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Have Metropolitan Planning Organizations Improved Regional Policy Making?

The Cases of Kansas City and St. Louis

by

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A DISSERTATION

Submitted to the Graduate School of the

UNIVERSITY OF MISSOURI - ST. LOUIS
In partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY in

Political Science

May, 2010

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Abstract

Have Metropolitan Planning Organizations Improved Regional Policy Making?
The Cases of Kansas City and St. Louis

Historically, municipalities and regions continually competed for a share of transportation funds. The process was dominated by state Departments of Transportation where cooperation, equity and participation were limited. Eighteen years ago the federal government provided metropolitan areas with the opportunity to play a larger role in the regional transportation process. On December 18, 1991 President George H.W. Bush signed the Intermodal Surface Transportation Equity Act (ISTEA). The legislation ushered in a new era of cooperation between state and local leaders by empowering regional Metropolitan Planning Organizations (MPOs). The federal legislation's intention was to allow a region, through their MPO, to address participation, economic development, social equity and quality of life issues through their transportation policy. The significance and effectiveness of these increased functions has not been determined. The work of other scholars is insufficient to determine whether MPOs are making a difference and led to calls for further research. There was a need for an in-depth examination of MPOs through a comparative case study.

This study examines whether Metropolitan Planning Organizations (MPOs) make a difference in regional transportation policy-making. It investigates whether MPOs increase public saliency, increase the consideration of social factors (e.g. employment, quality of life and equity) and improve elected official participation in the regional transportation planning process. The study examines six major regional transportation projects: Three projects at the Kansas City MPO; Mid-America Regional Council (MARC), and three projects at the St. Louis MPO; East-West Gateway Council of Governments (EWGCOG). Study results were determined through comparative analysis of the case studies.

The evidence suggests MPOs make a difference in four of the five areas examined. They make a difference in public saliency, quality of life, employment factors, and elected official involvement. The means by which an MPO makes a difference include: employing expert consultants, advisory groups, and numerous internal committees brokering political agreements, and managing funds. The cases illustrate that the MPOs powers to coalesce regional cooperation are informal and that MPOs make a reasonable difference in regional transportation policy. The study points toward the need to provide more resources to MPOs.

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Chapter 1 - Introduction

This chapter describes the significance of Metropolitan Planning Organizations (MPOs), the development of regional planning, and outlines the study of the difference an MPO makes in the regional transportation process. The Intermodal Surface Transportation Efficiency Act (ISTEA), introduced in 1991, shifted the focus of transportation policy from the state to regional level. This shift made MPOs the focal point for regional transportation decisions. Regional planning began to take shape in the mid-sixties through the formation of Council of Governments (COGs) whose numbers grew rapidly due to federal support. Despite this federal government assistance, COGs suffered from poor participation by the public and elected officials, and limited monetary resources. These COGs are the institutions, in most cases, that house MPOs. The chapter sets up the study of MPOs through a seven chapter comparative case study (Kansas City and St. Louis) to determine if MPOs, and their increased role in transportation policy due to ISTEA, are making a difference.

The Significance of MPOs

Transportation policy is a regional issue because commuters travel across and between various political jurisdictions. A transportation system shapes any region's quality of life and economic wellbeing. A region's transportation system has "...a profound impact on the living conditions and life chances of Americans" (Weir et al., 2009). It dictates growth and economic activity through land use and provides the capacity to move goods and people

throughout a region. A region is an urbanized geographic area with a central city and suburbs tied together economically and socially. The performance of this geographic area's transportation system affects air quality, traffic congestion, social equity, economic development, job access and other important regional features. On air quality, for example, the Environmental Protection Agency (EPA) identified 474 counties and thirty-one cities as out of compliance with the Clean Air Act in April of 2004 (EPA, 2004). The Texas Transportation Institute's 2002 Urban Mobility Report illustrates that traffic congestion in the United States results in nearly six billion gallons of wasted motor fuel annually (American Road & Transportation Builders Association, 2006). Nationwide traffic volume has continued to increase, especially in the metropolitan regions. The vehicle distance traveled has been increasing and road infrastructure has failed to keep pace. According to the Federal Highway Administration (FHWA), the annual vehicle distance traveled tripled from 1967 (1.14 billion lane miles) to 2005 (2.9 billion lane miles) (FHWA, 2007). Meanwhile, road infrastructure has not increased in pace with demand. The total lane miles in the US has increased from 8.1 million miles in 1992 to 8.3 million miles in 2005 (Bureau of Transportation Statistics, 2008).

In an effort to better address these policy concerns the federal government shifted the focus of transportation policy to the regional level. In 1991, Congress adopted the Intermodal Surface Transportation Efficiency Act (ISTEA) which mandated the enhancement of MPOs. By increasing the focus on metropolitan regions and transferring greater responsibility for transportation

planning to MPOs, ISTEA represents the most significant transportation reform in recent decades (Katz, Puentes & Bernstein, 2005).

By giving MPOs a more significant role in regional transportation, ISTEA provided more flexibility in developing transportation policy, planning and investment, and sought to improve transportation initiatives and services in metropolitan regions. Since 1991, the Transportation Equity Act for the Twenty-First Century (TEA-21) in 1998, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA_LU) in 2005 have built on ISTEA.

Recent transportation policy changes and a greater role for MPOs offer metropolitan regions the opportunity to more effectively address their regions' transportation issues. Prior to ISTEA, federal transportation policy was dominated by state Departments of Transportation. ISTEA was supposed to make transportation policy a regionally cooperative effort. MPOs hold significant policymaking responsibilities and offer a form of regional governance intended to coordinate regional transportation policy by garnering horizontal cooperation between two or more local governments (Gerber & Gibson, 2009). This shift in policy through the ISTEA initiative was significant because it allowed for transportation policy to address the fragmented nature of American government and various transportation issues.

According to the US Census Bureau there were approximately 87,500 local governments in 2002. These included about 3,000 county governments; 19,400 municipal governments; 16,500 townships; 13,500 school districts; and

35,100 special districts (US Department of Labor, 2005). In an effort to ease the effect of fragmentation and garner greater regional cooperation, new federal transportation policy (ISTEA, TEA-21, & SAFETEA_LU) is being implemented through a state and local partnership which is mandated to be comprehensive and inclusive (Katz and Puentes, 2005). This legislation requires transportation plans to be developed with input from local governments, area transit providers and state Departments of Transportation.

As regions develop transportation plans it is crucial that they are aware of the critical link between transportation and societal goals. Federal law explicitly encourages MPOs to address traffic congestion, air pollution, and the spatial mismatch between jobs and workers. MPO programs emphasize the importance of reinvesting in existing transportation systems and provide for their preservation.

MPOs offer several other potential benefits for metropolitan regions: (1) They provide information to policy makers by making planning and technical assistance available. (2) They coordinate regional progress by developing regional plans. (3) They conduct research and analysis of regional issues and provide technical support to the regional decision making process. (4) They help local leaders and private citizens develop plans for public transit, trails and greenways, and traffic management which are important to the future development of metropolitan regions. These efforts enable local communities to make more efficient use of resources and to cooperatively invest in common, strategic regional objectives.

Federal legislation is supposed to allow MPOs to facilitate regional cooperation and create a transportation policy that addresses more than just traffic flow within a region. The federal government viewed MPOs as the forum to plan regional transportation projects, and to improve regional transportation policy making. Despite these potential benefits there is little evidence as to what, if any, difference MPOs have made in transportation policy over the past eighteen years.

This raises several pertinent questions regarding the effectiveness of this federal legislation. Have MPOs actually improved the regional transportation policy process? Have they made a difference in the way regions make transportation policy? Have ISTEA and its successors caused MPOs to improve regional information about regional transportation problems, regional solutions for transportation and regional cooperation? MPOs offer potential but do these regional governance entities make a substantial, significant or minimal difference? If so, how can we be sure?

Regional Planning

The aim of the federal government was to increase regional planning and coordination by creating regional oversight in fragmented metropolitan regions. The theory was that this would force municipalities to combine and coordinate their development plans through regional governance (Hamilton,1999). The committee on Improving the Future of US Cities through Improved Metropolitan Government defines regional governance as, "...governmental institutions within metropolitan regions, processes (the way in which groups participate,

decisions are made, resources allocated, and activities undertaken in metropolitan regions), and policies that influence the metropolitan area" (Altshuler et al.,1999). Regional governance involves collaboration between government, business and community leaders (Hamilton, 1999). The underlying political dilemma associated with regional governance is that local officials must relinquish a degree of control to achieve regional coordination (Gerber & Gibson, 2009). Regional planning is important because political development rarely exceeds a region's social and economic development and the fragmented nature of metropolitan regions often serves as an obstacle to cooperation and coordination of regional policy.

The Development of Regional Planning

The development of regional planning has been both aided and undermined by the federal government over the past forty years.

In the middle of the twentieth century institutions intended to aid planning and build regional cooperation in metropolitan areas emerged in the form of Councils of Governments (COGs). Their development began slowly in the mid-fifties and took off in the mid-sixties. According to the National Association of Regional Councils (NARC) there were forty-nine regional COGs in 1966, a number that grew to 223 by 1970 (NARC, 2006).

The growth of these regionally specific institutions was stimulated by federal aid for the discussion of problems, facilitation of planning and promotion of horizontal intergovernmental relations. The federal government played a significant role between 1954 and 1971 by passing legislation which

encouraged the formation of COGs. The Housing Act of 1954 made planning assistance funding available to COGs for professional staffing, data collection, and regional planning studies for land use, economic development, transportation, and housing (Hamilton, 1999). In 1965, federal legislation went a step further, when the Federal Highway Act mandated a regional approach to highway planning. This law required local governments to come together to develop highway plans cooperatively in order receive federal financial assistance (Wikstrom, 1977). In a similar fashion, the Housing and Urban Development Act of 1965 made grants to regional councils to cover two-thirds of the costs of studies, the collection of data and the preparation of regional plans and programs. As the number of federal grant-in-aid programs increased, their coordination became a concern for the federal government and resulted in legislation requiring comprehensive planning and review by a regional "clearinghouse" as designated by the Office of Budget Management. The Demonstration Cities of Metropolitan Development Act of 1966 increased the council of government's role by requiring that all local government requests for federal aid be reviewed by a regional review agency.

The emphasis of early legislation was to stimulate the growth of Metropolitan Planning Organizations (MPOs) to serve as regional review agencies to improve coordination between local governments. Regions that housed Councils of Governments (COGs) were often designated the MPO in order for regions to vet transportation plans and receive federal funding for projects. In areas where there was no MPO, they were often created and

designated as the COG for the area. By requiring metropolitan areas to establish and maintain regional review agencies consisting of elected officials from various counties and municipalities, the federal government spurred a dramatic increase in the number of COGs housing MPOs which serve as policy making institutions.

These acts of legislation stimulated the growth of regional review agencies and resulted in numerous projects including highways, airports, sewage facilities, transportation facilities and waste-treatment plants (Wikstrom, 1977:41). COGs facilitated the increase in projects by improving coordination and serving as the regional review agency as mandated by federal legislation. In 1954, the Detroit area welcomed the establishment of the Supervisor's Inter-County Committee (SICC), the first council of governments in the US. In 1968 the Southeast Michigan Council of Governments (SEMCOG), a council including counties, municipalities and special districts, replaced the SICC (Wikstrom, 1977:25). Since 1954 similar councils developed in nearly every region of the country. Examples include the Puget Sound Governmental Conference (Seattle-Tacoma, 1957); the Association of Bay Area Governments (San Francisco, 1961); the North-Central Texas Council of Governments (Dallas, 1966); the Capital Region Council of Elected Officials (Hartford, Connecticut, 1966); the East-West Gateway Coordinating Council (St. Louis, 1966) and the Mid-America Regional Council (Kansas City, 1972) (Wikstrom, 1977:26).

Scholars from various disciplines soon published positive evaluations of these COGs. These scholars included experts in urban politics,

intergovernmental relations and public policy. Their findings suggested that COGs helped promote communication, cooperation and a regional community, and suggested that more could be accomplished in regional associations. In 1963, Cassella analyzed the cooperation between local governments, observing that COGs build consensus between governments and officials to promote solutions to common problems. He suggested that, "They are means by which strong units of local government may work together cooperatively to determine region-wide comprehensive policies and to accomplish the programs implementing these policies" (Cassella, 1963: 214). In 1971, Mogulof observed that COGs facilitated a sense of regional community; "Interdependencies have been sharpened and an institution has been created which continuously poses expectations for regional action" (Mogulof, 1971:74). In 1977, Wikstrom suggested that COGs have engendered horizontal cooperation and promoted vertical channels of access and communication between the local, state and national levels of governments (Wikstrom, 1977:105). These studies offered evidence that there is an important role for metropolitan planning associations in the policy process. Despite these positive evaluations there was evidence that COGs faced several limitations which mitigated their effectiveness in regional planning. COGs were plagued by three problems: (1) limited participation among members, (2) limited revenue, and (3) low public saliency. Evidence of these problems is illustrated by Hanson (1966), Mogulof (1971), and Harris (1970).

