that was acquired follows.

The interview identified the plans developed by MAPA. These include the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP). The MAPA staff member explained that the instruments the agency uses, in regard to urban transportation planning, are its land use and transportation models. The transportation model is a four-step process, which uses the program TRANSCAD. The land use model is a mathematical model developed by MAPA. It is called Land Use Activity Allocation Model (LUAAM). Various public policies are embedded in the two models.

The employee explained that, in order to develop the land use model, MAPA staff first talks to all the member jurisdictions' city and county planning departments. The jurisdictions explain what type of development they want to pursue (i.e. residential, industrial). This information gives MAPA an idea of what the potential future land use will be. To avoid errors, MAPA requests that jurisdictions review the collected data for possible mistakes. Next, MAPA develops regional forecasts for population, housing, and employment for the

Transportation Study Area. (The map in Appendix B shows the MAPA Transportation Study Area.) Following this step, MAPA allocates the forecasts in the designated transportation zones. The allocations are based on an index consisting of multiple factors, such as: slopes, vacant (available) land, accessibility of the land, availability of utilities (sewer, water, gas), whether the land is adjacent to existing development (i.e. access to existing services), potential density, etc. These factors are weighted according to the land use (residential, industrial, etc.) Afterwards, MAPA develops estimates. The agency uses socioeconomic information (where people live, work, etc.) and develops its four-step modeling process. The four-step modeling process is the basis for the transportation forecast. The interviewee explained that MAPA forecasts where transportation problems will occur in the future.

Next, MAPA makes analyses. On one hand, jurisdictions have stated the transportation needs in their areas, i.e. what roads should be improved on their territory. On the other hand, by using traffic count numbers, MAPA determines what areas are over- or undersupplied with transportation. The agency uses the traffic count information to make adjustments to the needs stated by the jurisdictions. Following this step, MAPA gives a formal technical recommendation (though non-technical aspects are also involved in the recommendation). During the whole process described above, MAPA gathers public input (see the *Metropolitan Omaha-Council Bluffs public participation plan* in Appendix C). However, at the recommendation stage, gathering public

input is more essential to planning (though, as the interviewee explained, citizens mainly relate to specific projects, not long-term transportation planning). Upon making the technical recommendation, MAPA asks the officials to communicate to their policy makers what will be happening.

The interviewee explained that the described process has been ongoing since the early 1970s. Changes between the [long-range] plans have not been very significant. After the recommendations are made, it is not uncommon to examine other alternatives as well. This did not happen when MAPA adopted the 2025 plan [in 2000]. Since there were not many changes, there was not very much controversy and most people were fairly satisfied. The MAPA staff member added that in some cases MAPA knows from previous experience that, for political reasons, some projects would never happen. Therefore, the agency does not even test them.

The MAPA employee explained that MAPA solicits TIP, the short-range transportation plan, with jurisdictions. The plan is constructed as a reaction to community needs. MAPA examines whether the projects from the TIP fit the LRTP and whether there is money [the jurisdictions' money] for building these projects. If there is no money, MAPA suggests that the projects be reprogrammed to a later date.

Further, the interviewee was asked what types of transportation planning information MAPA produces. The agency employee explained that traffic forecasts and traffic intersection [growth] reports are generated. Data MAPA

produces are utilized by jurisdictions in their traffic analyses. Jurisdictions, for example, use the information to determine how many full and turning lanes are needed for specific streets, etc. These data sets are used also by business people, who need to know what roads will be [or won't be] improved [and how their businesses will be influenced as a result]. The MAPA staff member noted that the agency does not publish its socioeconomic data analyses.

Next, the interviewee listed the groups involved in transportation decision-making in the urban area – the MAPA Council of Officials, and the MAPA Transportation Technical Advisory Committee (TTAC). The Council of Officials consists of local officials [one representative for each jurisdiction member of MAPA]. The members of the MAPA Board of Directors are members of the Council of Officials. The TTAC consists of local technical professionals. It advises the Board and the Council of Officials. MAPA employees and the TTAC become involved in a number of discussions concerning the transportation plans. TTAC recommends the LRTP, but the Council of Officials approves it.

The interviewee said that output information of the transportation demand model is in the form of technical working documents, such as graphs, maps, and tables. MAPA provides the output data to TTAC. [The members of the Council of] Officials have access to this technical information and they are aware of what type of data are being produced. However, technical (output) data are normally not presented to officials, since they don't need it for their decision-making process.

Further, the MAPA employee said that transportation planning is a reaction to what the public thinks, in that officials ask MAPA to review issues that concern citizens. The opinions of both residents and business people are considered valid issues.

Interviews with TTAC Members

For the purpose of this study, seven members of TTAC were interviewed and asked ten questions. TTAC members are transportation professionals: engineers, public works directors, surveyors, consultants, etc. (See Appendix E for some of the answers listed by interviewees.) The results of the interviews are summarized below:

“Describe the transportation decision-making process in Omaha-Council Bluffs Metropolitan Area.”

When it came to decision-making, all interviewees talked about funding. Some of them pointed out that for transportation projects funded with federal money there are federal regulations that have to be followed. The ratio between the federal and local funding is 80:20.

Several interviewees explained that five cities in Sarpy County – Bellevue, Gretna, La Vista, Papillion, and Springfield – coordinate transportation planning between each other and with Sarpy County. Each city has a 6-year road plan. For duplicating projects in the plans, the involved cities split the project cost. An

example is a recent project on Giles Road between 72nd & 84th Streets. Giles Road is the dividing line between Papillion and La Vista and the two cities split the cost. The directors of public works approach MAPA for federal funding of the projects. MAPA prepares the TIP, which lists the projects for implementation (see Appendix D for an example of a TIP projects list). Local money, on the other hand, becomes available through the city council. The finance director from each city administration decides on this matter. Local money comes from gasoline sales taxes and property taxes.

One professional said that decision-making should consider the interests of the local communities, and the logical flow of the planning processes occurring in the urban area. Planning and decision-making in this interviewee's jurisdiction start at the staff level. Planning and decision-making start after receiving requests, complaints, and opinions from the community about an existing problem, or as a result of monitoring. The staff reviews what kind of problems need to be addressed, what steps have to be taken, what regulations should be met, etc. After examining the options, the transportation professional said, the organization determines what option it can afford within its financial constraints. Then the results of this team's work are finalized and brought together. The one who makes the decision is the executive director. If the decision is such that it needs a Board resolution, public hearings are required. The same process is valid at the city level, noted the interviewee, but the mayor is the one who makes the decision in that case.

One of the interviewees explained that TTAC plays a crucial role in deciding what projects will receive federal funding and in determining the overall transportation needs in the area. In addition, the Committee plays a role in allocating federal money among projects. For example, financial constraints may cause some large projects to be broken into smaller projects [for implementation during different fiscal periods]. The reason for breaking projects down might not be strictly financial, though. In some cases, jurisdictions are unwilling to close long stretches of the road under construction for a long time. An example is the project at the intersection of 114th Street & West Dodge Road. At the moment, an elevated bridge is being built there. If decision-makers had decided to build an interchange, they would have had to close the street in all 4 directions, noted the interviewee. However, sometimes projects cannot be broken down and the road has to be closed for construction. The interviewee added that, on some occasions, MAPA determines that a project would receive federal funding, but at a later time.

Several of the interviewed professionals mentioned that MAPA helps communities build projects that are coordinated. For example, as one of them noted, a 2-lane road should not suddenly turn into a 4-5-lane highway at a jurisdiction line. In contrast, another interviewed TTAC member indicated that MAPA does not play a significant role in decision-making. Each jurisdiction follows its interests. MAPA coordinates the work of the local governments, but

does not make decisions. The agency, noted the interviewee, has no power to make things happen, if jurisdictions are not willing to take any actions.

Another interviewee said that planning and decision-making highly depends on the content of the city Master Plan. In his jurisdiction's plan, the city vision states that the community is committed to providing a high quality of life for everyone. Transportation decision-making is committed to the city vision and the transportation system has to be built accordingly.

“What tools do you use to conduct urban transportation planning (i.e. models, studies, etc.)? What input (technical/numeric, political, socioeconomic) data are used?”

The interviews revealed that the jurisdictions largely utilize engineering studies as a transportation planning tool. It was discovered that transportation modeling plays an important role for planning, too. However, several interviewees noted that it is expensive to run a model. Typically, cities [and counties] do not have their own models. They use data acquired by MAPA's transportation model. While models are important planning tools, planners should make sure the employed models match the reality in the urban area, such as demographics, noted one interviewee.

Jurisdictions use a broad range of input data for transportation planning. Input data included [population] projections, future need forecasts, projected land-use, traffic counts (own and from MAPA), political input, public input,

socioeconomic factors, employment projections, and sewer plans. One interviewee said she considered planning to be very apolitical. Another one said that political considerations are more important than technical input.

One interviewee emphasized that projections do not always prove right. Sometimes [socioeconomic] trends change and there are deviations from what has been projected. For example, in the past, the population in South Omaha decreased, and so did the demand for public transportation. In recent years though, the population there grew due to the increase in the Hispanic population. As a result, the demand for public transportation grew.

“What kind of planning information do you produce? Are there records? Who uses the data and how?”