First, a commonly perceived limitation of COGs since their inception is the half-hearted participation among their members. The participants, most of whom are elected officials, have limited interest, power, and time. COG members' time and dedication competes with the duties of their office and numerous other organizations. For example, an elected official may have to prepare for an upcoming town budget meeting or attend a local Chamber of Commerce meeting instead of attending a meeting at their regional COG (Hanson, 1966:34, also see Graves, 1972; Chatman and Jackson 1972; Hamilton, 1999).

Second, a COG's development often was impeded by its limited ability to finance operations and generate revenue. COGs received their funding from three basic sources: federal grants, state grants and support, and membership dues. Only a small portion of a typical COG's budget was generated through state support and membership dues, with the majority derived from federal grants such as the Housing Act of 1965 and Federal Highway Act of 1965. About fifty to sixty percent of a COG's budget came from federal grants. During this period, COGs had difficulties making long-term budgets because they were uncertain of the amount federal money they were to receive in the future. This hindered their ability to develop, plan, and implement long-term programs and activities (Mogulof, 1971:13; Krueckeberg, 1974; Norris, 1994).

Third, COGs were commonly plagued by limited public participation and low saliency among local citizens. As Graves illustrated, citizens of metropolitan areas are busy with work, personal interests and their families,

and feel that the regional council is not relevant to their problems (Graves, 1972; Oliver, 2000). For instance, many people are busy taking kids to sporting events, grocery shopping, worrying about projects at work, and planning family vacations, and feel that regional councils have little or nothing to do with these activities. This public ignorance and indifference toward COGs may be partly attributed to several additional factors. Studies have found that many Americans are politically apathetic and exhibit very little real continuous interest in politics (Deluca, 1995). Furthermore, the indirect nature of representation within COGs, where representatives serve in an advisory capacity, results in narrow and limited functional concerns which facilitate low public saliency (Harris, 1970:19). This evidence suggests that the enormous potential of COGs to make a positive contribution to metropolitan regions was often unfulfilled.

In the 1960s, the roles of regional review agencies in regional planning were limited to bringing together local governments for the exchange of ideas and information. Wikstrom suggests that COGs have to be judged on their ability to facilitate what Charles Lindblom calls, "coordination through mutual adjustment" (Lindblom, 1965:3). In the 1970s, this type of coordination where there is a flow of information between independent actors became more common in response to federal legislation. COGs housing MPOs became important players in several regional policy arenas due to federal government mandates for regional cooperation as a requirement to receive federal assistance. In 1971, the regional review mandate covered nearly 100 grant-in-

aid programs. In 1973, there were 238 regional clearinghouses and 212 metropolitan clearinghouses. In the 1980s, President Reagan and his "New Federalism" resulted in the federal government cutting many of the grant programs that allowed MPOs to play a significant role in the regional policy process. The number of grants dropped from 540 in 1981 to 435 by 1987. The intergovernmental affairs division of the Office of Budget Management (OBM) had a staff of 21 in 1981 but no longer existed in 1984 (Hamilton, 1999:158). Despite these set backs in the 1980s, the benefit of COGs and their designation as MPOs continued to demonstrate an ability to serve as a central authority for local governments to discuss regional policies.

These councils have persisted, facilitating information exchange, coordination and cooperation among local municipalities within metropolitan areas. This cooperation has taken the form of contractual agreements for services, such as water treatment, police protection, and library services. Evidence of this type of cooperation was revealed by Ostrom et al. in the late fifties in the Los Angeles area. For instance, the League of California Cities, an organization which consisted of the city of Los Angeles and others in the metropolitan area, negotiated a new metropolitan water district (Ostrom et al, 1961). Paul Freisema found this cooperation was present in the "Quad Cities" (Davenport, IA; Moline, IL; Rock Island, IL; East Moline, IL) in the early seventies through the League of Iowa Municipalities and Illinois Municipal League (Freisema, 1971).

Dissertation Outline

My dissertation addresses the puzzle of MPOs in the following steps.

First, I review the development of regional planning and the role created for MPOs by federal legislation. Chapter 2 illustrates the significance of regional policymaking institutions in the transportation policy process. The discussion of the significance of MPOs uncovers what is currently known about these institutions and more importantly provides some significant information about what else we need to know. The chapter provides a clearer picture of how to design the study and determine if MPOs have led to an improvement in regional transportation policy.

Next I describe the design of the study, which includes the process for conducting interviews and compiling the necessary quantitative data. The third chapter provides a roadmap to guide my research, and a discussion of the focal points of the study. It outlines the theoretical connection between the known and unknown by illustrating how I will answer my research questions, collect data and analyze results. It explains why I designed the study in this manner, why certain data was included or omitted and how the analysis of my results will contribute to the existing literature on MPOs and regional transportation policy. The chapter details the development of the research questions and the rationale behind the collection of various types of data to best answer the propositions in this dissertation. The intent is to elicit an inside perspective of the regional transportation policy process in Kansas City and St. Louis.

Chapter 4 discusses the transportation policy process in the Kansas City region. I summarize regional transportation planning in Kansas City and analyze the project selection process. Through the discussion of three regional projects these observations will illustrate the different roles that the regional MPO (MARC) plays, the input of the Missouri and Kansas Departments of Transportation, and the ability of the region to work together to take transportation policies in broader areas than congestion alone. This chapter will uncover the difference the MPO (MARC) is making in the Kansas City region.

In Chapter 5, I discuss the transportation policy process in the St. Louis region. I summarize regional transportation planning and analyze the project selection process. Through the discussion of three regional projects and transit these observations will illustrate the different roles that the regional MPO (EWGCOG) plays, the influence of the states' Department of Transportation on projects, and the ability of the region to work together to take transportation policies in broader areas than congestion alone. This chapter will uncover the difference the MPO (EWGCOG) is making in the St. Louis region.

Finally, I will offer a critical analysis of the regional planning process and illustrate the difference each MPO is making as it relates to my propositions. This chapter will offer a comparison of the transportation policy process across cases in an effort to identify whether MPOs have improved regional transportation policy and if so, how?

Chapter 2 - MPOs: What we know and what we need to know

This chapter discusses why a study of MPOs is important. It offers evidence of why MPOs are significant, the current evaluations of MPOs, why regional transportation planning is important, how MPOs could make a difference, and the obstacles facing MPOs. MPOs are the central mechanism to facilitate cooperation in, and coordination of, regional transportation planning. MPOs pursue national objectives through the development of key planning documents; in return a percentage of federal transportation money goes directly to the MPO and its region. ISTEA and subsequent legislation created this heightened role for MPOs, but the current evaluations of MPOs provide no hard evidence of whether MPOs are making a difference in regional transportation policy. This is significant because regions are facing increasingly large and more complex problems (e.g. traffic congestion and the spatial mismatch between jobs and workers) that can be more effectively managed at the regional level. This allows MPOs to make a difference in many ways, such as brokering political agreements, facilitating cooperation, and improving public participation. However, their ability to make a difference can be hindered by several obstacles which include local political culture and fiscal constraints.

Why ISTEA and MPOs?

To further improve regional cooperation, the federal government passed legislation making far-reaching changes in regional transportation planning.

Metropolitan Planning Organizations (MPOs) were the central tool for improving

transportation planning and for broadening its scope. In 1991, the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) ushered in a new era in transportation policy at the federal, state and local levels. ISTEA was viewed as a revolutionary development for transportation policy and provided the promise of institutional reform and new levels of participation (Weir et al, 2009). After years of MPOs playing a limited role in transportation policy dictated by the states, metropolitan areas were offered a greater role in transportation decisions through their regional MPO. Subsequently, over the last eighteen years, the role for a regional MPO has changed with increased responsibilities for air quality, transportation planning and funding allocation. What we do not know is how MPOs adapted to these changes and whether states have been able to adjust and loosen their grip on a policy process that was once purely theirs. Once states and metropolitan areas are able to work together and fully embrace an MPO's role in transportation decisions they will realize the potential of federal transportation legislation.

ISTEA mandated the creation and enhancement of MPOs, many of which were housed within the existing COGs of each region. For example, the East-West Gateway Coordinating Council (EWGCC), now called East-West Gateway Council of Governments (EWGCOG), was incorporated in 1965 to provide a forum for cooperative problem-solving and the coordinated development of regional policy, and was later designated as the St. Louis region's MPO.

This landmark legislation revealed a new type of federalism, in which for the first time, a significantly new federal transportation policy was being implemented through a state and local partnership which is mandated, by law, to be comprehensive and inclusive (Katz and Puentes, 2005). This mandate required transportation plans to be developed with input from local governments, area transit providers and state Departments of Transportation. For there to be a true partnership between state and local governments, there must be a role for local governments in developing the regional transportation agenda. ISTEA requires that six percent of Surface Transportation Program funds be made available for expenditure in metropolitan areas with populations over 200,000. This apportionment of funds in combination with project selection through the metropolitan planning process, has brought about shared responsibility for highway and transit investment decisions in metropolitan regions (Katz and Puentes, 2005). ISTEA's intention was for MPOs to serve as the focal point in regional transportation planning in order to facilitate cooperation and coordination.

In 2006, the Association of Metropolitan Planning Organizations (AMPO) listed 380 MPOs (AMPO, 2006). Each MPO covers a core geographic area of adjacent communities with a high degree of economic and social integration and a minimum population of 50,000. Each community identified plays a role and has an interest in the region's economic success and metropolitan identity. Smaller MPOs, in areas with a population less than 200,000 are commonly a state responsibility, and typically under the control of the state department of transportation. The passage of ISTEA and subsequent legislation meant that regions of varying sizes were able to play a more significant role in project

selection and the allocation of federal funds. This initiative has continued with a significant increase in authorized funds and responsibilities.

In 1998, Congress reauthorized and extended ISTEA through the
Transportation Equity Act for the Twenty-First Century (TEA-21), which was
followed by the Safe, Accountable, Flexible, Efficient Transportation Equity
Act: A Legacy for Users (SAFETEA_LU) of 2005. These reforms further
established a voice for metropolitan areas by devolving greater responsibility
for planning and implementation to MPOs through Long Range Transportation
Plans (LRTP) and Transportation Improvement Plans (TIP). TEA-21 authorized a
40 percent spending increase over ISTEA (\$155 billion to \$218 billion), though it
did little to improve the accountability and performance measures for MPOs
(Katz, 1995). SAFETEA_LU further increased funding to \$284 billion,
representing the largest surface transportation funding in the nation's history.
It also provided more flexibility than previous legislation for MPOs to solve
transportation problems within their communities (Federal Highway
Administration, 2005).

ISTEA was supposed to offer states more flexibility by allowing them to transfer funds earmarked for the Congestion Mitigation and Air Quality Improvement Program (CMAQ) to its Surface Transportation, National Highway System, Interstate Maintenance, Bridge, Highway Safety Improvement, and/or Recreational Trails apportionment. The amount that may be transferred can not exceed 50 percent of the amount by which the state's CMAQ apportionment for the year exceeds the amount the state would have been apportioned if the

program had been funded at 1.35 billion dollars annually (US Code Title 23). However, according to the Executive Director of East-West Gateway, in the last decade, "...the state has not taken advantage of the law by choice, they are not going to transfer money to mass transit, they are going to build roads. ISTEA created some new programs but didn't really change the authority because many MPOs don't embrace it" (Sterman, 2005). For example, between 1992 and 1999, 4.2 billion of the 33.8 billion dollars (12.5 percent) in flexible funds available for transfer to transit was used. During this time period, Missouri transferred only 10.48 percent (62.7 million dollars) of its eligible funds (598.9 million dollars) to transit. Illinois transferred 13.53 percent (199.2 million dollars) of its eligible funds (1.4 billion dollars) and Kansas transferred no money. The median state was New Mexico with 3.85 percent (12.3 million dollars) of eligible funds (320 million dollars) transferred (Puentes, 2000). ISTEA's intention was to create more flexibility by allowing CMAQ funds to be transferred to transit and a more balanced relationship between metropolitan areas and states' Department of Transportation through regional MPOs. However, these figures suggest that the impact of this change has been relatively small.

States and MPOs are encouraged to consult with state and local air quality agencies in non-attainment and maintenance areas on the estimated emission reductions from proposed congestion mitigation and air quality improvement programs and projects. An evaluation and assessment of CMAQ

projects and programs to determine the direct and indirect impact of the projects on air quality and congestion is required. The MPO must maintain and disseminate a cumulative database describing these impacts. The potential for MPOs in facilitating better air quality is evident in their responsibilities and the regulations listed in Section 174 and 107(c) and (d) of the Clean Air Act.

Section 174 mandates that MPOs report pollutants in non-attainment areas of a state and make a plan for attainment of federal air quality standards by the state, local governments and regional agencies. Planning for air quality attainment is one of many MPO responsibilities designated by the federal government.