Interviews showed that local governments typically produce their own traffic counts and make them available to MAPA and to the public. There is significant interest in this information, especially from developers. Some jurisdictions do not produce much planning information besides the traffic counts. However, they use, on a regular basis, the forecasts that MAPA produces. An interviewee from MAT, the city of Omaha Transit Authority, said that the jurisdiction produces monthly, quarterly, semiannual, and annual ridership numbers. MAT uses this information to decide how best to use its assets – for planning and scheduling. A professional from one of the counties explained that the county produces traffic counts and Highway Performance Monitoring System

(HPMS) data, and performs bridge inspections. Other interviewees noted that their jurisdictions produce projections (i.e. population, housing, etc.), but they hire consulting firms to do that. In addition, the jurisdictions [cities and counties] track the number of new lots permitted for development and the land use changes, and use the information to decide if new land should be opened for development.

“What factors play a role in urban transportation planning and decision-making? Please, rank the factors according to their importance.”

Most of the interviewees pointed out funding as the most important factor in decision-making. A number of them said that if their jurisdictions had the money they would have been doing a lot more improvements. Traffic engineering studies and traffic counts, current and future needs, federal and state planning regulations, urban growth, and availability and condition of facilities were mentioned as further factors that influence transportation planning and decision-making. In the end, though, the majority of the interviewees pointed out that these factors are dependent on the ability to fund the projects.

Two other interviewees explained that safety is the number one priority in decision-making. Safety is largely connected with the level of service (LOS). The characteristics of the road should fit the land use, one of them noted. If there is more traffic than the road can accommodate, there is a risk of accidents. As an example it was pointed out that Papillion is building a Wal-Mart on 72nd Street and Giles Road. In order for the new traffic to be accommodated, acceleration

and turning lanes will be built. Giles Road will be upgraded from a 2-lane rural design to 3-lane urban design

During the interviews, some professionals said that decision-makers use traffic counts to determine the transportation needs. Since needs always exist, projects are prioritized, they commented. Generally, before considering new construction, jurisdictions try to involve all sides affected by the project. Planners and decision-makers want different sides to reach agreement on the project before the investment is made. In some cases, indicated one transportation professional, trade-offs are made, until developers and the public reach a point of equilibrium. Different sides are satisfied and officials are not put in the hard position of choosing between the interests of the contributors and voters. There is not much of a political argument left.

Another interviewee said, however, that political considerations are among the most important factors in decision-making. It matters who exactly wants the project to materialize, he commented and gave two examples. First, approximately ten years ago, 90th Street had two lanes between West Dodge Road and West Center Road. The City of Omaha decided to improve the section by upgrading it to a 4-lane street. However, citizens did not want the improvement to happen. Though the public held back the project for a period of time, later it was implemented. The construction of an elevated highway at the intersection of 114th Street and West Dodge Road was given as another example. Though the

site is in Omaha, [West] Dodge Road is [part of] State Highway 6. In the end, the state had the final word.

“Do decision-makers have access to/knowledge about technical information?”

Some interviews identified elected officials, such as mayors and the city councils, as the ones who make the ultimate decisions about projects. All seven interviewees agreed that officials have adequate access to technical information. One interviewee noted that decision-makers refer to public works for the data they need. Typically, decision-makers would ask for traffic counts. If public works departments do not have the requested information readily available, it is their responsibility to collect it and provide it to officials, he added.

One interviewee explained that elected officials approve the projects for implementation, but the ones who make recommendations to them are the technical specialists, such as engineers, Nebraska Department of Roads (NDOR) experts, etc. (Note: NDOR is the DOT in the State of Nebraska.) Three other interviewees said that officials are not technically oriented. They added that though officials are provided all the information they request on projects, they typically are not interested in raw numbers. Normally, officials review only the reports with recommendations prepared by technical staff. One participant even added that officials ignore the technical information.

Moreover, two interviewees expressed the opinion that officials are not the ultimate decision-makers. Transportation decisions, noted one of them, are based on needs. Technical experts have to justify needs through technical information. Thus, decisions are not political, but rather technical. City, county, and state engineers develop recommendations, which in most cases officials would follow. The interviews showed, however, that occasionally politicians and technical staff have disagreements. Two interviewees gave the ongoing project on 114th Street and West Dodge Road as an example. [West Dodge Road is located within the City of Omaha boundaries, but is part of State Highway 6]. About four years ago, noted one interviewee, the former Omaha city administration opposed the construction of the overpass at this intersection. Local officials wanted to look for a different option and the project was held up. The project was on the state level and NDOR made it clear that they will either spend the money for building an overpass, or will use the funds at another location. Thus, local administration was pressed to build the overpass. Moreover, added the interviewee, the argument contributed to the local city administration being defeated at the next election. Another interviewee mentioned a case of disagreement between the technical specialist and the politicians. In the 1960s, he noted, [technical people] recommended the construction of a new highway, the West Expressway. However, the highway was not built. Politicians had to stop the project due to the public opposition to it.

“What is the role of public and working meetings for urban transportation decision-making?”

A participant from one of the smaller cities said that the local government does not hold regular working meetings for transportation issues. The TTAC meetings, however, are very beneficial for all the member jurisdictions, since they exchange information. He explained that TTAC consists of voting members and associates. Voting members are technical and administrative staff that makes financial decisions. These professionals, said the interviewee, study the results from reports MAPA gives them in advance and vote on projects. Associate members are mainly specialists from consulting firms who attend the meeting to get informed about what is happening in the region. At the TTAC meetings, minutes are taken that are available to the public.

The law requires that public meetings be held when cities prepare their 6-year plans, mentioned some of the interviewees. Most participants noted that all major projects also require an informative meeting, or presentation, at the conceptual stage. These meetings are held before projects are put on paper and sent to the mayor or to the city council for approval. Before the design is completed and approved, and before construction begins, public hearings are held. The public and the interested groups can give their opinion and concerns about the project. City and engineering staff are present at the hearings. Jurisdictions try to get as much input as they can prior to the construction phase. At this stage, some changes can still be accommodated. One interviewee noted that public

meetings really have impacted the decisions on some projects. In some cases, people even vote whether they want some project to happen.

One interviewee noted that open house meetings are required for all projects funded by federal dollars. State DOT and the Federal Highway Administration (FHWA) have to approve the project if federal money is used. In order to receive federal funds, projects have to comply with all federal requirements, including the conduct of public meetings.

One interviewee explained that if a project will affect certain individuals and groups, jurisdictions meet with the affected sides and try to accommodate them. This was done, for instance, for a project built on 96th Street in Papillion. The project affected a family that has been farming the land for over 100 years, he said.

Several interviewees noted that public meetings are not well attended. Moreover, it is always the same people who come. The interviews revealed that public meetings are normally attended by affected property owners and by citizens and groups generally interested in the overall city development (i.e. interested in cycling, trails, etc.). One interviewee even emphasized that there is a negative aspect to public meetings and hearings. People attend them only if they are negatively affected by the project and want to oppose it. Nevertheless, noted a different interviewee, the public raises good issues at the meetings.

“What are the limitations to urban transportation planning? Are there any conflicts?”

Available funding and time [constraints] were mentioned each by four interviewees as limiting factors to planning. Future land use was mentioned by three interviewees. Interviewees explained that there are always projects waiting to be built, but there are limited funds. In addition, due to limited time, some information cannot be gathered. It is helpful that MAPA provides some useful data and cities/counties don't have to gather it themselves. Sometimes, the lack of time can prevent planners from getting enough public input for the project. Last, but not least, unanswered questions about future land use can also limit planning. If, for example, the land is zoned as commercial, it might not be clear what businesses would open there. Some businesses bring more traffic than others, explained one interviewee. Movie theaters, for instance, bring a large number of people during certain hours. He pointed out Oakview Mall as an example of a project that caused unexpected outcomes. When the mall was built, many other businesses opened around it and brought a lot of additional traffic. Planners, he said, have to make sure there is sufficient transportation supply [or capacity]. On the other hand, roads should not be built according to the worst case scenario, i.e. an 8-lane road should not be built if in fact only four lanes are necessary.

The interviews revealed that limitations to transportation planning can also be the physical features of the land, population density, income, space available

for parking, location of employers, suburban growth, sprawl, and shift in population. The lack of an MPO that has the power to enforce projects is also a limiting factor, noted one of the professionals. MAPA does not have such power. If the federal department did not require MAPA's existence, said the interviewee, local jurisdictions would not have voluntarily created it.

One interview participant noted that there are no real limitations to planning in the area, but there are always conflicts. He pointed out, however, that conflicts with businesses, residential areas, etc., are a normal part of the planning process in the urban areas.

Conflicts, according to one interviewee, may occur because different governmental entities control different parts of the urban area. Jurisdictions work together with MAPA to prevent conflicts from happening, another interviewee explained. All federal money flows through MAPA and MAPA has to approve the project. In this sense, there is coordination between cities and counties how the money should be spent.

Two interviewees expressed the opinion that plans, especially comprehensive, help prevent conflicts. If the public has concerns or questions, planners can show the comprehensive plan to justify the project. Planners also refer to the comprehensive plan when developers propose a project. However, another interviewee said that conflicts arise when planners make a land-use plan and people are not happy with it. For example, people may want more commercial development, but the plan is to build a park.

One interviewee noted that each project should be seen as a compromise, not as a conflict. Planning, he said, needs to make compromises, because different interests need to be served.

“What are the limitations to urban transportation decision-making?”

Again, funding and prioritizing projects (due to funding issues) were listed as limitations. Decision-makers, said one of the TTAC members, try to do the best they can with limited funds. It is difficult to try and find additional funds by imposing new local taxes on the public. Therefore, if new development is creating new transportation needs, developers have to fund their part of the project.

As another factor that influences decision-making was mentioned the public perception and acceptance of the project. Officials try to please the public, so if the public disagrees with a project, the technical recommendations might not materialize into a decision, commented the interviewee.

An additional limitation is the lack of a unified comprehensive land-use plan in the area. Cities have their own plans which in some cases contradict each other. One of the professionals explained that (after a 1-year study has been conducted) there is a possibility of merging the jurisdictions of the City of Omaha and Douglas County. As 85% of the population of Douglas County currently lives in Omaha, the two jurisdictions have to be combined into something more efficient. In addition, the city has extraterritorial jurisdiction of 3 miles out of the

city, but the county is responsible for transportation planning there. Sometimes county plans might be in conflict with the city's requirements.

“What factors may limit the objectivity of urban transportation decision-making? What measures do decision-makers take to maintain objectivity?”

One professional noted that final decision-makers could threaten objectivity. Engineers are objective and engineering numbers are “cut and dry.” However, another interviewee noted that politicians, in their desire to be reelected, in some cases would ignore the technical recommendation to try and please the public. For example, a neighborhood might state that there is a lot of traffic at a certain location and request a stop sign there. The traffic engineer may determine that the stop sign is not really needed, but politicians might still consider the public request and install the sign. Engineers try to resist any unreasonable limits on their professional authority, he said.

Another interviewee noted that objectivity can be maintained through getting public and corporate feedback, attending public meetings and transportation oriented meetings, through constantly keeping up with what is going on in the area.

According to another professional, a limitation to objectivity is the geographic competition for funds. Jurisdictions compete for the same pool of funds. No entity would admit that another entity's project is better or more beneficial and has to be built before its own project. Even if this were true,

decision-makers would not admit it and risk losing their jobs. However, noted the interviewee, jurisdictions usually try to work out such issues with MAPA ahead of time.

Another interviewee noted that bureaucracy exists to ensure objectivity. Bureaucrats are expected to be objective or otherwise they risk losing their jobs. Limitation to objectivity has a political aspect. Namely, two people can be objective and still come to different conclusions. For example, a study is being conducted to discover if the downtown portions of Farnam and Harney Streets [currently one-way streets] should be made two-way streets. The interviewee said that City of Omaha officials think there is no need to make this change, since the streets currently move traffic well. Other people though, think that it is better for businesses if the traffic flows both ways. Both opinions, he concluded, are objective (albeit from different viewpoints) and can certainly be justified. Further, he explained that one way to be objective is to hire consulting firms to perform studies on various issues. Bureaucrats, generally, are not well respected by people and people do not consider them objective. Consultants are often considered to be objective. This opinion may or may not be true, but jurisdictions would use a consultant to show objectivity. (Note: One of the thesis committee members disagreed with the statement that consultants are objective. He noted that consulting firms would prefer that the jurisdictions opt for more construction. In this manner, consulting firms have the chance of getting more contracts with the jurisdictions. This note has a valid concern. Due to the subjective nature of

the interview, though, the researcher decided to keep the citation that reflects the opinion of the interviewee.)

Technical tools, such as models and traffic counts, were recognized to help maintain objectivity. Often, when their interests are affected, citizens assume that whoever developed the plan “does not know what they are doing,” said one interviewee. Technical data explain to them why the project is being implemented. However, noted another participant, it is difficult to translate technical information to decision-makers. Moreover, sometimes officials are more responsive to what the public is telling them than to the technical data. Further, rapid urban growth in the form of urban sprawl puts another limitation on objectivity. The transportation system cannot keep up with the sprawl and funding is far from enough for solving the problem.

“How comprehensive is urban transportation decision-making?”

One professional said that it is really important for planning in the area to be comprehensive, since Omaha has a 50-mile radius commuter region. Planners and decision-makers try to “see the big picture.” Every 3 years, growth projections are made for the next 50 years. Douglas and Sarpy counties have good growth management. However, this is not true for the counties that surround them. Their land quickly fills up with sprawled development. Once all the area in these counties is filled, people will start moving to the surrounding counties. If these growth patterns continue, within 25 years Douglas County and

Omaha will have all of their ground developed and will be out of land. Acreage development will take up miles of land for roads. Transportation costs will increase immensely, since more people will commute to Douglas and Sarpy counties to work and the roads will have to be widened to handle the traffic. As a result, taxes will go up. In order for these problems to be avoided, small communities are encouraged to have a sewer system and keep new developments close to town, noted the TTAC member.

Four of the interviewees said that decision-making is very comprehensive. A lot of planning and research is being done to make sure the transportation system is functional, safe, moves people in a timely and cost efficient manner, etc. Owing to TTAC, surface projects in the area are well coordinated. The problem in regional planning though, said one of the participants, is that it may not reflect what individual governments may want to do. Another interviewee added that rail and public transit planning is less comprehensive than automobile transportation planning. Another professional explained that, in decision-making, compromises are made very often. In this metro area, she added, people work together. There are still individual community interests, but, when it comes to access, jurisdictions work together to ensure a logical flow of the transportation systems. This is a professional environment that has been developed through the years. In addition, funds have shrunk and communities are finding ways to share costs, concluded the interviewee.

One of the interviewed TTAC members indicated that planning should be more comprehensive. Later, he added that he was not sure if it could, in fact, be more comprehensive. Forces outside of the planner's control often drive planning. For example, the construction of a new development was recently announced. This will cause changes to the transportation system and will easily become a priority for planners. The building of this development, he explained, was not anticipated, and such things happen often. Another example he gave was the development on L Street from 120th to 132nd Streets. The City widened the street to meet existing needs. However, Walmart and other retail businesses moved there unexpectedly [and brought additional traffic.]

Interviews with Officials

For the purpose of the study, four officials from the MAPA Council of Officials were interviewed and asked nine questions. (See Appendix E for some of the answers listed by interviewees.) The data collected from the interviewees follows.

“Describe the urban transportation decision-making process in Omaha-Council Bluffs Metropolitan Area.”

One official said that the county surveyor attends TTAC meeting, listens, and then makes [technical] recommendations to the county officials. Another interviewee noted that the decision-making process is different for transportation

projects inside and outside the city, since they are under different jurisdictions. If the road is in the city, normally the City Council makes the decision. If a road is outside of the city, the County Board is the decision-maker.

Another official noted that planning follows the Capital Improvement Program (CIP) to see which projects are needed. Next, projects are approved by MAPA. It is necessary to make sure that all entities involved in the implementation, such as Omaha Public Power District (OPPD), contractors, etc., are coordinated, so that the project is not held up.

Another participant said that in the area more construction is done than reconstruction of local existing roads. Council Bluffs uses data from MAPA, such as projections, traffic counts, modeling studies, etc. The City and the Iowa Department of Transportation (IA DOT) also perform some traffic counts of their own. In addition, public works department receives calls from developers, who want to locate a business in the area. Businesses provide an estimated number of vehicles they will draw daily, weekly, or monthly, he added.

“What factors or information do you take into account when you make an urban transportation decision? Why are those factors important?”

One of the interviewees said that input comes from the county engineer and from the public. The public approaches the commissioners with questions and concerns. The county engineer initiates and guides planning.

According to another official, the most important factor considered is avoiding congestion. A certain level of service has to be maintained on roads. Another official noted that her jurisdiction takes into consideration the [technical] recommendation made by the surveyor [to make transportation planning decisions]. Also, if an economic development project is proposed that will bring benefits to the community, the jurisdiction would change its priorities to accommodate it. If developers would pay for the road or intersection, the project will be added to the plan. However, jurisdictions want to have a transportation network and want roads in the plans to connect. This is kept in mind when developers offer to build a road. (Note: The interviewee mentioned that in some situations, developers would offer to pay only for the portion of the road to their development. This does not help the local jurisdiction in its effort to create a completely networked system of roads, because the developer does not pay for enough of the project to link roads together. In many cases, the jurisdiction can't accept that situation.)

One of the officials indicated that the most important factor he takes into consideration is projected growth, and where it will occur. Growth largely depends on topography, since the cost of construction is immensely high under certain geographic conditions. In Council Bluffs, for instance, the [Missouri] river is a limiting factor for land development. Finances are an additional factor decision-makers consider when they decide what will be built, he commented.

“Which factor do you consider to be the most important for urban transportation decision-making? How can you rank the factors you mentioned?”

One of the officials noted that the County Board approves the projects, but is largely dependent on TTAC for guidance. Officials get previews from the county engineering office and in the end, professionals at the engineering office are the actual decision-makers. The situation is similar with the MAPA Board. The Board makes the amendments on the TIP, but the initiative comes from the engineers.

According to one interviewee, traffic is the most important factor for determining whether old roads will be upgraded and new roads will be built. Another official indicated that financial considerations are the most important factor. Funding for the projects, in addition to state and federal money, is acquired in conjunction with private development, commented the interviewee. Developers fund their part of the project, but have to comply with design standards, such as curves, grades, width, used material, etc.

“To what extent do you incorporate technical, political and socioeconomic information in urban transportation decision-making?”

One of the participants said that his data sources are the county engineer and the public. Almost always, officials approve what the engineer has recommended. The interviewee also said that officials do not get much technical information, since TTAC recommends the project to them. He said he could not

remember a case in which officials did not approve what TTAC recommended or requested from them.

Another interviewee noted that all pieces of information – technical, political and socioeconomic – are important, and all pieces go together. The technical information, though, is the foundation. Technical information, such as traffic counts and modeling studies, is used to make projections that are as close as possible to the reality, indicated another official.