A requirement for receiving federal money is that MPOs must pursue a series of programs to carry out national objectives. Included in these programs are the Transportation and Community System Preservation (TCSP) and Job Access and Reverse Commute (JARC) programs. The TCSP program is a comprehensive program of research and grants designed to investigate the relationships between a region's transportation infrastructure, the community, and system preservation plans and practices. This creates the necessity for all MPOs to focus on these issues within their community in an effort to qualify for funds. The JARC program sets aside a portion of transportation funds for activities that mitigate metropolitan traffic congestion and improve air quality. In 2002, Mid-America Regional Council (MARC) began a program titled "Smart Moves" which is being phased in over a ten year period. Its intention is to improve the transit system throughout the Kansas City region by integrating

services. Some of the services offered in the program include transit centers, more weekend and evening routes, a bus system that includes Freeway Flyers for long commutes, Airport Arrows serving the KCI airport and buses with low, walk-on entries for senior citizens and people with disabilities (MARC, 2005).

Funding for JARC grants was authorized at 150 million dollars annually beginning in 1999, including up to 10 million dollars for Reverse Commute Grants. A 50/50 federal/local match is required, and other federal funds can be used as part of the local match. In 2000, Congress appropriated 75 million dollars for the program (Federal Transit Administration, 2006).

JARC's purpose is to strengthen the relationship between transportation spending and air quality by developing transportation services for the transport of welfare recipients and low income individuals to and from jobs and develop transportation services for residents of urban, rural and suburban areas to suburban employment opportunities. Emphasis is placed on projects that use mass transportation services (Katz, 2005 & FTA, 2005). In urbanized areas with a population of 200,000 or more, MPOs select the applicant(s). In small urbanized areas with a population under 200,000 and in non-urbanized/rural areas, states select the applicant(s). Tribal governments must go through the state process but once selected can choose to be sub-recipients of the state or apply directly to the FTA. A brief look at some of these programs illustrates that MPOs are required to take transportation planning beyond mobility concerns and consider social, economic and environmental outcomes. For example, during the 2006 fiscal year MARC performed Bus Rapid Transit

Studies, Paseo Bridge Environmental Impact Statement, I-70 Environmental Impact Statements, South Metro Connection Study, and Regional High Occupancy Vehicle (HOV) Study. Many of these studies were part of the Kansas City regional transportation policy process due to federal mandates.

Federal law emphasizes that the regional planning process address societal goals, and consist of more than a list of capital investments, transit projects and highway projects. The passage of ISTEA was supposed to empower MPOs to develop strategies for operating, managing, maintaining, and financing the region's transportation system in such a way as to advance long term goals. As David Warm, the Executive Director at MARC, states, "Increasingly in the last decade our (MARC) allocation decisions are being made through a policy lens and before then the process was bargaining and dictated by public works" (Warm, 2005). Prior to ISTEA, MARC was not playing any kind of active role in the state's department of transportation in terms of setting their policy for how they allocate funds. Currently, MARC plays a limited role in Kansas and a very active role in Missouri. According to Warm, "...that has a huge impact in our being a collective voice for community interests around transportation" (Warm, 2006). For instance, MARC did a lot of work in the mid to late nineties based around growth concepts associated with urban design and form. These studies were very influential in helping local governments develop new subdivision ordinances and address traffic flow, land use and environmental concerns (Warm, 2006).

According to the Federal Highway Administration, when a region develops a transportation plan it should incorporate its vision for the future and include: a detailed and in-depth discussion of all alternatives; an evaluation process that encompasses diverse viewpoints; participation of all relevant transportation agencies and organizations; and an open, timely and meaningful involvement of the public (FHWA, 2006). Despite this clearly specified process, in Missouri, there is "No national transportation strategy, no economic strategy or land use strategy at the state level or the regional level. At the local level there are statements but they want to grow as big and as fast as they can" (Warm, 2005). At MARC the plan is a statement of what they are likely to become, but there is no clearly articulated strategy of how they want to grow (Warm, 2005). This shows that local involvement can lead to a short-sighted and sometimes self-centered perspective in regard to transportation which can impose costs on other jurisdictions or groups of citizens.

Throughout the transportation planning process it is crucial to provide an opportunity for the participation of people who have typically been underserved by past transportation plans. The federal legislation was intended to mitigate the tendency of previous systems to define "clear winners and losers" and the "haves" and "have-nots" (Sanchez, 2006). David Warm suggests, "...what people expect is a big driver in the current policy process and politically people expect huge, larger, wider highways" (Warm, 2005). This type of singular focus is what led to community fragmentation and racial segregation in many suburban and urban communities (Sanchez, 2006). The

role of the MPO is to mitigate these effects by incorporating a diverse constituency. At MARC, they assert that their constituency is the general public, local governments, developers and planners - people who have a role in the process and did not have a voice before ISTEA. These formerly underserved participants have created increased expectations through heightened awareness and feedback. The heightened awareness and feedback is a result of these groups becoming more educated and informed on the parameters of the legislation, the role of the MPO, their role in the process and a familiarity with the rules that govern project selection and fund disbursement. In some cases this results in, "...regional and local interests closely align(ing) and regional decision makers face little conflict. In other cases, however, regional and local interests may diverge dramatically, making compromise far more difficult" (Gerber & Gibson, 2009). Increasing public participation may be beneficial for actors that were previously underserved by the local decision making process but it may increase the scope of conflict within a region by providing additional means to advance the interests of those who were previously underserved (Schattschneider, 1961).

Public participation, in the form of feedback, is a key component of the regional transportation process since the passage of ISTEA. Other feedback consists of a formal discussion among MPO staff, local government officials, transportation officials and relevant agencies of how transportation policies influence economic development, and address equity and social issues. It is

pertinent for these forms of feedback to be present in the policy making process for MPOs to make a difference.

The importance of feedback is illustrated by the Federal Highway

Administration (FHWA) in Figure 2.1. It suggests that feedback should be a part

of each stage of the metropolitan planning process. Increased participation

offers familiarity and a level of trust among the actors in the process.

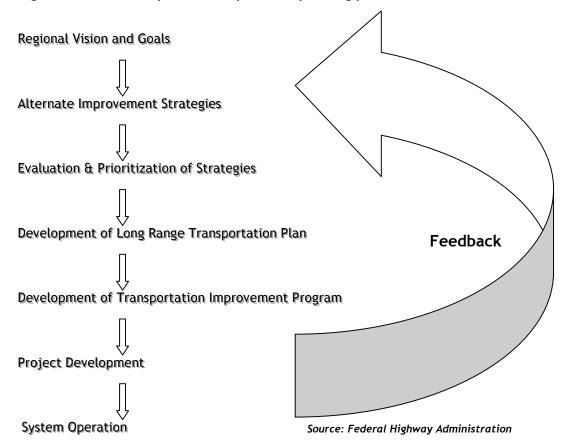
According to Les Sterman this is the situation at East-West Gateway. He

suggests that at the St. Louis MPO, "Most decision making is dependent on the

level of trust between the public, committees, board and staff" (Sterman,

2005).

Figure 2.1: The metropolitan transportation planning process



MPOs have been given the opportunity to play a greater role in the transportation planning process by establishing a forum for a fair and impartial discussion. This allows for the evaluation of alternatives, maintenance of a Long Range Transportation Plan (LRTP), development of a Transportation Improvement Program (TIP), and publication of a Unified Planning Work Program (UPWP). These key planning documents are shown in Table 2.1.

In an effort to program money and organize transportation priorities (e.g. air quality, traffic flow, environmental impact and land use), MPOs are required to develop an annual UPWP in cooperation with the state and operators of public owned transit. The UPWP must meet the requirements presented by the Federal Highway Administration (FHWA) in Title 23 of the Code of Federal Regulations Part 420, subpart A. It must discuss in detail the planning priorities of the metropolitan area and describe all metropolitan and transportation related air quality planning activities within the area during the next one or two year period, regardless of funding sources or the agencies conducting activities, indicating who will perform the work, the schedule for completing it and the products that will be produced.

Table 2.1: Key Metropolitan Planning Organization planning documents

	Time Frame	Contents	Update
			Requirements
UPWP	1-2 years	Planning Studies and Tasks	Annually
LRTP	25 years	Future Goals, Strategies and Projects	Every 5 years
TIP	5 years	Transportation Investments	Every 4 years

The purpose of the UPWP is three-fold: (1) to describe the activities the MPO and other agencies plan to undertake within the next year; (2) to document the proposed expenditures of federal, state and local funds in support of applications for various planning grants; and (3) to provide a management tool for MPOs and the funding agencies in scheduling transportation planning activities, milestones and products.

The Long Range Transportation Plan (LRTP) is a 25 year transportation plan which serves as the centerpiece of the metropolitan transportation planning process. The plan identifies transportation improvements over the next 25 years and specifies the region's transportation strategies, goals, and policies. Regional transportation planning is a problem-solving exercise. For instance, East-West Gateway's LRTP offers a framework for regional transportation solutions through a multi-step decision making process based on past and current trends, future possibilities and the following seven regional goals: (1) a strong position in the national and global marketplace, ensured through strategic economic development, competitive employment opportunities, a well-trained workforce, and responsible asset management; (2) a sustainable and growing economy grounded in the wise and coordinated use of physical, environmental, social, and agricultural resources; (3) a clean and healthy environment; (4) safe neighborhoods, communities, and thoroughfares; (5) resources for learning and personal development, accessible at every point of the life cycle; (6) a growing, diversified population, with equity, choice, and opportunity for all citizens; and (7) efficient and balanced

patterns of growth and development that respect the land, the citizenry, the history, and the strategic location of the St. Louis region (EWGCC, 2005).

The LRTP is a comprehensive, intermodal plan that responds to both community goals and federal policy direction. The plan is limited by federal funding, reflecting only funding that is currently available or can reasonably be expected to be available during the plan's time frame.

The LRTP provides the basis for development of the Transportation Improvement Program (TIP) which is a financially restricted list of prioritized projects to be funded and implemented over the next five years. These priorities are established by a separate list of regional goals which are more narrowly focused on transportation. According to East-West Gateway, projects are prioritized based upon six regional goals for transportation: (1) preservation of existing infrastructure by maintaining the current road, bridge, transit and intermodal assets in good condition; (2) safety and security in travel, by decreasing the risk of personal injury and property damage on, in, and around transportation facilities; (3) ensuring that congestion on the region's roadways does not reach levels that compromise productivity and quality of life; (4) access to opportunity, by addressing the complex mobility needs of persons living in low-income communities and persons with disabilities; (5) sustainable development, through coordinating land use, transportation, economic development, environmental quality, energy conservation, and community aesthetics; and (6) efficient movement of goods, by improving the movement

of freight within and through the region by road, rail, water, and by air (EWGCC, 2005).

The TIP must be consistent with the LRTP. It provides a schedule for implementation of regional projects over a five year period to ensure that public resources are being spent efficiently. The projects included in the TIP are submitted for consideration by local governments, the state Department of Transportation, local transit operators or the MPO staff. Prior to approval of the TIP, the MPO provides an opportunity for public review and comment. After approval by the MPO, the TIP is approved by the Governor(s) and incorporated in the statewide transportation improvement program (STIP). MPOs potentially have far-reaching influence over transportation development and regional development because no regionally significant project, regardless of funding source may be implemented unless it is included in the TIP (MARC, 2006).

Evaluation of MPOs

Many evaluations of MPOs are based upon increased mandates for coordination, planning protocol and funding criteria. After forty years of top down transportation policy, the enhancement of MPOs created a regional policy framework for transportation decisions (Sanchez, 2006). Over the past two decades the regional governance literature that has supported the enhancement of regional agencies suggests that horizontal collaboration alone can empower regional decision making venues (Weir et al., 2009). In Metropolitan Government and Governance, G. Ross Stephens and Nelson Wikstrom suggest there is a need for a governing body to address large scale

problems. These governance arrangements often include "non-legislative" and "non-governmental" actors in public decision making which incorporate structures that require shared policy making responsibility (Gerber & Gibson, 2009). MPOs offer this type of arrangement, in which a region can address large scale problems without the formation of a formal regional government. This process is referred to as "mutual adjustment" (Savitch & Vogel, 1996), or "coordination through mutual adjustment" (Lindblom, 1965:3). The premise is that the lack of a governing body, whether formal or informal, results in piecemeal, haphazard decisions on every issue from air quality to transportation (Stephens and Wikstrom, 2000). In this light, scholars have offered an optimistic perspective, by suggesting that the enhancement of MPOs could help alleviate several regional problems, such as traffic congestion, air quality and the spatial mismatch between jobs and workers.

The majority of scholars have focused on the significance of the legislation and the difference that an MPO should make from a policy perspective. According to these observations, ISTEA and its successors should spur cooperation and coordination among local municipalities. But there are few studies that offer any direct observation of the effect that ISTEA and its successors on MPO policies. Furthermore, there is little in-depth analysis of MPOs and even less hard evidence that MPOs are making a difference in policymaking or that the legislation has resulted in policies that benefit regions.

In his book "The Metropolitan Chase," political scientist E. Terrence Jones presents MPOs as the central point for transportation decisions while discussing their role in regional policies since the passage of ISTEA. MPOs benefited from mandates for increased public participation, coordination of all modes of transportation within their region, increased flexibility in funding allowing money to be moved between modes (e.g. highways to mass transit) and the ability for elected officials to meet regularly at board meetings to determine regional transportation projects and funding (Jones, 2003:102). Meanwhile, prior to the passage of ISTEA, MPOs had smaller staffs due to federal budget cuts in the 1980s. This led to reduced policy expertise, and counties and municipalities searching for project funding could bypass the MPO and go directly to the state since the review authority was shifted from the federal government to the states under Reagan's "New Federalism" (Jones, 2003).