One interviewee pointed out environmental issues as an example of political consideration. As a socioeconomic consideration, on the other hand, he mentioned the manner in which the right-of-way (ROW) affects the public. The decision-makers first try to negotiate and purchase the property for the ROW. As a last source [for acquiring the land] jurisdictions use condemnation.

“What training (education or work experience) do you have – technical, social studies, etc.? To what extent do you make use of expert advisers in your decision-making process (i.e. for technical issues)?”

One of the interviewees said he is a farmer and a businessperson and holds two scientific degrees. He said that he uses a lot of expert advice. People serving on the City Council and County Board, he indicated, have other primary jobs and the involvement in the council and the board is only part-time. Individuals on the council and board are citizen representatives. They listen to the experts and the citizenry, and make the decision.

Another interviewee held a [nontechnical] Master's degree. He gained knowledge about transportation planning from attending meetings with engineers and listening. He indicated that he uses a lot of expert advice, too. The other two interviewees also explained they acquired most of their training through long years of experience in the public sector. One had consulting experience and participated in training programs. He added that he uses advice from MAPA and from consultants, who provide a wide range of information.

“What is the role of public and working meetings for urban transportation decision-making?”

One of the interviewees said the question is not very applicable to his jurisdiction, since it doesn't hold many public hearings. County engineers, however, have working meetings regularly and sometimes officials are invited to attend. Whenever the jurisdiction has public hearings though, they are very useful, since the constituencies give the officials useful feedback. He added that public hearings are very important. However, people who attend them normally complain, request deadlines on projects, etc. Another official added that very few people come to the public meetings. Normally, he said, these meetings do not change anything, since the jurisdiction uses technical data to justify its decisions. Another interviewee explained that internal meetings are important to planning. Internal meetings can be on entity staff level, city level, IA DOT level, NDOR level, TTAC level, etc. In Iowa, a transportation alliance group has been formed.

About 30 people attend the meetings. Public and private business people are brought together to discuss short-term transportation issues of up to 5-10 years.

“What limitations do you encounter when you face transportation decision-making? Are there any conflicts? Is there sufficient information?”

One official pointed out that there are conflicts every time a [public] decision has to be made. There are many sources of limitation, and public opinion is an important one. He gave an example, in which officials were considering closing a road due to public safety issues. A wealthy individual, who had property in the area, offered to build a trail for the community, if the road closes. The neighborhood though, did not want it closed. Moreover, people thought that the individual, who proposed to build the trail, was trying to “buy” them. Though he did not clearly indicate what decision was reached, the interviewee commented this issue received great publicity. The opinion of one citizen (the person who offered to build the trail), added the official, does not carry more weight than the opinion of the other people.

Three out of the four interviewed officials said that money limits decision-making. One of them said that, unlike the larger Douglas County, most counties couldn't afford to have an elected county engineer. Another added that the City of Council Bluffs wanted to build a viaduct in the southern part of the city. Officials were sent to Washington D.C. to [discuss] funding as early as 1993, but the project was secured in 1997.

Two interviewees said that [lack of] information could be a limitation, too, and the more information you have, the better it is for making the decision. One of them noted that officials do not proceed with a project unless they have sufficient information.

ROW was mentioned as another limitation to decision-making. It is hard to do acquisitions and to relocate people, commented one official. One of the interviewees noted that his jurisdiction has had conflicts with labor unions. In some cases, projects were sped up [and additional workers had to be hired]. Labor unions wanted to know if there were enough workers working at the site.

“What factors may limit the objectivity of urban transportation decision-making? What measures do decision-makers take to maintain objectivity?”

One of the interviewees said that constituencies might put obstacles to objectivity in decision-making. Officials do not particularly try to maintain objectivity, but to represent people, he added. If the public wants a project approved or stopped, officials would support the public opinion. In addition, money limits objectivity. If money were not limited, there would have been great roads everywhere, said the official.

Another participant said that the question of who pays for the project cost creates limitations on decision-making. In their jurisdiction, for example, three public entities are involved in the projects – City of Omaha, the OPPD, and the

Metropolitan Utilities District (MUD). All of the mentioned entities use tax money, but still have to justify how they spent their part.

“How comprehensive is urban transportation decision-making?”

One of the officials said that the question is not applicable, since his jurisdiction does not do planning. Another interviewee indicated that more could be done to make planning more comprehensive, and that transportation planning [in the area] is not very well coordinated. MAPA has the information necessary for planning, but it is not very well used. MAPA’s job is to coordinate projects and make sure projects in the different jurisdictions do not duplicate, he noted. For example, City of Omaha and Sarpy County work together on a project on Harrison Street. However, planning in the area could be better coordinated than it is currently.

Another official said that transportation planning in Council Bluffs is coordinated only for corridors which cross boundaries. In such cases, there is a lot of coordination effort, but at other places there is not much comprehensive planning. Another interviewee gave, as an example for comprehensive planning effort, the project on Harrison Street, too. The project is between 36th Street and 72nd Street and is built in conjunction with Bellevue, La Vista, Douglas and Sarpy counties, and Omaha (as a lead agency). The official said that MAPA has been doing a good job in coordinating planning and also that MAPA hires specialists [to work on the projects].

Comprehensive planning means planning that serves the greatest number of individuals in the community, commented one official. Various issues have to be considered, such as special interest groups (environmental groups, development people), political and socioeconomic needs and problems, funding, etc. Some environmental issues of today, for example, are concerned with problems that should have been dealt with years ago when projects were first built. Archeological issues also have to be addressed, because of history preservation concerns. There were Indian settlements there that were 100-1000 years old.

Examples of Projects

At the end of the interviews, each participant was asked to give examples of transportation projects in the metropolitan area. The projects that were described are listed below:

One of the projects mentioned several times during the interviews was the elevated highway that is being built on the intersection of 114th Street and West Dodge Road. Both the State of Nebraska and the City of Omaha are involved in the project. The project has received a large amount of public input and opposition. It will be beneficial in the long run, but there are disadvantages in the short run. For example, the interests of local businesses are affected, due to the construction work.

The construction of two bridges over the Missouri River was discussed by two of the interviewees. It was considered that the construction of a bridge in the north would be more beneficial, because it will provide better access to Eppley Airport. The citizens though, wanted two bridges to be built – one in the north, and one in the south. However, there was money for just one. At the end, federal enhancement funding became available and two bridges will be built.

It was mentioned that a project for a train between Omaha and Lincoln has been discussed. The project is possible, but not realistic. Due to urban sprawl, the train would not have enough ridership to justify its cost.

Another project that was mentioned was the construction of the North Omaha Transit Center (NOTC). The project was built jointly by Public Safety and MAT and they shared the cost.

Two interviewees mentioned the project on 72nd Street from I-680 to N-32, near the county line. Seventy-second Street will be upgraded from a 2-lane county road to a 4-lane county road for 1.5 mile. The project was authorized in 2002. The land for the street will be acquired by the mid summer of 2005 and construction work will start in the spring of 2006. The project has 3 phases and is expected to take 2.5 years. The road will be closed for construction. North of I-680 the section is still rural and carries traffic over its capacity, noted one of the interviewees. The cost of the project is estimated to be \$12,000,000. The traffic on this street has been over capacity for a long time. However, jurisdictions waited until they had accumulated enough federal funds to build it. The other

interviewee, however, said that the project was not really needed, since the area is not very populated. The money can be spent on another project that will solve real traffic problems, he added.

Another interviewee discussed the interstate reconstruction project, [but he did not specify the exact location]. It is a state project funded with federal and state money. It was decided that traffic be kept on the highway during construction. Though this option is costly, this is the intelligent way to handle the problem, instead of diverging traffic to local streets, commented the interviewee.

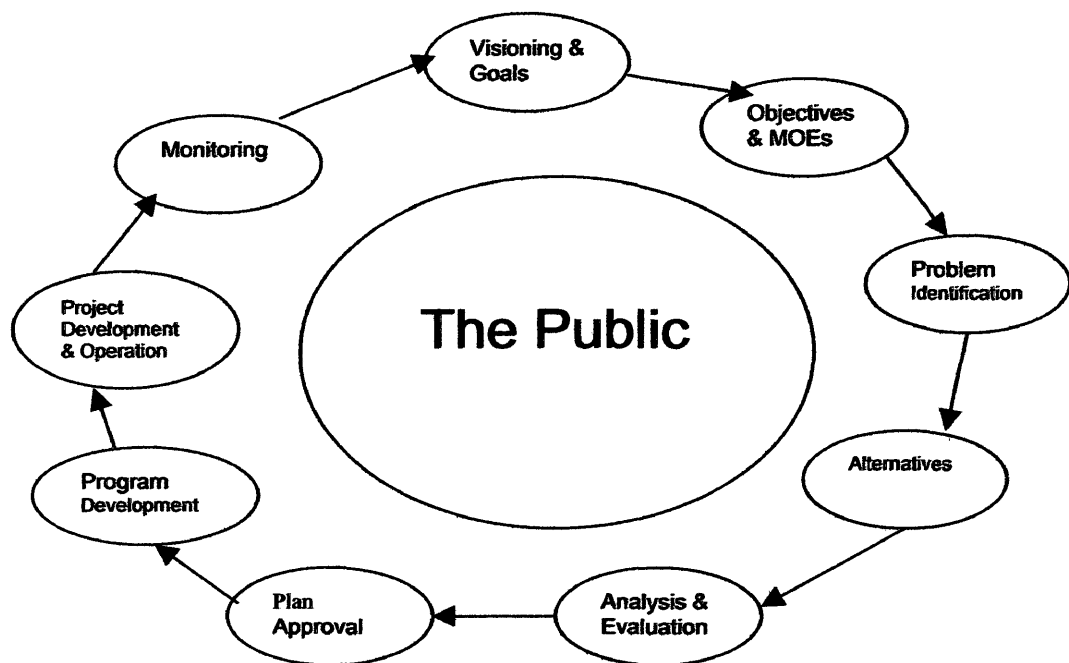
Second Meeting with MAPA Staff

After the interviews were conducted and the information was reviewed, the researcher had another meeting with a MAPA staff member. This meeting became necessary for two reasons. The first interviews did not give a full picture of the transportation planning process and did not clearly outline its steps. In addition, in many cases MAPA was pointed out as the agency that selects which projects will be included in the TIP and will be funded. The researcher assumed that by MAPA the interviewees meant the MAPA TTAC and the MAPA Board of Directors, and not the MAPA staff. The meeting with the MAPA staff member helped clarify the phases transportation planning process goes through and the participants in each phase.

The MAPA staff member was asked the first question of the interview protocol – to describe the transportation planning process. The meeting led to gathering the information listed below.

The interviewee illustrated the transportation planning process in Figure 2.

Figure 2. The transportation planning process adopted by the Omaha-Council Bluffs metropolitan area consists of nine steps.



Source: National Transit Institute (NTI). *Metropolitan Transportation Planning: NHI Course 152069.*

First, the process starts with laying out planning visions and goals, as well as objectives and measures of effectiveness (MOEs). During these phases, MAPA staff meets with the member jurisdictions to specify what direction the region is generally going, the MAPA staff member said. These broad goals are

used for the potential future problems to be identified in the problem identification phase. Next, different alternatives for solving the identified problems are offered. The alternatives are analyzed and evaluated, i.e. what is their cost, how do they impact the neighborhood, etc. Next, TTAC makes a recommendation to the MAPA Board of Directors for the LRTP. TTAC votes on all recommendations it prepares. The Board then passes the plan to the MAPA Council of Officials for final approval. The MAPA staff member explained that the LRTP has to be approved by the Council of Officials, since it is considered policy. The TIP, on the other side, is considered a program, and is therefore being approved by the Board.

The interviewee indicated that, after the plan is approved, the phase of program development follows. MAPA staff sends a letter to all jurisdictions asking them to submit the projects they want to implement. MAPA initially screens the projects in that it checks if the projects are in the LRTP. If they are not in it, they can be added. The plan is updated every 5 years. The Board of Directors has designated a certain dollar amount for transportation. In the selection process, the jurisdictions (TTAC members) negotiate which projects will be included in the TIP and which projects will be prioritized. In this phase, TTAC allocates the transportation funds available in the area. Since funds are limited, the projects of some jurisdictions will be implemented before those of other jurisdictions. The MAPA staff member noted that jurisdictions “are not always happy” if their project is not prioritized, but so far they have always

reached an agreement on a technical level. (If a disagreement were to occur, noted the interviewee, the Board would have to decide on the prioritization.) Once projects are selected for the TIP, TTAC makes a recommendation to the Board for approval. Federally funded projects have to comply with federal requirements. On some occasions, projects selected for implementation in the first year of TIP have not yet received federal approval. Though money was already set aside for the projects, they could not be implemented before they receive approval.

After the program development follows the project development and operation phase. The approved projects go to contractors for bidding. After projects are implemented and operation starts, the monitoring phase follows. Then the phases of the described process are repeated again.

During the entire process, public involvement is encouraged. However, the public in the metropolitan area has not been very responsive. Currently, MAPA is conducting a survey with the public. The agency tries to get feedback for the LRTP. A number of people have already participated. The survey has not discovered any new information [about transportation needs in the area]. The MAPA staff member commented that this is a good sign. It means that MAPA has already been concentrating on the issues that are important to the public. The interviewee said that it is very important to communicate with the public. The public needs to be well informed.

The MAPA employee noted that the LRTP tries to identify as many needs as possible. Analysis is made to see if there will be enough funds for the projects. The plan includes local funds too. It is not a requirement to account for local funds in the LRTP, but it gives a more complete idea of the situation in the area, indicated the interviewee.

Observations

As part of the data collection, the researcher attended two TTAC meetings. The observations from the meetings follow.

The MAPA Transportation Technical Advisory Committee (TTAC) has one meeting approximately every two months. The committee has two different types of members – voting and associate. Currently, TTAC has 19 voting and 16 associate members. The voting members are city or county engineers, public works directors, or other administrative staff from the jurisdictions members of MAPA. They vote on proposals TTAC prepares before they are presented to the MAPA Board for approval. Associate members do not have voting power. Typically, they are representatives of local consulting firms, who attend the TTAC meetings to get informed about what projects are proposed in the area. The meeting is open to the general non-transportation public, too. However, the public does not show interest in attending.

Prior to the meeting, the members have received and reviewed the meeting agenda and a report from the previous meeting. They know in advance what topics and projects will be discussed.

At the two meetings, no disagreements occurred between the TTAC members. Some voting members presented projects their jurisdictions wanted to implement. Other members made comments or asked additional questions on the discussed projects. MAPA staff also reported on what they were involved in. At the time the meetings took place, MAPA was collecting data for the Long Range Transportation Plan update to 2030. The instrument MAPA used for data collection is a survey among the public. The survey is designed to identify transportation problems and potential solutions in the metro area. It was commented that the survey has shown good results. There were more respondents than expected and the input provided was helpful to the agency.

The overall impression from the meeting was that the committee members are well informed on transportation issues concerning their jurisdictions and others. Everyone is on the same track and knows what is going on in the region. There are neither major surprises, nor disagreements. However, some of the voting members were not present at the meetings. One of the meetings held in the summer, specifically, was not very well attended.

The researcher concluded that the information gathered by attending the meetings is useful. However, data from the interviews are more detailed and complete, and therefore more significant to the research.

Summary, Findings, Conclusions and Recommendations for Further Study

This final chapter of this case study offers various conclusions that were drawn from the interviews. In addition, it offers recommendations for further research in the area of urban transportation decision-making.

Summary

This case study examines the transportation decision-making process in Omaha-Council Bluffs metropolitan area. It aims to discover the information and the main factors that play a role in decision-making and to explore their importance. The study identifies the actors who participate in transportation decision-making and explores their roles for the process. In addition, the research is concerned with discovering whether decision-making is objective and comprehensive.

Based on the literature review, this study addresses five research questions. Transportation planning in the urban area is conducted through MAPA, a regional council of governments serving as a metropolitan planning organization. The data for the study is gathered mainly through interviewing officials and professionals involved with MAPA Council of Officials and TTAC respectively. Observation is used as an additional, but not significant, data collection tool.

Findings

This part of the work discusses the findings discovered by the research. Research questions of the study are listed and expected findings for each question are stated. Further, findings for each research question are discussed and tested against the expected finding.

“What data are critical for urban transportation decision-making?”

Expected finding: Numeric data are critical for transportation decision-making.

The goal of this research question is to identify the data critical for urban transportation decision-making in Omaha-Council Bluffs metropolitan area. The factors and issues mentioned vary from purely technical matters to public input and political considerations. The conclusion drawn from the interviews, however, is that technical issues are more important to decision-making than political and other issues.

Most of the interviewees said that technical and numeric data are critical for decision-making. Decision-making is based on existing and future needs. Though needs could become evident through public input, they are estimated through using technical and numeric data. The technical data jurisdictions use mainly consist of traffic counts, projections, and studies. Together with the data they produce themselves, jurisdictions utilize the output data from the land-use and transportation models run by MAPA. MAPA staff explained that the model

output information is in the form of technical working documents, such as graphs, maps, and tables.

Technical data find various applications. Developers request technical information to locate a development. Professionals use the technical data to make their recommendations to officials. Officials do not review purely technical data. Some of the interviewed officials indicated that the input for their decisions comes from the county engineers and surveyors, as well as from the public. Only one interviewee said that political considerations are more important than technical data. Though this opinion was not predominant, it is still valid. Other interviewees also mentioned politics among other factors. In addition, a MAPA staff member said that some project alternatives are never tested, since it is obvious that political reasons will prevent them from happening.

“What factors and issues play a role in transportation decision-making in Omaha-Council Bluffs Metropolitan Area? How important are they?”

Expected finding: Federal funding is among the most important factors to decision-making, if not the most important.

The research question aimed to identify and explore the importance of the factors and issues influencing decision-making in Omaha-Council Bluffs metropolitan area. The research showed that decision-making is highly dependent on funding. Transportation projects are expensive and finding funding is critical for selecting the project for implementation. Local governments want their

projects to qualify for federal funds. For selected projects, federal funding covers a sizable part of the cost, specifically 80%. The remaining 20% must be provided locally. Another way to fund projects, whenever applicable, is to have developers pay for the part they are responsible for. The interviewees said that if funding was not an issue, many more projects would have been implemented, since needs are always greater than the available money can fund.

An additional factor of great importance was safety. However, safety considerations are connected to funding. If funds are available jurisdictions would be able to build safe roads with adequate level of service (LOS), turning lanes, etc.

“How do transportation decisions happen in the Omaha-Council Bluffs Metropolitan Area? Who are the decision-makers and who plays critical roles for decision-making?”

Expected finding: City and county officials are the final decision-makers on transportation projects. They use technical reports as an input to their decisions. However, they do not have a transportation background and seldom challenge the information planners and experts report to them.