Judith Innes, Professor of City and Regional Planning, and political scientist Judith Gruber, conducted a case study examining transportation decisions in the San Francisco Bay area. The purpose of their study was to identify the conditions under which transportation decisions were made that focused on the interests of the region through their MPO, the Metropolitan Transportation Commission (MTC). After analysis over an eight year period they found mixed results. They concluded that no one is clearly in charge and no organization feels empowered to solve transportation problems that interest the people in the local community most, such as congestion and the use of transit. Congestion and public dissatisfaction with the transportation system increased due to policies being implemented without concern for how they

affect the region as a whole. This is the result of a pork barrel culture where earmarking money for special projects allows for the regional decision making process to be bypassed. Under these conditions the regional review agency is not given an opportunity to discuss the project because once earmarked by the federal government the project must be included in the region's Transportation Improvement Plan (TIP). The regional transportation process has not been made completely irrelevant by this pork barreling. Some of the promise has been realized as the region has come together to support a number of projects in order to guarantee maximum funding to the region. New partnerships were developed, agreements were made on some difficult questions, and new ideas and programs were developed (Innes & Gruber, 2001). While there has been some success, the limitations identified have prevented recent federal transportation legislation to be fully embraced by the region.

Robert Puentes, a fellow at Brookings Institution, and Linda Bailey, a transportation policy analyst with ICF International, wrote a paper on metropolitan funding illustrating the limitations and potential of MPOs (Puentes & Bailey, 2005). MPOs are limited in the difference they can make by a state's use of its political leverage, which exceeds that of MPOs. The state receives and manages all federal transportation money as well as large amounts of state transportation money, and often ignores an MPO's decisions and needs. Puentes and Bailey conclude that state opposition to greater MPO power is starting to dissipate. Nonetheless, the difference an MPO can make is limited because the capacities of MPOs and the state remain uneven. MPOs are allocated a small

amount of money through ISTEA for regional projects that have been created through the metropolitan planning process. However, this change was not significant because states have always allocated money to metropolitan areas. The purpose of ISTEA was to provide metropolitan areas the ability to design, plan and implement transportation projects; in other words, to decide how the money should be spent. Many of the disputes between metropolitan areas and states are a result of projects that states want to implement and the local community opposes. Prior to ISTEA, metropolitan areas had little say in transportation projects in their region. According to Bailey and Puentes, while the states still wield a disproportionate amount of power, ISTEA has offered more flexibility and an increased role for MPOs. This provides them with the ability to make a difference by bringing together a wide range of stakeholders to ensure that projects are representative of the region and not purely the product of the highway department (Puentes & Bailey, 2005).

Other observations and analyses contained within larger volumes of work dealing with Metropolitan Politics support this premise that MPOs can and do make some difference. For instance, Dreier et al. in their chapter on regionalism, discuss the rejection and approval process for transportation projects through the provisions in the ISTEA legislation. They identify the difference an MPO can potentially make but do not discuss whether MPOs have any impact (Dreier et al, 2004:233). The discussion related to MPOs specifically consisted of a few paragraphs addressing ISTEA and TEA-21. The rest of this discussion primarily focuses on the functions of COGs.

Bruce Katz, Vice President and Director of The Metropolitan Policy Program at Brookings Institution, and Robert Puentes illustrate the significance of the regional transportation policy process and the possible implications for the future of metropolitan areas. Their vision offers a prescription to alleviate several common transportation problems: (1) traffic congestion; (2) poor air quality; (3) spatial mismatch between jobs and low income workers; (4) metropolitan sprawl; and (5) the aging of the transportation network (Katz and Puentes, 2006). They focus on a potential policy prescription for the future of regional transportation and do not offer an in-depth analysis of what MPOs accomplish and what, if any, progress has been made since ISTEA. An examination of their policy recommendations suggests that metropolitan areas have not been able to fully embrace the legislation. The current transportation policy is failing in certain areas, and in order to succeed it should: (1) promote the economic efficiency of metropolitan areas; (2) help cities realize their full economic and fiscal potential; (3) help remake the suburbs to enhance choice and quality; (4) connect cites and metropolitan areas; and (5) respond to the major demographic and development changes underway in our society and help our citizens realize their full potential (Katz & Puentes, 2006). Their analysis and vision makes an important contribution to the discussion surrounding regional transportation issues, but it lacks what we need to know about MPOs and the regional transportation process created by ISTEA and subsequent legislation. What is working? And how can we build upon that to make a difference in the future?

The research described above further illustrates what is lacking in regard to scholarship on MPOs (Dreier et al., 2004; Katz and Puentes, 2006). Katz focuses on what an MPO should be able to do but does not offer an in-depth analysis of what they are accomplishing, while Dreier et al. focus more on COGs with little discussion of one of their primary roles, which is serving as the MPO. However, much of their discussion is speculative and lacks the appropriate evidence to determine how effective MPOs have been in implementing ISTEA and what, if any, obstacles stand in the way of realizing the full potential of the legislation.

These authors suggest that MPOs are making a difference and offer promise through horizontal cooperation, by developing regional relationships and bringing together a wide range of stakeholders to determine policies and projects that represent the region's interests. The authors acknowledge that these regional governance bodies have a difficult time making a significant difference due to a lack of operating authority and capacity compared to states. Each of these authors in their own way suggest, "ISTEA's central institutional reform carved out a space for regional decision making by enhancing the power of Metropolitan Planning Organizations (MPOs), regional entities that had existed since the 1960s but which exercised little authority" (Weir et al., 2009). In short, the authors identify the potential of the shared policy making responsibility that MPOs represent for regional transportation planning, but do little to properly assess whether this potential has been realized.

Why Regional Transportation Planning is Important

Assessing the effectiveness of MPOs is very important; metropolitan areas have continued to spread geographically, resulting in larger and more complex problems that affect the entire region. These large scale problems include traffic congestion, deteriorating air quality and increasing distance between job seekers and jobs - problems that MPOs are required to deal with.

First, traffic congestion has been a steadily growing problem in metropolitan areas. For example, the average time that commuters spent stuck in traffic in metropolitan areas since 1992 has increased by 41 percent, or eighteen hours per year (Downs, 2004:22). Note that this increase is not increased aggregate travel time, but only the extra time spent going slow or going nowhere because of traffic congestion. According to the Texas Transportation Institute's 2002 Urban Mobility Report, traffic congestion costs the US economy 68 billion dollars per year, which is equivalent to 1,160 dollars per traveler in lost productivity and wasted motor fuel (American Road & Transportation Builders Association, 2006).

These conditions, accompanied by geographic fragmentation and an increase in suburban commuters, often result in conflicts over how best to allocate resources to address this regional issue collectively. Suburban areas complain that they have experienced the greatest increase in traffic congestion and are not being allocated the necessary resources to address the problem through the regional decision making process. Meanwhile, the central city

argues that they have received a lack of regional resources to upgrade aging infrastructure such as bridges (Wachs & Dill, 1999:305-306).

A second problem that requires regional cooperation is air pollution. The Clean Air Act of 1990 established air quality standards for metropolitan areas. According to the EPA, poor air quality results in premature death, heart attacks and increased hospital admissions for people with lung and heart disease (EPA, 2006). Long regional commutes and traffic congestion result in poorer air quality, so regional cooperation is necessary to direct traffic flows and establish regional fuel standards to mitigate the effects of vehicle emissions (Downs & Puentes, 2005:182). Clean air plans commonly include the development of light rail/mass transit systems, special region-wide fuel standards, bicycle lanes and high occupancy vehicle lanes (Wachs & Dill, 1999: 317). These projects cross jurisdictional boundaries and necessitate significant public investment. In order for such plans to go forward, a regionally collective decision is necessary which requires cooperation and also necessitates many localities to forgo their own local plans and initiatives.

Third, in recent decades, as businesses and economic activity decentralizes across metropolitan areas a "spatial mismatch" has arisen between jobs and workers in the nation's urban regions (Allen & Katz, 1999:31). In suburbs, entry-level jobs abound in manufacturing, and wholesale and retail trade. These suburban jobs provide opportunities for people with only basic education and skills (Pugh, 1998). At the same time, central cities have lost jobs resulting in unemployment in the urban core. It seems obvious

the urban unemployed could fill many suburban jobs. But the absence of viable transportation options combined with persistent residential racial segregation and a lack of affordable suburban housing effectively cuts many inner city workers off from suburban job opportunities. The need for better transportation to get workers from the inner city to the more numerous jobs in suburban areas is a problem in which regional planning and coordination should make a difference. There are institutions that have the potential to address this type of collective action problem. These institutions do not require a powerful government to coerce individuals, but they also do not presume that local governments naturally cooperate to solve problems (Bickers & Williams, 2001:75).

The emphasis of legislation from the 1950s through the 1970s, then, was to stimulate the growth of COGs to serve as regional review agencies. This resulted in numerous regional projects including highways, airports, sewage facilities, transportation facilities and waste-treatment plants. Despite these achievements COGs and their service as MPOs were limited by a lack of participation, low revenues, and little public saliency. These MPOs later lost support due to the cutting of many grant programs, but not before their ability to serve as a central authority for the discussion of regional policies was realized. Recent federal legislation has given MPOs new responsibilities and the ability to address large transportation policy issues. Along with these new responsibilities and an exponential increase in funding over the last eighteen years is the opportunity to address air quality, traffic congestion, and the

spatial mismatch between jobs and low income workers. This was the intention of the legislation, to move away from a one size fits all transportation policy and state control, to a more comprehensive approach tailored to each region's needs. Despite their existence since the mid 1960s and empowering legislation in 1991 there is a lack of sufficient data to answer the question of whether MPOs have made a difference in the regional policy-making process.

In summary, MPOs have been present in metropolitan areas for nearly forty years. Their development was spurred by the federal government but they played a limited role in transportation policy. Most transportation decisions were made by states' Department of Transportation with little input from regional MPOs, which basically served as a rubber stamp for state decisions. Recently, MPOs have found new responsibilities and a larger voice in transportation decisions within their region. The significance and effectiveness of these increased functions is yet to be determined. The early evaluations suggest that MPOs, metropolitan areas and states have struggled to change and balance the transportation policy process.

How MPOs could make a difference

MPOs were created to ensure that funding of transportation projects and programs are based on a continuing, cooperative and comprehensive planning process. The policy process should include thoughtful deliberation of all possible strategies, an evaluation process that includes diverse points of view and collaboration between all relevant agencies and organizations. The policy process should promote involvement by all interested parties, such as the

business community, community groups, environmental organizations, elected officials, public officials and the general public through a hands-on participation process carried out by the MPO in coordination with state DOTs and transit operators. Through this process MPOs could make a difference by brokering political agreements, creating better and more cooperative relationships with state DOTs, facilitating the responsible disbursement of funds for important regional projects, creating policies that improve air quality, land use, asset management, financial management, freight movement, performance measures, improving public participation, project development, safety, system management, transportation demand management and environmental justice.

MPOs have sufficient capabilities to make a difference by brokering political agreements. They have the unique ability to bring varying factions within the community together to discuss and determine what is best for the region. These factions include anyone who resides in the region, interest groups, state Departments of Transportation, political leaders within the MPO region or someone who does business in the region potentially affected by transportation decisions. These capabilities stem from their role as the region's center for transportation funding and decision making. Therefore, the MPO brokering of agreements should be self-governing, since the attendant norms, power structures, and resource distribution comes mainly from repeated interactions and a deep history among the members themselves.

MPOs have a long history of working with state DOTs. Once merely seen as an informal participant in the state transportation policy, MPOs now serve as a clearinghouse for all projects within their region. This has heightened their power and leverage with DOTs. Therefore, creating a better and more cooperative relationship with state DOTs is a greater priority now than it was before ISTEA. Transportation planning must be cooperative, because no single agency has responsibility for the construction, operation or maintenance of the entire transportation system. For example, some roads that are part of the Interstate Highway System are subject to certain standards and are usually maintained by a state DOT. Others are county arterials or city streets designed, operated, and maintained by counties or local municipalities. Transit systems are often built, operated and maintained by a separate entity. The MPO is responsible for actively seeking the participation of all relevant agencies and stakeholders in the planning process.

MPOs are also responsible for the facilitating the disbursement of funds for important regional projects. This responsibility means the MPO should be evaluating and selecting projects for implementation that ensure the funding requirements of the Transportation Improvement Program (TIP) will not exceed the amount of funds expected to be available from federal, state and local sources. The funding must be in place before they can move forward with any regional policy.

MPOs are also responsible for developing policies that improve air quality. A region's label as non-attainment or maintenance region creates

additional requirements for transportation planning. Most importantly, transportation plans, programs, and projects must conform to the state air quality plans, known as the State Implementation Plan (SIP). Air quality concerns have a major impact on metropolitan planning. MPOs in air quality non-attainment and maintenance areas are required to ensure that emissions from transportation investments will not cause new violations or affect an area's schedule to attain their air quality standards. Therefore, MPOs need to have a clear idea of what the requirements are. The challenge for MPOs in non-attainment and maintenance areas is to decide on a mix of transit and highway investments that, combined with measures such as inspection and maintenance programs or reformulated gasoline, will keep emissions from motor vehicles within allowable limits.