The question aimed to explore how transportation decisions happen in the area and to discover who, in fact, plays a critical decision-making role. It was identified that planning starts at the jurisdiction level with local governments preparing projects they would like to implement. Then jurisdictions approach

MAPA with their projects and request federal funding. Implementation of projects, however, depends on [justified] needs. There are always more transportation needs than there is money to fund the projects and, therefore, projects are prioritized. On many occasions, projects are delayed until money is found for their implementation. This is valid especially for large projects that cannot be split into several smaller projects.

People who approve projects for implementation are the city and county officials. Normally, within the city the decision-making body is the City Council. The County Board makes decisions for projects outside of the city. Though officials approve projects, the interviews showed that planning professionals play an important role in decision-making, too. Generally, officials do not have technical knowledge and rely on the technical experts to make recommendations to them for specific projects. In almost all cases, officials approve the projects that professionals have recommended. In this sense, the ones who have the technical expertise are more involved in decision-making than those who make the final approval of the project.

Together with the planners and politicians, the public can also participate in the planning process. The public is given the opportunity to give input in all phases of the transportation process, but it seldom exercises this power. Citizens typically show interest in planning only when their personal interests are involved.

“To what extent is decision-making objective?”

Expected finding: Decision-making is very objective.

The question addressed objectivity in decision-making. Most of the interviewees noted that their jurisdictions use traffic counts and projections from MAPA for their planning. If everything happens as expected, this technical data should provide objectivity to the decision-making process. Also, as an additional way to maintain objectivity, jurisdictions hire independent consultants to conduct studies for them. The research, however, discovered the following main threats to objectivity. First, officials could be subjective due to the nature of their job. Officials represent the public interests. Sometimes the public wants certain projects to be implemented or stopped, though it would contradict the [objective] technical recommendations. Another main threat to objectivity is the fact that each jurisdiction from the MAPA Council of Governments is a separate entity with its own interests. Federal money is never enough and all communities have various needs. It is realistic to think that each jurisdiction would want its own project to be funded first.

“To what extent is decision-making comprehensive?”

Expected finding: Due to the involvement of the MPO, transportation projects are well coordinated between the cities. In this sense, decision-making is territorially comprehensive. It is unclear, though, whether planning is structurally

comprehensive, more specifically, to what extent it includes other elements of the surrounding environment.

The question aimed to determine the degree to which transportation planning in the urban area is comprehensive. It was discovered that comprehensiveness has two aspects: territorial (planning is fair to all cities) and structural (all elements of the surrounding environment are considered). Most of the interviewees talked about territorial comprehensiveness. Only one interviewee said comprehensive planning suggests that various issues, such as environmental, archaeological, political, socioeconomic, etc., be considered in the planning process.

Observations during the two TTAC meetings showed that TTAC members are well informed about the overall transportation planning in the metro area and are in agreement with each other. In addition, during the interviews, four TTAC members and one official indicated that transportation planning in the urban area is well coordinated. Other interviewees noted, though, that a better job could be done in this aspect.

Several interviewees mentioned that jurisdictions try to coordinate planning, so that communities don't duplicate projects. However, one of the interviewees noted that planning is coordinated only for projects located on jurisdiction boundary lines. The researcher also noticed this trend in the examples for coordinated projects given by interviewees. Communities are interested in coordinating projects on boundary lines, only so that they share the project cost.

One interviewee said that Omaha has a 50-mile radius commuter area and therefore a comprehensive approach must be employed. Transportation planning coordination efforts have to be extended to include communities in the commuter area too. The research, however, discovered that there is no unifying planning agency in the region. MAPA coordinates planning, but does not have the power to make decisions.

Conclusions

Based on the literature review, the researcher expected that the study would come to several conclusions. First, the researcher expected to find that urban transportation decision-making relies mainly on numeric data. This expectation was met, to a large extent. However, in some cases, city officials would give preference to what the public wants, rather than to what the engineering numbers say.

In addition, the researcher anticipated discovering that federal funding is very important to decision-making. Federal funding proved to be the critical factor for implementing planning decisions.

Further, the researcher expected to find that city officials make the final decisions on transportation projects, by using technical reports as an input to their decisions. In addition, it was anticipated that officials typically are not technically oriented. It was discovered that, although officials make the decisions, they largely follow the recommendations of the technical experts. They do not have

the technical background and seldom challenge the technical information they receive. In this sense, some interviewees noted that the decision-makers in fact are the engineers [and other technical people].

It was also expected that decision-making is very objective. Interviews proved that this statement is true, to a large extent. Though there are some limitations to objectivity, the interviews showed that the usage of technical data removes the subjective elements from planning.

Finally, the researcher anticipated finding that the transportation projects are well coordinated between cities. Many interviewees expressed a great satisfaction with the way MAPA coordinates the transportation projects in the area. It was noted, however, that the agency does not have the power to make decisions. In addition, a concern was expressed that planning is coordinated primarily for projects on the jurisdiction borderlines.

Recommendations for further research

The research discovered the following areas for further studies:

(a) During the process of gathering data, the researcher attended two TTAC meetings. One of the interviewees mentioned another transportation group that meets regularly in Iowa. Further research could try to identify what different transportation-oriented groups have regular meetings, what they discuss, and how these meetings impact transportation planning and decision-making in the urban

area. In addition, transportation professionals outside of MAPA can be approached and asked similar questions to this case study's interview questions.

(b) One of the literature sources (Meyer & Miller 2001) discusses the formal process of interaction between the organizations and the informal personal and group relationships in transportation planning. These issues can be addressed by further research, aiming to explore the mentioned interactions and relationships and to examine what role they play in decision-making.

(c) Further research could explore whether jurisdictions are really concerned with cooperation, or they just participate in the regional planning process in order to receive federal funding. A question that could be addressed is whether MAPA would still exist if federal funding were not an issue.

(d) A question for further research is whether decision-making is predominantly short-term and incremental (mainly decisions needed at the present moment are made), or is it more concerned with decisions valuable in the long run? Is there more construction or reconstruction going on?

(e) An identical study could be conducted in another area (with similar or different characteristics) and the results could be compared. As a variation, the factors that play a role in decision-making, identified in this study, could be used as a basis for conducting a quantitative survey. Subjects could be asked to assign numerical rankings of the factors, according to the importance of each.

(f) The role of the public in decision-making could be addressed further. Public meetings and hearings could be attended and the results from them

examined. It could be useful to find out whether issues raised at the public meetings and hearings can make decision-makers and planners change their mind about projects.

(g) The MPOs in some metropolitan areas may have more powers than MAPA. Research could be done for urban areas with a stronger MPO. Research could aim to find out, for instance, whether the structure of such MPOs differs significantly from that of MAPA, and what the decision-making process in such metropolitan areas is like, etc.

(h) A research could be conducted to find out if planning in the metropolitan area is structurally comprehensive, more specifically, whether planning takes into consideration multiple elements of the surrounding environment.

(i) Finally, it could be beneficial to further examine the role and the powers of the state DOTs in regard to transportation planning.

Appendix A: Interview Questions

Questions to transportation professionals (TTAC members and associates):

- Describe the urban transportation decision-making process in Omaha-Council Bluffs metropolitan area.
- What tools do you use to conduct urban transportation planning (i.e. models, studies, etc.)? What input (technical/numeric, political, socioeconomic) data are used?
- What kind of transportation planning information do you produce? Are there records? Who uses the data and how?
- What factors play a role in urban transportation planning and decision-making? Rank the factors according to their importance.
- Do the decision-makers have access to/knowledge about technical information?
- What is the role of public and working meetings for urban transportation decision-making?
- What are the limitations to urban transportation planning? Are there any conflicts?
- What are the limitations to urban transportation decision-making?
- What factors may limit the objectivity of urban transportation decision-making? What measures do decision-makers take to maintain objectivity?

How comprehensive is urban transportation decision-making?

- What are some examples of urban transportation decision-making (i.e. actual projects) in the Omaha-Council Bluffs metropolitan area?

Questions to officials (MAPA Council of Officials members, politicians):

- Describe the urban transportation decision-making process in Omaha-Council Bluffs metropolitan area.
- What factors or information do you take into account when you make an urban transportation decision? Why are those factors important?
- Which factor do you consider to be the most important for urban transportation decision-making? How can you rank the factors you mentioned?
- To what extent do you incorporate technical, political and socioeconomic information in urban transportation decision-making?
- What training (education or work experience) do you have – technical, social studies, etc.? To what extent do you make use of expert advisers in your decision-making process (i.e. for technical issues)?
- What is the role of public and working meetings for urban transportation decision-making?
- What limitations do you encounter when you face transportation decision-making? Are there any conflicts? Is there sufficient information?

- What factors may limit the objectivity of urban transportation decision-making? What measures do decision-makers take to maintain objectivity?
- How comprehensive is urban transportation decision-making?
- What are some examples of decision-making (i.e. actual projects) in the Omaha-Council Bluffs metro area?

Appendix B: MAPA Transportation Study Area



Figure 1
MAPA Transportation Study Area



Source: Metropolitan Area Planning Agency (2004, September).

Appendix C: Metropolitan Omaha-Council Bluffs Public Participation Plan

MAPA Public Participation Plan

file:///C:/http/final/ppp.htm

METROPOLITAN OMAHA-COUNCIL BLUFFS PUBLIC PARTICIPATION PLAN

July 1, 1994

Amended August 31, 1995

INTRODUCTION

A requirement of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) is early and on-going public involvement in the development of the Long Range Transportation Plan, the Transportation Improvement Program (TIP), and other transportation planning and implementation activities. To accomplish this ISTEA further requires that the Omaha/Council Bluffs Metropolitan Area Planning Agency (MAPA) must develop a proactive public involvement process.