A region's transportation system represents a massive investment in the facilities and the capital assets used to operate and maintain this system. The transportation system is one of the largest government-owned assets in any region. Wear and tear from normal use and from the environment (e.g. heaving from freezing and thawing), will make transportation infrastructure deteriorate over time. If roads, bridges, airports, transit facilities, ports, bicycle and pedestrian paths, etc. are not maintained, people and goods will not move as easily and safely, resulting in reduced quality of life and diminished economic activity.

The MPO can support asset management by encouraging the collection of data and use of the resulting information for establishing priorities for

improving the area's transportation assets. TEA-21 states that the transportation planning process should "...support the economic vitality of the metropolitan area (or state), especially by enabling global competitiveness, productivity, and efficiency; increase the accessibility and mobility options available to people and for freight; and enhance the integration and connectivity of the transportation system, across and between modes, for people and freight" (TEA_21, 1998). According to the FHWA:

The movement of freight is an important part of any regional transportation system. The efficient movement of freight within and through a region is critically important to industry, retail, agriculture, international trade, and terminal operators. Metropolitan regions with their cargo airports, intermodal freight yards, large trucking terminals and shipyards are especially affected by freight movement issues. As the forum for cooperative transportation planning and decision making, the MPO is responsible for making sure that freight movement is considered in the transportation planning process. Many MPOs should systematically incorporate freight movement issues into their planning activities (FHWA, 2006).

The basic purpose of transportation is to move people and goods from one place to another, but its effect on economic development goes well beyond this. An efficient transportation system can improve the economy, shape development patterns, and influence quality of life and the natural

environment. According to the FHWA, "Land use and transportation are symbiotic: how development is spaced can greatly influence regional travel patterns and, in turn, the degree of access provided by the transportation system can influence land use distribution" (FHWA, 2006). The role of the MPO in land use varies according to state and locality. In some areas, MPOs are responsible for reviewing local land use decisions considered regionally significant. In others, land use decisions are solely the prerogative of local officials. Regardless of the MPOs role in decision making, transportation planners must make every effort to consider the comprehensive land use plans of the region and local jurisdictions, and create a constructive dialogue with land use officials. In that way, each group is informed of actions that might affect the other.

Activities meant to stimulate economic development can affect the transportation network and adjacent parcels of land in terms of zoning. It is important to consider the effects of development on the quality of life for residents (e.g. traffic noise, improved mobility, more jobs, etc.) the transportation network and the regional economy as a whole. Much of this will require balancing projected benefits against projected externalities. According to the FHWA:

Better planning tools are increasingly available to help MPOs understand the impact of economic development decisions on the transportation network and the natural environment. Examples of planning tools include the following Geographic

Information Systems (GIS) to help illustrate how transportation facilities can affect specific parts of a region or community and travel demand and emission model which help show how transportation can affect air quality (FHWA, 2006).

Model results are only as good as the data that go into the model. MPOs must use the most current socio-economic and census data available, especially if the region is growing rapidly. MPOs should make every effort to explain the information and assumptions that went into creating the model in plain and understandable terms.

The MPO can take the lead in creating performance measures that provide information critical to regional and local decision-makers. Performance measures demonstrate how well the transportation system is doing its job of meeting public goals and expectations of the transportation network. Some methods used to measure performance include tracking average speeds and crash rates. Many metropolitan areas monitor how close they are achieving specific goals such as the mobility of disadvantaged populations, levels of air quality, and health of the economy, by using performance measures. These provide feedback on the decision making process by answering questions such as whether the performance of the transportation system, economy, air quality etc. are changing over time and whether transportation investments are making a difference. Because performance measures strongly influence the goals and objectives of the planning process, their development and ongoing support can become part of the activities of the MPO. If performance measures

are to be developed, they should be subject to the MPO sponsored public involvement program (FHWA, 2006).

Public involvement is integral to an MPOs transportation mission. Without meaningful public participation, there is a risk of making less than optimal decisions. With public involvement, it is possible to make a lasting contribution to an area's quality of life. According to the FHWA:

Public involvement is more than an agency requirement and more than a means of fulfilling a statutory obligation. True public participation is central to good decision making. The public includes anyone who resides, has an interest or does business in a given area potentially affected by transportation decisions. This includes both individuals and organized groups. As the agency responsible for coordinating the regional transportation planning process, the MPO must actively involve all affected parties in an open, cooperative, and collaborative process that provides meaningful opportunities to influence transportation decisions. Transportation has a profound influence on the lives of people (FHWA, 2006).

Decision-makers must consider fully the social, economic and environmental consequences of their actions and assure the public that transportation programs support adopted land use and community values:

MPOs must develop, with the public, effective involvement processes custom tailored to local conditions: Early and continuous involvement; reasonable public availability of technical and other information; collaborative input on alternatives, evaluation criteria and mitigation needs; open public meetings where matters related to transportation policies, programs, and projects are being considered; open access to the decision making process prior to closure (FHWA, 2006).

Safety is one of the most important goals in the operation of the transportation system. Over the past three decades, transportation fatality rates have declined in relationship to system usage, due in large part to safer cars, tougher police enforcement, and increasing use of seat belts, air bags and child safety seats. However, in many categories, the actual number of accidents has increased because there are more people using the transportation system. Integrating safety into metropolitan transportation planning requires MPO coordination with transit, state highway and motor carrier safety agencies and their safety processes. Transportation planning takes safety considerations into account by identifying high-accident locations and giving them high priority for improvements. Many MPOs also participate in safety campaigns that educate the public on good safety practices. Many state DOTs and local transportation agencies have developed safety management systems that monitor accident locations in their jurisdictions over time. The

MPO can participate in data collection for these systems or coordinate the development of a regional safety management system (FHWA, 2007).

System management and operations (M&O) analyzes regional transportation as an interconnected set of services and systems, to improve system performance through better management and use of the transportation network. In identifying possible system M&O improvements, it is important to understand what system users want in terms of performance. Some examples of user oriented performance measures are average trip travel time, length of delay, and reliability of trip making. These are important indicators of how well the transportation system is operating. Successfully implementing M&O strategies requires close coordination among the many different agencies and groups with responsibility for transportation system performance. The role of the MPO in enhancing system management and operation is to identify M&O strategies and benefits. When developing the transportation plan, the MPO should consider using M&O strategies as one method of improving mobility for constituents (FHWA, 2006). Those programs and projects should then be given high priority in the TIP. The MPO can provide regional leadership in establishing a decision making framework by bringing parties together, by helping to determine how M&O decisions will be made in an area and by asking for input on M&O issues as part of the planning process. This allows agencies to develop M&O strategies in common. The MPO should develop system performance measures that take into account the desires and expectations of transportation

users and can be used to decide how funds should be spent. The MPO can then work to improve the system through future plans and TIPs (FHWA, 2007).

The goal of Title VI is to ensure that services and benefits are fairly distributed to all people, regardless of race, national origin, or income and that they have access to meaningful participation. According to the FHWA:

Title VI/environmental justice in transportation programs is achieved through: (1) Avoiding, minimizing, or mitigating disproportionately high and adverse human health and environmental effects, including social and economic effects on minority and low-income populations. (2) Ensuring the full and fair participation in the transportation decision making process by all potentially affected communities. (3) Preventing the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations (FHWA, 2006).

As the agency responsible for coordinating the regional transportation planning process, the MPO must make sure that all segments of the population have been involved with the planning process. The impact of proposed transportation investments on under-served and under-represented population groups must be part of the evaluation process.

In its broadest sense, Transportation Demand Management (TDM) is any action or set of actions designed to influence the intensity, timing and distribution of transportation demand, in order to reduce traffic congestion or enhance mobility (FHWA, 2006). Such actions can include offering commuters

alternative transportation modes and or services, providing incentives to travel on these modes or at non-congested hours, providing opportunities to link or "chain" trips together, and/or incorporating growth management or traffic impact policies into local development decisions. TDM strategies are part of the toolbox of actions available to planners for solving transportation problems. As such, MPOs should make sure that TDM actions are considered in the planning process. In areas where congestion management systems are required (populations greater than 200,000), TDM actions are among the strategies that can reduce congestion or enhance mobility.

Over the last eighteen years MPOs have been offered a variety of tools to make a difference in regional transportation planning. However, there are several obstacles that could potentially limit their effectiveness within a region. These include the state(s) culture, state(s) fiscal constraints, their capacity versus state(s) capacity, the entrenchment or siloing of state transportation policy, political interests of national, state and local players, the blinders of engineers and the local political culture/network. These all serve as potential pitfalls and extraneous variables that can act as barriers to the ability of MPOs to make a difference in regional transportation policy.

MPO Obstacles at the State Level

The pre-conditioned and embedded paradigm of thought in regard to the state policy process dictates most actions in transportation policy, creating a serious challenge for MPOs. A regional MPO must deal with advocates who have been socially pre-conditioned to a particular way of doing things and are

reluctant to change and embrace the MPO's more significant role in transportation planning at the state and regional levels. Actions that diminish an MPO's effectiveness include bypassing the MPO process through earmarks, state transportation plans being completed without thorough consideration by all MPO members and groups, and the provision of incentives to adopt a particular member's plan or project. These actions may significantly limit the effectiveness of the toolbox of actions available to MPOs for solving transportation problems.

State fiscal constraints play a major role in metropolitan planning, creating limitations and additional requirements for MPOs. Transportation plans, programs, and projects must conform to the state's budget. This spending constraint is particularly limiting in a state that is financially strapped. MPOs must find alternative financing, adopt a policy that is more cost effective and less optimal for the region or forgo the project completely.

The level of horizontal cooperation versus vertical conflict is an obstacle for many MPOs. An MPO's capacity versus the states' capacity is one of the most significant indicators for the effectiveness of an MPO in the regional transportation process. Over the past eighteen years, MPOs have witnessed a dramatic increase in their role in the transportation process, however, they have not attained the capabilities or powers vested in state Departments of Transportation. In some instances, where there is a disagreement between state priorities and regional planners, this disparity in capacity can limit an MPO's ability to make a significant difference in regional transportation policy.

The siloing of state transportation policy has contributed to the limitations of MPOs and provides an obstacle for MPOs to overcome as they work to make a difference. Policies with a high profile and large expenditures are often entrenched in a political network whose members are reluctant to relinquish their grasp on the policy area or to embrace change. The same can be said for transportation policy which has been long dominated by the state government, large municipal governments and state DOTs. These sub-systems make it difficult for a new player to become engaged in the process, change the nature of the process, and embrace their role within the policy process. MPOs must deal with such obstacles to achieve their mission and at times the siloing of transportation policy can result in MPOs making little difference at all.

The involvement of federal, state and local political leaders in the MPO process is meant to stimulate the regional transportation policy process. However, the political interest of these players can have a negative impact on an MPO's ability to make a difference in the regional transportation policy process. It is important to consider the effects of politics and personal agendas on the MPO process. Politicians can have a wide variety of motivations (e.g. traffic noise, improved mobility, more jobs, etc.) for their portion of the region to ensure a better chance of re-election and often fail to embrace the regional concept of a transportation network and a regional economy. This can result in projects that do not embrace the MPO mission of a regional transportation

system and slow the progression of the entire community and the difference an MPO can make.

An MPO is not an implementing agency for projects, but provides overall coordination in the planning and programming of funding for projects.

Coordination and cooperation through the MPO planning process, in an effort to address a region's transportation needs, optimizes the application of the legislation's intent. MPOs plan; they do not build. Engineers manage the actual construction. In most cases, engineers wear conceptual blinders, focusing on completing the job and rarely look at the policy side of the project. These members of transportation process are the implementers and focus on materials, resources and time issues. They can fail to see the impact on a community. The failure of engineers to be aware of community impacts and the natural environment can limit the effectiveness and mitigate the intention of the regional project.

The local community is integral to the MPO's transportation mission. The decision making process evolves around the community, however, when the old (unilateral) way of conducting business meets the new (regional) way there is a risk of less than optimal decisions due to limited cooperation and coordination. As the agency responsible for coordinating the regional transportation planning process, the MPO must actively involve the community members, many of whom are not onboard with the MPO process. This can lead to a negative or stagnating effect on MPO transportation decisions and the regional transportation process.

The background provided in this chapter provides evidence of the difficulties faced by MPOs in implementing effective regional transportation changes. In order to determine if MPOs, due to ISTEA, TEA-21 and SAFETEA_LU, are actually improving transportation and air quality policy-making in metropolitan areas there is a need for a direct observation and systematically gathered evidence.

Chapter 3 - Research Design

This chapter discusses the best way to examine MPOs, the type of data necessary to answer the propositions posited in this study, and the selection of the cases (Kansas City and St. Louis). The best way to examine whether MPOs are making a difference in regional transportation planning is through a comparative case study using quantitative and qualitative data. The study consists of two case studies (Kansas City and St. Louis), which allows for comparison and generalizablility of the results. The two cases include MPOs housed in COGs, two bi-state regions, with each MPO district including eight counties (EWGCOG - seven counties + St. Louis City). In an effort to determine whether MPOs are making a difference, the chapter presents three propositions. These propositions measure an MPOs ability to increase public saliency, address region wide factors (quality of life, employment and equity), and increase public official involvement.

Research Design Issues

The research design for this study allows for an in-depth examination of the increased capacity of an MPO and asks what, if any, difference MPOs have made in regional transportation policy since the passage of ISTEA in 1991. The results of this study are determined through the use of comparative case study analysis with longitudinal data and evidence from face to face interviews, MPO meeting minutes, MPO budget information and newspaper articles.

Case Studies

The best way to examine the policy-making impact of MPOs is through a case study analysis and the use of longitudinal data. A case study is an in-depth examination of a "social system," which may be an election, a war, a government or anything else the researcher wants to learn more about (King, 1989:6). Longitudinal data time orders the independent and dependent variables by recording repeated measures over a period of time, which allows the research to identify changes to the social system temporally (Meier & Brudney, 2002:43).

A case study is the most fitting method for this research because the method offers the ability to study "how" and "why" questions with little or no control over third variables (Yin, 2003). Compared to a history, a case study can reduce the uncertainty caused by external factors and variables which the researcher has little or no control over by selecting cases that ensure some similar conditions. If two cases without similar conditions are chosen, this makes it difficult for the researcher to determine whether any causal relationship or changes in the study were the result of the variables and conditions being examined or were a result of varying external factors. A case study is suitable for this research because it can examine past and contemporary events with little control over third variables, several potential causes, numerous chains of events and the interdependency of outcomes. Furthermore, a case study offers two sources of evidence not included in a history: direct observation of contemporary events and interviews of the

persons involved in these events. Thus, the ability of a case study to address contemporary events with little or no control over third variables and collect a full variety of evidence - documents, archival records, interviews and observations make it the best method for this study.

This case study of MPOs involved several steps: (1) determining the design of the study; (2) deciding how to collect the evidence; (3) collecting the evidence; and (4) analyzing the evidence. Case studies offer three different designs for the testing of theories: controlled comparison, congruence procedure, and process tracing (Evera, 1997:56). The design most appropriate for this study is a controlled comparison because it allows for the comparison of results across cases without pre-determined characteristics or comparisons within cases. A controlled comparison case study includes more than one case for the purposes of illustrating similar or conflicting results. The comparative design replicates the study in two or more cases which allows for inferences to be drawn by comparing the outcomes of each study. The comparison of results across cases allows better generalization of the results of an in-depth analysis of MPOs and the effects of the legislation in key policy areas. One of the often cited advantages of conducting a comparative case study is that the evidence is considered more compelling and the results are viewed as more robust (Yin, 2003:46).

In an effort to make the results more robust the case study incorporates longitudinal data. Longitudinal data can most effectively identify the patterns of change and sequence of events that occur within an organization, the family

unit or some other entity over time. Longitudinal designs can reduce error to which alternative methods, such as cross-sectional studies, are vulnerable (Young et al, 1991:2; Phelps and Colby, 1990). Longitudinal data organizes the data over time using multiple points in time, while cross-sectional data is recorded at a single point in time. As a consequence, longitudinal studies are ideal for in-depth studies that inquire about the causal relationship between an event (passage of ISTEA) and changes in a social system (participation at MPOs). This does not hold for cross-sectional studies where the causal inference is weak. For instance, if all variables are measured once, it is difficult to determine whether the event has caused the change in the social system or the change is due to a third variable. As a result, in a cross-sectional study the causal relationship may be a leap of faith or an assumption (Meier & Brudney, 2002:43).

Why Kansas City and St. Louis?

This study uses a controlled comparison of MPOs over time in Kansas City and St. Louis. The use of two case studies allows for inferences to be drawn in a comparative fashion and illustrate common outcomes. These two cases are likely to differ to some extent and arriving at common conclusions from both cases, will expand the external generalizability of the findings compared to a single case alone (Yin, 2003). The grounds for choosing Kansas City and St. Louis are they offer similar systems, represent average American cities and are neither huge nor tiny metropolitan areas. They each are represented by MPOs housed in well established COGs in a bi-state region. These cities have an urban

core with the majority of the population living in the suburbs. Their metropolitan areas have a population range between 1.5 and 2.5 million, with the largest portion of both their populations located within the state of Missouri. Two metropolitan areas based in a single, representative state provide a good opportunity to examine the strengths and weaknesses of MPOs. Missouri, which is economically, politically and demographically average, contains all the nation's characteristics and serves as a microcosm (Robertson, 2004). It has two large metropolitan areas, growing suburbs and small towns, and while it is "highly urban it is also deeply rural" (Brookings, 2002:6).

Regional Planning in the St. Louis and Kansas City Metropolitan Areas

The Kansas City region and St. Louis region offer similarities and differences that make it the ideal laboratory to study regional transportation planning. Missouri is the seventeenth largest state in the US, however, it has seventh largest state-owned highway system; and the eighth largest total of state and local lane miles in the country. During the 1990s, 3,423 lane miles were added to the system (Liu, 2004). Missouri has 3,416 local governments, eighth largest among states, with 114 counties, 962 local governments, over 1400 rural "special districts," and 308 road districts (largest in the nation) (Katz, 2004). Kansas City has 182 local governments, meanwhile, St. Louis has 312 local governments (see Table 3.2).

Table 3.2: Political Fragmentation in US

Metropolitan Area C	ounties	Municipalities and townships	Total Local Governments	Local Governments per 100,000 residents
Pittsburgh	6	412	418	17.7
Minneapolis - St. Paul	13	331	344	12.3
St. Louis	12	300	312	12.2
Kansas City	11	171	182	10.6
Cleveland	8	259	267	9.2
Philadelphia	14	428	442	7.4
	-		· -	
Miami	2	55	57	1.6
Phoenix	2	32	34	1.2
Los Angeles	5	177	182	1.2
San Diego	1	18	19	0.7
Source: Myron Orfield. "American Metro Politics: The New Suburban Reality." Brookings, 2002.				

The Kansas City regional planning area, represented by the Mid-America Regional Council (MARC), consists of two states, eight counties and 3,833 square miles with a total population of 1.8 million (MARC, 2005). The St. Louis regional planning area, represented by the East-West Coordinating Council (EWGCOG), area consists of two states, seven counties and St. Louis City with a total population of 2.48 million (EWGCC, 2005).

The MARC area encompasses portions of the states of Missouri with a population of 5,754,618 (US Census, 2004) and Kansas with a population of 2,735,502 (US Census, 2004). The counties that constitute MARC are Cass County, MO (91,593), Clay County, MO (197,588), Jackson County, MO (660,095), Johnson County, KS (496,691) Leavenworth County, KS (72,439), Platte County, MO (80,967), Ray County, MO (23,937) and Wyandotte County, KS (156,487).

The EWGCOG area around St. Louis incorporates a segment of the states of Missouri 5,754,618 and Illinois with a population of 12,713,614 (US Census,

(2004). This area consists of three Illinois counties: Monroe County (30,491), Madison County (264,350), St. Clair County (259,132), and four Missouri counties and one independent city: Franklin County (98,234), Jefferson County (210,397), St. Charles County (320,734), St. Louis County (1,009,235), and St. Louis City (332,223).

The selection of EWGCOG and MARC offers somewhat differing demographics with an important constant, the state of Missouri, for studying MPOs. EWGCOG represents the St. Louis metropolitan area, whereas, MARC represents the Kansas City area. St. Louis bears a resemblance to the industrial communities of the East, meanwhile, Kansas City mirrors Western and Great Plain communities.

EWGCOG provides a means for planning and problem-solving through a board of directors and a staff of over 50. The board is comprised of elected officials from the three Illinois counties, the four Missouri counties, and St. Louis City. The board consists of twenty-one voting members, which equates to roughly one vote per 100,000 residents (Sanchez, 2006). This organization serves as the MPO for the area with the responsibility for preparing a transportation plan and selecting the appropriate road, bridge and transit projects for the area.

Similarly, MARC serves as an association of city and county governments and MPO for a bi-state area. Their organization consists of a board of directors who prepares transportation plans and the appropriate policies for the area

along with a staff of over 100. The MARC board consists of twenty-nine voting members, roughly two votes per 100,000 residents (Sanchez, 2006).

Both areas have undergone major demographic changes in recent years. During the 1990s, the St. Louis region grew at a rate of 4.5 percent (111,000) new residents), whereas, the Kansas City region grew at a rate 12.2 percent (193,187 new residents). The St. Louis downtown population grew by 4.2 percent, whereas the Kansas City downtown population decreased by 13.2 percent (Katz, 2004). Both regions saw their growth primarily take place in western suburbs. In St. Louis, sixty-four percent of the growth took place in St. Charles County, Kansas City's growth is attributed to Johnson County, which grew by twenty-seven percent and represents nearly half of the region's growth, adding 96,000 new residents. Job growth in the Kansas City region outperformed the St. Louis region during this time adding 222,223 jobs, while St. Louis added 185,000 jobs. Both regions have seen jobs move to the suburbs (Brookings, 2002). In Kansas City, forty-five percent of employees work at least ten miles outside the regional center. In St. Louis, this number increases to fifty-eight percent which is twenty-eight points higher than average of the top 100 metropolitan regions, in which thirty percent of employment is located ten miles from the central city (Katz, 2004). St. Louis County, the economic core of the region, contains nearly half the region's jobs and only thirty-nine percent of the population (Brookings, 2002). The trend in Kansas City is somewhat different; population and job growth have taken place in Johnson County. Jackson County, which was once viewed as the economic core for the Kansas

City region achieved a job growth of 2.3 percent from 1990 to 2008, meanwhile, Johnson County's job growth was 70.7 percent. Jackson County now holds 304,209 private sector jobs and Johnson County offers 268,991 private sector jobs (Stafford, 2009).

In addition, there is also a large difference in the number of large corporate headquarters between the two regions. According to the Brookings Institution, St. Louis has forty-two large corporation headquarters whereas Kansas City hosts eighteen large corporation headquarters. St. Louis boasts 520 mid-sized corporation headquarters and Kansas City is home to 409 mid-sized corporation headquarters. A large corporation contains over 5,000 employees, whereas a mid-sized corporation contains 250 to 5,000 employees (Katz, 2004).

In short, these two regions provide an ideal laboratory for examining the impact of MPOs because they have experienced similar transportation, pollution and employment mismatch problems. Both regions are undergoing decentralization, with the trend greater in the Kansas City area. St. Louis employment and population is still mainly centralized in St. Louis County; but ex-urban counties also have been growing rapidly. Kansas City is growing at a faster rate than St. Louis in terms of new jobs and new residents. St. Louis has more corporate headquarters and a greater percentage of jobs ten miles outside the urban core. The process of growth in Kansas City is resulting in a movement away from the central city and economic center. People and jobs are moving to Johnson County, yet the amount of sprawl, as determined by jobs located ten miles outside the central city, is comparably less than in St.

Louis. One reason for this may be the limited geographic size of St. Louis City compared to Kansas City. St. Louis City is sixty-one square miles and Kansas City is 313 square miles (US Census, 2004). This means that areas within the city limits of Kansas City reach further out into suburban areas while St. Louis City is truly limited to an urban core. St. Louis is more centralized with a significant portion of the population and jobs located in St. Louis County and offers more sprawl based upon the distance of employment from the urban core. Kansas City is more decentralized due to the amount of jobs moving to the suburbs, but has less sprawl due to the proximity of the city limits to the growing jobs and population in the suburban areas.

Propositions

This study examines whether or not MPOs make a difference in regional transportation policy-making. It investigates whether or not ISTEA promotes: cooperation between regional governments; policy planning within their regions; awareness of regional problems (public saliency); and participation among local governments within the region. Finally, I examine whether MPOs have taken transportation beyond simple mobility concerns and also take into account social, economic and environmental outcomes. In theory, ISTEA empowers MPOs which should improve regional policy making. The propositions, P1 - P3 are outlined below:

P1: ISTEA and its successors empowered MPOs, resulting in an increase in public saliency of regional problems.

An increase in public saliency is measured by interviewee comments on policies and the process by which they inform the public of regional issues.

Improved information about regional problems will also be evident by the availability of study results, policy initiatives and program information available to the public through MPO websites and publications.

P2: ISTEA and its successors empowered MPOs, resulting in more consideration of area-wide factors in regional-level policy making.

An increase in regional-level policy making is measured by interviewee comments on how ISTEA has expanded the number and scope of policy arenas over the years. This is further evaluated by noting the different actors and topics discussed in MPO meeting minutes. This analysis examines meeting minutes, memos and articles, commenting on how these projects and proposed policies affect the region in regard to social, economic and equity factors.

To specify this proposition more carefully, I examine three specific subpropositions.

P2a: ISTEA and its successors resulted in more consideration of quality of life factors in regional-level policy making.