The MAPA Board of Directors understands the importance of establishing a proactive public participation policy which will result in the following benefits:

1. An informed public on issues affecting the community. Public support for planning decisions.
2. Prevents unnecessary conflict due to miscommunication.
3. Prevents unnecessary conflict due to miscommunication.
4. Cooperation between the Board and the community.

The Board of Directors proposes to use the following procedures set forth to obtain active public involvement. These procedures are intended to allow for orderly public interaction with the Board, its committees and planning staff, and have been developed for the following formats of public participation: public meetings, public forums, public reviews, public comment, public appearances, and public notifications. The board plan to coordinate with the state's public participation activities where possible, eliminate duplicate efforts, and share information and ideas with the states.

PUBLIC MEETINGS

The purpose of public meetings is to conduct the business of the Board in public. Board meetings are conducted on a monthly basis. The date, time, place, and tentative agenda are announced a minimum of one week prior to the scheduled meeting.

The Board Chairman, with input from the MAPA staff and the Transportation Technical Advisory Committee (TTAC), will be responsible for furnishing the meeting agenda. The meeting agenda will be in final form not later than forty-eight (48) hours before the scheduled starting time of the meeting. The only additions to the meeting agenda after the final agenda has been set will be items of an emergency nature.

Copies of the agenda and all other written materials will be provided to members of the Board. Copies of all written items will also be made available to the general public upon request. All meetings will be held in compliance with the "Open Meeting Laws" of the States of Iowa and Nebraska. This will allow the general public the opportunity to attend the meetings and provide input on matters currently under consideration by the Board.

The public will be asked to sign the attendance roster during the public meeting, however, it is not required that the attendance roster be signed in order to attend the meeting. An example of the attendance roster is included at the end of the text (Attachment 1).

Members of the public will be expected to conduct themselves in an appropriate manner so that a fair exchange of ideas between them and the Board may take place. Members of the public may speak during appropriate times on the subjects then under discussion. The Board may request the name and address of the speaker as a condition of being allowed to speak. The Board will also allow only one speaker at a time to address the Board.

MAPA will take minutes of the open meeting. The minutes will record members of the Board, both present and absent; all actions by the Board; and a summary of all matters occurring during the meeting. The minutes in final summary form will be available for public review. Word for word transcripts will be available for a fee based upon actual time and costs.

PUBLIC FORUMS

The purpose of public forums is to inform the public and to solicit comments on a pending proposal or plan. These forums will be conducted on an as-needed basis. The forums will be conducted to allow for the greatest public participation at the forums. There will be three types of forums; an open house, public information meeting, or a public hearing.

Open House

The purpose of the open house is to provide an informal means of providing members of the public with information on a specific project and to solicit their comments. MAPA will make no formal presentation during the open house. MAPA will provide staff members to answer questions and seek comments on the project.

Public Information Meeting

The public information meeting will provide an informal means of providing the public with information on plans or programs. MAPA will make a presentation on a specific plan or program, followed by a question and answer period. The staff will also seek comments from the public.

The date, time, location and subject of the information meeting will be announced within two weeks of the meeting. The MAPA staff will provide copies of the agenda and all other written materials to the general public.

The public will be asked to sign the attendance roster during the information meeting, however, it is not required that the attendance roster be signed in order to attend the forum. An example of the attendance roster is included at the end of the text (Attachment 1).

Public Hearing

The public hearing will provide a formal means of providing the public with information on plans or programs. MAPA will make a formal presentation on a specific plan or program, followed by a question and answer period. The staff will also seek comments from the public.

The date, time, location and subject of the public hearing will be announced within two weeks of the public hearing.² The MAPA staff will provide copies of the agenda and all other written materials to the general public.

The public will be asked to sign the attendance roster during the public hearing, however, it is not required that the attendance roster be signed in order to attend the meeting. An example of the attendance roster is included at the end of the text.

PUBLIC REVIEW

The purpose of the public review is to provide the public an opportunity to review a proposal or plan in detail. The public will have thirty (30) days in which to review the plan or proposal. Before the start of the review period, MAPA will announce the proposal or plan in detail and state the starting and ending dates of the review period.²

Members of the public will be required to come to the MAPA offices or other selected locations during normal office hours (8:00 AM to 4:30 PM) to review the plan or proposal. A copy of the plan or proposal will be provided for review. A staff member will also be available to discuss the plan or proposal with the interested party or parties.

PUBLIC COMMENT

The purpose of public comment is to allow the public an additional means to express concern about a proposal or plan. The public will have two weeks, after a meeting or forum, in which to make comments.

Member of the public can make comments in person or they can send their comments to the MAPA office. An example of the Public Comments Sheet is included at the end of the text. The MAPA staff will take the comments under consideration and provide a response within two weeks of receiving the comments (Attachment 2).

PUBLIC APPEARANCES

The purpose of the public appearance is to explain a specific transportation issue to a local group. MAPA will provide a staff member to present an informational program to civic groups, professional groups, and all groups that have an interest in transportation.

MAPA will develop a comprehensive list of local organizations with which to initiate and maintain contact. MAPA will keep these local organizations informed on transportation issues by providing presentations upon request.

PUBLIC NOTIFICATION

MAPA will publish annually a public notice of regularly scheduled monthly meetings. In addition, an announcement will be mailed to the MAPA Board of Directors, MAPA Council of Officials, and to all member cities and county clerks/auditors for posting on a monthly basis.

The public notice will be published in the following newspapers:

1. Omaha World-Herald
2. Bellevue Leader5
3. Council Bluffs Nonpareil
4. Daily Record
5. Douglas Post-Gazette
6. Papillion Times

MAPA will send any additional announcements concerning public meetings, forums, and any other activity requiring public participation to the news departments of the local newspapers, as well as news departments of the cable, radio, and television stations.

MAPA will, in addition, develop a database consisting of neighborhood groups, disabled organizations, social service organizations, professional organizations, trails groups, bicycle groups, environmental groups, persons who have expressed an interest in transportation issues, and persons or organizations traditionally under served by existing transportation systems. This database will be used to notify these persons and/or groups about an upcoming meeting or activity that may be of interest to them.

ACTIONS

MAPA will incorporate public involvement into the planning activities of MAPA. Specific public involvement actions must be undertaken before an activity is considered complete. Actions MAPA will be required to undertake to involve the public in the planning process are briefly described below. A matrix of public involvement actions required for each planning activity is included at the end of the text (Attachment 3).

Long Range Plan

The Long Range Plan will be developed by MAPA. The Long Range Plan will consist of the goals and objectives for the improvement of transportation in the metro area. As part of the draft plan development, MAPA will seek input from the local communities. This will be done by using public forums and public appearances to advise the public on the draft Long Range Plan. The public will also be encouraged to come to MAPA's offices to view the plan.

MAPA will also accept the comments of the local citizens and make every effort to respond to the comments. After the thirty (30) day public review and comment period the draft Long Range Plan will be finalized and will include the summary of the significant comments and the disposition of those comments. The Long Range Plan will be available for additional public review and comment for thirty (30) days. Any additional significant comments and the disposition of those comments will be included in the Long Range Plan before final review by the TTAC. After final review by TTAC, the Long Range Plan will be forwarded to the Board for final approval. The final Long Range plan will include any additional significant comments received at the Board meeting and the disposition of those comments.

Transportation Improvement Program The Transportation Improvement Program (TIP) will consist of the proposed transportation projects within the MAPA transportation study area. Prior to their incorporation into the metro area's TIP, these projects will have been reviewed by all jurisdictions' respective governing bodies and their constituents through their public hearing requirements.

MAPA will incorporate the upcoming year's projects into the draft TIP. The draft TIP will be reviewed by TTAC and made available for public review and comment for thirty (30) days. After review, the draft TIP will be finalized and will include a summary of the significant comments and the disposition of those comments. The TIP will be available for Any significant changes to the draft TIP will required an additional public review and comment for thirty (30) days following the initial review process. Any additional significant comments and the disposition of those comments from the additional public review period will be included in the TIP before final review by the TTAC. After final review by TTAC, the TIP will be forwarded

to the Board for final approval. The TIP will be sent to the respective states for incorporation into their State Transportation Improvement Programs.

Transportation Improvement Program Amendment

MAPA will incorporate the amendment or amendments into the TIP and have available the amended TIP for public comment. Amendments will constitute any additions or deletions of projects currently programed in the first three years of the TIP. The amended TIP will be finalized with any significant comments and the disposition of those comments included.

The amended TIP will be reviewed by the TTAC, and forwarded to the Board for final approval. The amended TIP will be sent to the respective states for incorporation into their State Transportation Improvement Programs and will include any additional significant comments received at the Board meeting and the disposition of those comments.

Unified Work Program

MAPA will produce a Unified Work Program (UWP) for the upcoming year. This program will specify actions MAPA and other agencies will complete during the year. Once completed, the UWP will be made available for public comment. The UWP will be reviewed by the TTAC and then presented to the Board for its approval.

Special Transportation Studies

MAPA will perform special location or design studies on an as needed basis and will develop management systems as required by ISTEA. As part of the planning process, the public will be encouraged to provide input on the studies and the management systems. This will be done through the use of public forums and comments.

Major Investment Study (MIS)

As part of the MIS process the public will be encouraged to provide input on the MIS. This will be done through the use of public forums and comments. The MIS will be provided to the TTAC and the Board for its review and comment.

AMERICANS WITH DISABILITIES ACT

MAPA will make every effort to comply with the Americans with Disabilities Act. Meeting locations will be selected for their accessibility. MAPA will also comply with all reasonable requests for specially-formatted materials (129 percent print enlargement, audio cassette, et cetera). These specially formatted materials will be available within a reasonable period of time, and the availability of these formatted materials will be published in the public notices and announcements.

PUBLIC PARTICIPATION PLAN

The Public Participation Plan once completed will be presented to the Board for its comment. The plan will then be made available for public review for forty-five (45) days, as required by federal guidelines. The MAPA staff will take into consideration those comments made during the public review period and update the plan as needed. The plan in final form will be sent to the Board for its consideration and approval. The plan will be reviewed periodically to ensure that the goals of public involvement are being met.

Source: Metropolitan Area Planning Agency (1995, August 31).

Appendix D: Examples of Projects Included in TIP

MAPA TRANSPORTATION IMPROVEMENT PROGRAM

Fiscal Year 2005 Annual Element

Project Locator Number	Project/Project Number	Location	Type of Improvement	Length (Miles)	Federal Functional Classification	Federal Funding Source	Estimated Project Cost (x \$1,000)	
							Federal	Local
202	I-80 ¹ 21687	Meia Hill (Westbound) rest area	Improvements to rest area.	0.00	Interstate	IM	\$0.00	\$1,042.00
203	I-80 ¹ 21687	60th Street on ramp.	Grading, concrete surfacing and bridge.	0.00	Interstate	NHS	\$0.00	\$1,500.00
204	I-80 22002	144th Street to L Street in Omaha.	JT Seal and install plowable marker reflectors.	2.70	Interstate	NDOR	\$0.00	\$570.00
205	NE-50 (144th Street) 21790	Springfield, Nebraska to a point 3.7 miles north.	Reconstruct to a 4-lane divided facility.	3.70	Rural Minor Arterial	NDOR	\$6,469.00	\$3,801.00
206	NE-92 (West Dodge Road) 21065	Platte River to a point 4.6 miles east on NE-92.	Grading, drainage structures, PCC resurfacing and surface shoulders.	4.60	Rural Principal Arterial	NDOR	\$7,539.00	\$3,065.00
207	US-6 ¹ (West Dodge Road) 21901	Westbound Expressway Bridge between 108th Street and 120th Street.	Construct a 6-lane elevated freeway, Phase III.	1.40	Principal Arterial	NDOR Omaha	\$0.00	\$21,011.00
208	US-6 ¹ (West Dodge Road) 21902	Eastbound Expressway Bridge between 108th Street and 120th Street.	Construct a 6-lane elevated freeway, Phase IV.	1.40	Principal Arterial	NDOR Omaha	\$0.00	\$21,776.00
209	US-6 ¹ (West Dodge Road) 21903	120th Street to 108th Street.	Construct a 6-lane elevated freeway, Phase V.	0.90	Principal Arterial	NDOR Omaha	\$0.00	\$14,199.00
							\$0.00	\$17,749.00
							\$0.00	\$3,550.00

¹ Project is Advanced Construction (CIP) for converted to bus, if bus for maintenance per state of highway. Project is illustration (Project) proposal project approval of local function.

MAPA TRANSPORTATION IMPROVEMENT PROGRAM

Fiscal Year 2003 Annual Element

Project Locator Number	Project/Project Number	Location	Type of Improvement	Length (Miles)	Federal Functional Classification	Federal Funding Source	Estimated Project Cost (x \$1,000)			
							Federal	State	Local	Total
210	FY 2006 Pavement Rehabilitation Program NY14688K	Various locations in Bellevue.	Concrete pavement rehabilitation.	0.00	Various	Bellevue	\$0.00	\$0.00	\$560.00	\$560.00
211	24th Street / 27th Avenue 06-07A	Intersection of 24th Street and 27th Avenue.	Install turn lanes and signalization.		Minor Arterial	Council Bluffs	\$300.00	\$0.00	\$150.00	\$450.00
212	ADA Ramps FY 2005 06-01	Citywide.	Install wheelchair ramps.	0.00	N/A	Council Bluffs	\$0.00	\$0.00	\$25.00	\$25.00
213	Avenue G 06-08	18th street to 7th Street to US-6.	ROW, bridge and pavement.	1.00	Minor Arterial	Council Bluffs	\$2,160.00	\$0.00	\$600.00	\$2,760.00
214	East Beltway - Airport Phase II 06-09	US-6 to Cedar Lane	Construct new 2-lane ACC facility.	1.00	Local	Council Bluffs	\$0.00	\$0.00	\$450.00	\$450.00
215	Franklin / Lincoln 06-05B	Franklin Avenue to Glasgow.	Pavement and sewer.	0.00	Collector	Council Bluffs	\$0.00	\$0.00	\$1,000.00	\$1,000.00
216	Indian Creek Trail	16th Avenue south to IA-92 along the Indian Creek.	Construct a hiking/biking trail.	1.00	N/A	Council Bluffs	\$140.00	\$0.00	\$210.00	\$350.00
217	Locus Lodge 06-05C	North Broadway to North Avenue.	Pavement and sewer.	0.00	Local	Council Bluffs	\$0.00	\$0.30	\$800.00	\$800.00

1 Project is Advanced Construction (STP-33C converted to local funds for reimbursement, per stated schedule). 2 Project is illustrative (Project is programmed, pending approval of Federal funding).

Source: MAPA (2003, August).

Appendix E: Interview Results by Interviewees

a) TTAC members:

Interviewee No.	Tools/data used in planning	Most important factors for planning	Do decision-makers have access to technical data	Limitations and conflicts	Limitations to objectivity	How comprehensive is decision-making?
1	Current needs and future needs forecasts; political influences; public input; engineering studies.	Safety; engineering traffic studies and traffic counts; funding, etc.	Yes. Public works department has to provide the information. Decision-makers ask for traffic counts.	Funding; time; unclear future land use; officials.	Decision-makers. Other than that, engineers deal with numbers (objective).	Very comprehensive.
2	[MAPA] transportation models; studies; socioeconomic factors; apolitical.	Funding; public/ Corporate input; state/ federal regulations.	Yes.	Time; money; environmental impacts/ studies; sprawl; physical features of land; demographics; parking; location of employers; urban growth.	Limitation is removed by getting input and attending meetings.	Constantly monitored. Jurisdictions work together and compromises are made all the time.
3	Own traffic counts; HPMS; LOS; bridge inspections; studies by hired consultants; rely mainly on MAPA census track and projections.	Money; LOS (safety)	Yes. Officials approve projects, but technical experts make recommendations.	No real limitations to planning. Conflicts in urban areas always exist – MAPA coordination helps avoid conflicts. Limitation to decision-making – public perception and acceptance of project; fiscal constraints.	Geographic competition for funds; political aspects.	Comprehensive, but only for automobile transportation. Due to MAPA, projects are well coordinated.

4	Traffic counts data; MAPA projections; projected land-use.	Money; growth.	Yes. They get reports, not raw numbers.	Funding is a limitation. Conflicts when people do not agree with land-use plans.	Funding.	Very comprehensive. TTAC does a lot of planning.
5	Studies (by MAPA and consultants); [starting to use more] models; more interested in numeric and technical aspects than in political and socio-economic.	Money; road congestion; growth and future growth.	Yes, but officials are not technically oriented; they rely on technical experts for technical information. Therefore, transportation is not a political decision.	Money; time. Every project is a compromise, not a conflict.	Bureaucrats and consultants are objective. Limitation—political aspects.	Should be more comprehensive than it is, but that might not be possible.
6	MAPA transportation model; political issues more important than technical.	Funding; facility; political considerations (who wants/ does not want the project).	Yes, but they do not understand or even ignore technical information. City Council, County Engineer, and DOTs have the final say.	Conflict – different jurisdictions control different parts [of the urban area]. There is no unified comprehensive land-use plan. MAPA has no power to enforce [decisions].	Difficult to translate the technical data to decision-makers. Hard to keep up with growth (sprawl).	Due to MAPA, planning is comprehensive, but MAPA may not reflect what individual governments may want to do.
7	Population and employment projections; sewer plan studies.	Public opinion (needs – rational method is used, i.e. traffic counts).	Yes. Officials approve plans. They have facts, numbers, etc.	Inform officials and public to avoid conflicts; time could be a limitation (sometimes, there is no time for public input and conflicts follow).	Data helps maintain objectivity.	This issue is very important. Douglas and Sarpy counties control growth, but counties next to them don't. In the future that will create problems.

b) Officials:

Interviewee No.	Factors/ information considered in decision-making	Most important factors for decision-making	Limitations and conflicts	Limitations to objectivity	How comprehensive is decision-making?
8	Input from county engineer and public.	Data from the engineers. In reality, engineers are the decision-makers.	Many limitations – the public, money.	Public; money. Officials do not try to be objective, but to represent people.	Not applicable.
9	Avoid congestion.	Traffic.	Information.	Cost [of projects] and who pays for the cost.	-
10	Technical recommendations; offers by developers to build a road.	-	Money	MAPA does a good job coordinating.	Planning is not well enough coordinated. Though MAPA coordinates projects to avoid duplications, the information from MAPA is not very well used.
11	Projected growth.	Financial considerations. Developers fund areas applicable to them.	Money; acquisition of ROW; information.	To be objective means to serve the greatest part of the community.	Only at jurisdiction boundaries. Topography makes comprehensive planning harder.

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