Quality of life factors ensure that transportation policies and investments embrace the concerns of as many neighborhoods and communities as possible, leading to decision making that includes a wider range of impacts and a greater acceptance of transportation projects. Social factors are measured through an MPO's use of population growth forecasts when developing projects and modes of transportation that improve the quality of life. Quality of life factors are analyzed through the amount of discussion and inclusion of multi-modal transportation. This includes light rail, greenways and bicycle paths in an effort to provide more accessibility, reduce traffic

congestion and improve air quality. Multi-modal transportation is measured by interviewee comments, meeting minutes and the number of policies dealing with light rail, pedestrian trails, greenways and bicycle lanes.

P2b: ISTEA and its successors resulted in more consideration of land use and employment factors in regional level policy making.

Economic factors coordinate and integrate transportation plans with land use and the labor market. Land use is analyzed through the discussion of the impact of transportation projects on development. This is measured through interviewee comments, meeting minutes, memos and the inclusion of land use studies conducted by each MPO. The labor market is analyzed through the amount of discussion on the growth and trends in employment within the region and the inclusion of the appropriate studies. This is measured through interviewee comments, meeting minutes, and memos.

P2c: ISTEA and its successors resulted in more consideration of equity factors in regional-level policy making.

Equity factors ensure that transportation policies and investments are representative of the region's needs and demographics in the allocation of resources. This is measured by opportunities for participation from areas impacted by regional projects and an evaluation of the representatives in terms of gender, economic status and ethnic background. This involves using interviewee comments, meeting minutes, and MPO budgets.

P3: ISTEA and its successors increased the number and quality of elected official participation in regional transportation planning.

An increase in elected official involvement is evaluated through the number of regional officials who attend board meetings, the geographical

inclusiveness of the jurisdictions they represent, and the frequency with which they participate. Evidence of this involvement is collected through board meeting minutes, interviewee comments and researcher observation of board meetings. Attendance at board meetings is measured by the number of members present at the monthly MPO board meeting. This is accompanied by the interviewee comments on involvement in the policy process pre- and post-ISTEA.

Collection of Data

This study consists of a qualitative analysis based on two cases supplemented by the appropriate longitudinal data. The data was collected for a specific time frame, before (1978, 1984, 1991) and after (1992, 2000, 2006) ISTEA. The data was collected through face to face interviews, the analysis of MPO annual budgets, MPO meeting minutes, the Unified Planning Work Program (UPWP), Transportation Improvement Plans (TIP), and Long Range Transportation Plans (LRTP). An emphasis was placed on certain topics of interest, which were at the forefront throughout the collection of data which include the working relationship between MPO and relevant state Department of Transportation, regional road and bridge project selection, multi-modal efforts, land use, and reverse commute programs.

The interview protocol consisted of a list of questions administered face to face with individuals who play various roles within the process. The interviewees include members of each MPOs board and staff, members of the relevant states' Department(s) of Transportation and elected officials within

each region (for the list of interviewees see Appendix A). The questions address the process for policy determination within MARC and EWGCOG. Topics discussed include regional problems, regional projects, member cooperation, and member awareness of regional issues. The interviews consisted of eight open-ended questions, conducted by the researcher (for questions see Appendix F).

In an effort to measure changes in participation over time, a data set of pooled data and ninety-five observations was compiled through the use of meeting minutes. The data set unit of analysis is the month and year as dictated by meeting minutes. Unfortunately, in a study of this magnitude, conducting archival research leads to missing observations. The collection of the meeting minutes was subject to what each MPO had on record. The MARC meeting minutes omitted eighteen of seventy-two months on which the research was conducted, and EWGCOG omitted thirty-one observations including the entire year of 1978. Each of these omissions were random and determined by the meeting minutes available at each MPO. Some meetings were cancelled due to various reasons (e.g. weather, holidays). Therefore, the data available for the years 1978, 1984, 1991, 1992, 2000 and 2006 has a total of forty-nine missing observations out of a possible 144, meaning the data set is best suited to identify the changes in the policy process and the difference between the cases using the years 1984 through 2006. During this time period there are thirty-six missing observations out of a possible 120 observations. Ten of the missing observations from each MPO occur during the same months (Nov.

1984, Jan.1991, Feb. 1991, Dec. 1991, Aug. 1992, Oct. 1992, Nov. 1992, Dec. 1992, July 2000, Aug. 2006) resulting in twenty missing observations, and leaving only sixteen observations that are mismatched in the data set for the years 1984-2006. Despite these missing observations the data set is extensive enough to offer the ability to support interviewee comments and to document change in participation and the type of policies discussed. Using the eighty-four observations from 1984 through 2006, MARC has a total of forty-three and EWGCOG has forty-one observations.

The quantitative data was derived through meeting minutes based upon certain criteria. The data compiled to further examine MPO participation includes Members, Others, Month and Year. "Members" refers to the number of voting members present at each meeting as listed in the meeting minutes. "Others" refers to the non-voting members present at each meeting minus the MPO staff present as listed in the meeting minutes. The MPO staff was not included because it would inflate the participation numbers when the purpose of the variable is to determine the number of people outside the MPO that are participating. "Month" and "Year" refers to the month and year of the meeting minutes (e.g. April 1984).

The findings are substantiated and led by comments and suggestions recorded during the interview process. For example, if an interviewee or numerous interviewees cited a specific study or program to illustrate a point, this was followed up by investigating these materials to substantiate these assertions. The analysis of this information allowed further substantiation of

any causal relationship between ISTEA and changes in MPO policies and processes.

The compilation of evidence to support or refute propositions also relied upon LexisNexis searches. The entails searching for articles via the database using various search terms. The first search consists of using the project's name (e.g. new Mississippi River Bridge). The second search involves the project and the MPO (e.g. East-West Gateway). The evidence obtained was used to quantitatively measure the amount of public saliency created by the MPO and the amount of public saliency surrounding the project. The use of two searches allows for a distinction to be inferred between how much of the coverage is a result of the MPO, about the MPO or simply the project. At the beginning, I intended to compile the results of a third search. The third search was going to be of the MPO alone to measure how often they are in the news. However, the phrase could not be structured to produce meaningful results due to the specifics of this study. This study focuses on the role of MPOs in regional transportation policy, and a broad search will skew the results because of MPOs involvement in a wide range of issues (e.g. homeland security and the headstart program). For instance, a search for MARC over a year's time may return 700 hits, however, only 200 of these hits will have anything remotely to do with transportation policy in the Kansas City region. In a similar fashion, the use of meeting minutes will not be as useful as originally intended. The meeting minutes from the MPOs offers a list of attendees at the meetings, an agenda, and bullet points on topics discussed. Unfortunately, the meeting

minutes do not contain a transcript of the discussions at these meetings. This makes it difficult to impart evidence to support the propositions on regional factors. In order to obtain such information that is not listed in the meeting minutes, the researcher would have had to attend all or most of the meetings from 1978 to 2006.

In summary, this research design allows for an in-depth analysis of the regional transportation policy process at two MPOs, focusing on road and bridge project selection; the relationship between regional MPOs and relevant states' Departments of Transportation; multi-modal efforts; and the consideration of land use in project design and selection. The use of numerous sources of data, specific regional programs and the selection of the proper study design will provide results that are more robust and easier to substantiate due to the increased generalizability offered by using more than one case (Kansas City and St. Louis) and the increased causal inference offered by the longitudinal data.

Chapter 4 - Kansas City

This chapter discusses Mid-America Regional Council's (MARC) background, project funding, project selection and three regional transportation projects within their region. MARC, the regional MPO in Kansas City, has acquired a new role in regional transportation policy since the passage of ISTEA. The MPO evolved from the regional body responsible for federal forms to an institution that leads the transportation process in the Kansas City region. The MPO is involved in planning and programming (funding and selecting) regional transportation projects. This chapter illustrates this role through studying the MPO's involvement in three regionally significant projects: The Triangle, Paseo Bridge and Red Bridge. The findings suggest that the role that the MPO plays in each of these projects is as unique as the individual project itself.

Background on MARC

The role of MARC, the regional MPO for the Kansas City area, has evolved over the past three decades. MARC directs the transportation decision making process in ways that help achieve regional goals. MARC provides a framework intended to identify projects that will support a healthy, strong, regional economy; maximize access to opportunity for all area residents; support a quality built and natural environment; and promote the safety and well-being of the traveling public (MARC, 2005). MARC committees identify the current and evolving surface transportation needs of the metropolitan area and broadly categorizes transportation investments, through their annual budget, state

grants, federal grants and earmarks, ranging from road and transit improvements to projects that enhance bike, pedestrian and freight movement (MARC, 2006).

In recent years, MARC has experienced an increase in capacity and a more substantive role in regional transportation policy. Prior to the passage of ISTEA, MARC merely filed paper work, moderated meetings, assisted with federal forms, published study results and consented to projects with little authority to do otherwise. Since the passage of ISTEA, MARC has provided leadership and problem solving for area projects by playing technical, financial and policy roles as well as providing a leadership role depending upon the project or program.

MARC's primary role is to program projects, meaning that MARC verifies the funding is available and adds the project to the three major regional transportation documents: the Long Range Transportation Plan (LRTP), Transportation Improvement Plan (TIP) and the Unified Planning Work Program (UPWP) as described in Chapter 2. The role of MARC is dictated by the way projects and programs appear on the agenda; through Congressional earmarks, the regional planning process, community solicitation and broader internal planning work. A Congressional earmark means MARC must program the project and allocate the funds. The regional planning process involves a vigorous engagement of the community at a localized level to determine the appropriate policy. Under community solicitation, a community will present a project at MARC for assistance in allocating the money. Regional projects

arrive on MARC's agenda through the broader internal planning work, such as traffic flow studies and Major Transportation Investment Analysis (MTIA). At MARC, every project is unique and does not follow a set model. Their level of involvement, beyond programming, differs based upon the project, constituent needs and parameters set by federal legislation.

ISTEA, TEA-21 and SAFETEA_LU legislation provided MPOs with a number of eligible uses for Surface Transportation Program (STP) funds. These include wetlands creation, highway projects, and in the most recent legislation, livable communities, pilot projects, and transit projects. At MARC, the majority of funds have remained focused on local street networks and arterial streets in an effort to improve street maintenance and traffic flow. Many other eligible uses have not been funded due to limited monetary resources in comparison to the region's needs. This results in the region being able to fund a minimal number of projects each year.

In the 2007 allocation of STP/Bridge funding only a few projects received funds (see Table 4.1). Only three cities on the Kansas side of the MARC planning area obtained funding: Olathe, Lenexa, and Overland Park. In Kansas, there are over twenty eligible municipalities in the two county area but for any given year only three to five municipalities have any federally funded programs.

Fiscal year 2007 obligated projects	STP Funds
349197 Olathe - Dennis Ave. Bridge over Little Cedar Creek	\$ 1,119,450.00
350176 Overland Park - Metcalf Ave.: 99th to 103rd	\$ 2,880,000.00
350177 Overland Park - Overland Park Traffic Control System Upgrade	\$ 840,000.00
345106 Lenexa - Monticello: 83rd to 91st	\$ 3,905,210.00
349190 Olathe - Lone Elm: I-35 Interchange	\$ 2,772,098.00
Fiscal year 2008 obligated projects	STP Funds
350184 Overland Park - 119th: Riley to U.S. 69	\$ 3,596,000.00
349190 Olathe - Lone Elm: I-35 Interchange	\$ 1,104,402.00
970029 MARC Operation Green Light - additional intersections	\$ 2,010,400.00
345097 Lenexa - 87th St Parkway: Pflumm to Renner (Ph. 3)	\$ 3,876,500.00

Doug Brown, a member of MARC's STP/Bridge committee and Overland Park, KS Public Works Director, suggests that this results in,

"... a fairly modest effect because on any given year there is about 10 million dollars in STP funds being allocated and there is about 3 million in Bridge funds, so a total of 13 million a year maybe 14 million a year which makes a fairly small impact which is one of the reasons, up to date, about the only projects that have been approved for federal funding through the MARC committees have been either major bridge projects or major arterial improvements" (Brown, 2006).

The case is no different on the Missouri side of the MARC planning area where the cities of Independence and Liberty, and Jackson County received funding for projects through the STP/Bridge program in 2007 accounting for twenty percent of MARC funds, while Kansas projects garnered eighteen

percent. Collectively the STP/Bridge program accounted for thirty-eight percent of all MARC spending in 2007 (MARC, 2007) (see Table 4.2).

Table 4.2: Missouri STP/Bridge funding 2007-2008		
Fiscal year 2007 obligated projects	STP Funds	
628028 Independence - R.D. Mize Road, Phase 1	\$ 1,580,000.00	
520040 Liberty - US-69 & M-33 Intersection Improvement	\$ 1,500,000.00	
790032 MoDOT/Pleasant Hill - M-7 Turn Lane Project, Phase 5	\$ 1,567,000.00	
634028 Jackson County - Woods Chapel Rd, I-470 & Liggett Road	\$ 2,756,000.00	
Fiscal year 2008 obligated projects	STP Funds	
628111 Independence - 23 rd Street and Noland Rd. Intersection Improvements	\$ 440,000.00	
611042 Kansas City - 87 th Street (Section 2)	\$ 1,298,800.00	
970029 MARC - Operation Green Light Priority Corridors	\$ 2,156,000.00	
610003 Kansas City - 22 nd -23 rd Street Corridor, 1B- Tracy to Brooklyn	\$ 5,038,600.00	
611054 Kansas City - Blue Ridge Blvd. & 107 th Street Geometric Improvements	\$ 456.000.00	
610358 Kansas City - Bannister Rd. & Blue Ridge Blvd.	\$ 440,000.00	
TIP 628111 Independence and 611042 Kansas City deferred from 2007 t o 2008. Source: Mid-America Regional Council STP		

The interviewees, whether from the Missouri or Kansas side of the region, all stated a similar sentiment to Doug Brown's and seemed to believe that if there were ten times as much money then the region would certainly embrace a wider variety of projects.

Project Funding and Selection at Mid-America Regional Council

At MARC, the Long Range Transportation Plan (LRTP) identifies the goals for transportation and a policy framework with four priority focus areas to guide the region's transportation planning and programming activities. MARC's ranking process specifically addresses these goals and policies allowing projects to be scored and ranked determining how well each fits into MARC's vision.

The regional funding process creates more work for state and local public works departments, while increasing MARC's power in regional transportation development. A municipality must have their program or project

listed in the LRTP to receive funds through the MARC funding allocation process. After a project is listed in the LRTP, MARC solicits a call for projects, and the interested party must submit an application on-line with MARC. The project is scored, ranked and discussed by all public works directors in the region. For instance, Missouri Highways Priorities Committee is where all the local public works directors meet to discuss projects, as Linda Clark, Missouri Department of Transport's (MODOT's) Assistant District Engineer observes, "we all come in, look at the scores and then we horse trade and the money gets programmed at MARC" (Clark, 2006). If approved, it goes into the TIP and other appropriate planning documents.

Table 4.3: Goals and policies used to rank and score MARC projects

Transportation Goals

Goal 1: Support a healthy, strong, regional economy

Goal 2: Maximize access to opportunity for all area residents

Goal 3: Support a quality built and natural environment

Goal 4: Promote the safety and well-being of the traveling public

Policy Framework - four priority focus areas

Policy 1: Increase emphasis on maintaining transportation infrastructure

Policy 2: Increase modal choice

Policy 3: Better integrate projects into the community

Policy 4: Better manage roadway capacity

Source: Mid-America Regional Council LRTP

The appropriate planning documents include each municipal, state or county's improvement plan. Missouri and Kansas have a State Transportation Improvement Plan (STIP). If a project receives federal funding through the MARC Surface Transportation Program (STP) and Bridge allocation process the Kansas Department of Transportation (KDOT), MODOT must amend their State

Transportation Improvement Program and MARC must amend their TIP to include the project before it can proceed. Likewise, Kansas City's capital improvement plan must include all city projects. If a project is not listed in the TIP and it is in a municipal, state or county plan the money cannot be spent because federal legislation requires all projects to be listed in the MPO's TIP prior to fund disbursement. For example, the city of Overland Park, Kansas began building an overpass at US 69 and 132nd street in 2007. The project came up several years ago, and at that time MARC programmed the project in the LRTP. MARC did not list the project in the TIP until funding was verified. Once it was listed in the TIP the city of Overland Park could list it in their improvement plan and move forward with the project.

According to MODOT and KDOT officials, the Kansas City area is making regional decisions and the most out of the money available for the states, cities and counties. The process allows the region to maintain or improve their transportation infrastructure despite a lack of revenue and a slow progression in new and innovative policies. According to the Reason Foundation, Kansas roads rank third in overall road performance, whereas, Missouri has recently moved up from the bottom to seventeenth in overall performance (Reasons Foundation, 2007). There are two reasons why Missouri lags behind Kansas: 1) In 1952, MODOT took over responsibility for 12,000 miles of county highways (MODOT, 2006). 2) MODOT is limited by Missouri's funding formula enacted in the books in 2003. The formula states, Missouri will take all of the federal dollars and by formula determine what each of the ten MODOT districts

receives; these funds then have to go to the designated district. These issues have prevented progress in the development of roads in Missouri.

ISTEA offers MARC the ability to work around the limited funds going directly to MODOT's fourth district. The transportation policy process allows the region to combine federal highway dollars, federal railroad funds, city money, state money, local money and private money to fund projects through the local MPO.

At MARC, it is common to program a project with numerous funding sources, such as Congestion Mitigation Air Quality (CMAQ) enhancement funds, railroad money, city money, MODOT money, downtown council money all in one job (Warm, 2005). For example, the Paseo Bridge project is being funded by numerous sources, these include, Amendment 3 money, a federal earmark, federal highway grant, and Port Authority/Highways for Life funds. Whereas the Triangle project was funded by Interstate Maintenance Funds, National Highway System Funds, Surface Transportation Funds, Bridge Rehabilitation and Replacement Funds, Congestion Mitigation and Air Quality Funds, Transportation Enhancement Funds, Intelligent Transportation System Funds, State and Local Funds. Currently, local communities are combining resources and money to create projects addressing the needs of the region, providing larger rewards for the region as a whole with less noticeable benefits for any single municipality.

MARC members suggest they have produced efficiency and economies of scale by combining monetary resources. Linda Clark's comments express the

sentiment of committee members, "Yeah, it is better for the region because we are spending money more efficiently. One of the more important things is that we are making joint decisions and prioritizing and you don't have the big dog on the porch, Kansas City, coming over to MODOT and getting whatever they want and walking out. So yeah, I think it (cooperation) is better for everybody, it is painful, though" (Clark, 2006).

Cooperation in the MARC community involves each municipality agreeing on a larger regional project or study, forgoing their smaller local projects. At times it is an arduous process to demonstrate the benefits of a regional project and bring all MPO member communities together. The effort to bring these communities together consists of several meetings within the numerous MARC committees and more compromise than MODOT and Kansas City are accustomed. MARC's increased role in transportation policy and the passage of the first transportation legislation (ISTEA) created an opportunity for an increase in dialogue and cooperation. The combination of resources offers a more efficient process and a project that addresses the needs of the region.

Case Studies

This study examines three cases in the MARC area. The cases of the Triangle, Paseo Bridge and Red Bridge offer the ability to determine whether MARC is making a difference in regional transportation policy. The Triangle project offers an opportunity to evaluate the work of MARC as they attempt to garner regional consensus, cooperation between multiple municipalities, access funds for its completion, community involvement and public input. The Paseo

Bridge provides the ability to assess MARC's contribution in the regional transportation process through regional consensus, cooperation between two counties, and acquisition of additional federal funding to create a project the region desires. The Red Bridge project allows for an analysis of MARC on a project in which they had a limited role and little authority due to a federal earmark. Red Bridge provides the opportunity to view what happens to the regional transportation process when a municipality acquires a federal earmark and regional consensus is lacking. These projects offer the opportunity to evaluate MARC's ability to coalesce regional consensus on three federally funded projects.

As the designated MPO for the Kansas City metropolitan area, MARC receives federal funds to develop regional transportation plans and programs (Table 4.4 and Table 4.5). These funds are intended to support the coordination of technical studies, policy studies and project planning for a wide range of transportation issues, working in cooperation with KDOT, MODOT, local governments and transit providers.

Table: 4.4: MARC transportation programs for 2006	
1 Design of Operation Green Light phase I traffic signal improvement	ents \$ 5,537,424
2 Regional job access and reverse commute transit services	1,248,559
3 South Metro connection study	485,000
4 Integrated regional planning	400,000
5 External station survey	300,000
6 RTA trolley car restoration	125,800
7 Regional Investment Fund - collaboration study	100,000
8 Develop plans for Kansas City Smart Port ITS elements	100,000
9 Regional Transit Alliance administration	90,000
10 Freight model upgrade	50,000
11 Safety data mapping	40,000
12 Regional HOV study	35,000
13 Transit public outreach consultant assistance	32,400
14 Aerial photo acquisition	30,000
15 Regional Investment Fund - community engagement	25,000
16 Smart Moves - planning/local links	25,000
17 Legal fees for the Operation Green Light program	20,455
18 Model development	20,000
19 Travel model upgrade	20,000
20 Mode choice model development	20,000
21 Leavenworth area planning	20,000
Source: Mid-America Regional Council Budget 2006	

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Transportation	\$6,739,033	\$7,081,629	\$8,414,401	\$11,339,250
Environmental Planning	\$1,979,185	\$1,596,594	\$1,780,193	\$2,753,690
Citizen Engagement	0	0	0	\$35,000

Source: Mid-America Regional Council 2006 & 2008 budgets

In addition to their annual budget, STP/Bridge funds, CMAQ funds and numerous other federal grants, the region receives a significant amount of funds in the form of earmarks. For example, Senator Kit Bond secured 21

Table 4.6: Kansas City projects included in 21 million dollars secured by Senator Bond

\$750,000 for the Heart of America Bridge in Kansas City. Funds will retrofit the Bridge to provide a barrier-separated crossing for bicyclist and pedestrians crossing the Missouri River from the North.

\$750,000 for the Paseo Street Corridor in Kansas City. Funds will facilitate the repair, maintenance and construction of roadways along the corridor.

\$1,000,000 for the Kansas City Area Transportation Authority (KCATA) in Kansas City. Funds will provide for the replacement of transit buses to meet fuel efficiency and clean air standards.

\$2,500,000 for the Kansas City Light Rail Alternative Analysis in Kansas City. Funds will initiate the planning process for the light rail.

\$6,260,000 for the Troost Corridor Bus Rapid Transit (BRT) in Kansas City. Funds will expand public transit services within the region.

Source: Kansas City Star/Senator Kit Bond Press Release

million dollars in 2007 for transportation projects in the Kansas City area (Table 4.6) as part of the Transportation-Housing Bill. Projects listed in the bill include: a pedestrian/bicycle access lane on the Heart of America Bridge, the Paseo Street Corridor, Light Rail Alternative Analysis, the Kansas City Area Transportation Authority (KCATA) to retrofit buses and the Troost Corridor Bus Rapid Transit.

ISTEA increased the monetary resources by providing funds for transportation improvement through numerous categories. These different categories (Table 4.7) have increased the MPO's ability to complete studies

independently and cooperatively, as well as to move funds from one program to another.

MARC plays an active leadership role in strengthening the metropolitan community by providing: A forum for addressing regional objectives and diverse community issues (as illustrated by TIP funding categories in Table 4.7); Long-

Table 4.7: MARC Transportation Improvement fund categories

- *Urbanized Area Formula Grant Program
- *Elderly and Persons with Disabilities Program
- *Nonurbanized Area Formula Grant Program
- *Accelerating Safety Activities Program (ASAP)
- *Statewide Bridge Rehabilitation and Replacement (BR)
- *Metropolitan Bridge Rehabilitation and Replacement (BRM)
- *Off-System Bridge (BRO)
- *Congestion Management Air Quality (CMAQ)
- *Congressional High Priority Project (HP)
- *Interstate Maintenance (IM)
- *Intelligent Transportation Systems (ITS)
- *Job Access Reverse Commute Program (JARC)
- *National Corridor Planning and Development Program (NCPD)
- *National Highway System (NHS)
- *NHTSA Safety Grant
- *Congressional General Provision
- *Safety
- *STP-Safety Program (SP)
- *Safe Routes to School (SRTS)
- *Statewide Surface Transportation Program (STP)
- *Metropolitan Surface Transportation Program (STPM)
- *Transportation and Community and System Preservation Program (TCSP)
- *STP-Transportation Enhancement Program (TE)
- *Alternative Analysis Program

Source: Mid-America Regional Council LRTP

range planning and public policy coordination; and technical assistance and services to enhance the effectiveness of local government (MARC, 2005). For example, during the Triangle project MARC was involved in a joint study with MODOT widely presumed to call for an expansion of Interstate 435. The study helped MARC to identify the problem and the solution. After consultation

with MARC and others, MODOT decided to create a community advisory committee to address community input and concerns. In a similar effort, the Paseo Bridge project was developed through a joint study and a strong community feedback process. Ten years ago MODOT would not have consulted MARC in regard to these projects. One of the apparent outcomes of ISTEA is that it compelled MODOT to reach out to MARC, in theory making the regional transportation process more collaborative. This flexibility offers MARC the potential to make a difference in regional transportation through their leadership and planning.

MARC seeks to build a stronger regional community through cooperation, leadership and planning. Through MARC's leadership, area jurisdictions and diverse community interests sit down together to address regional problems and identify the opportunities for cooperative solutions. These efforts, in turn, enhance the effectiveness of local government. In an effort to identify the role ISTEA played in the MPO process and to understand how MARC has changed, focusing on one project in the MARC region would provide a distorted view. The case studies in this dissertation provide an opportunity to view MARC's unique role in project selection: confirm there is a problem, build awareness for what the problem is, provide a forum for review, prioritize the project from the funding perspective and program the project in the region's major transportation documents.

The Triangle Project Case Study

The Triangle project, officially named 3-Trails Crossing Memorial Highway, is a crossroads in the Kansas City region. It is the intersection of Interstate 435 (I-435), Interstate 470 (I-470) and US Highway 71 (US-71). The interchange is built at the historic crossroads of the Santa Fe, Oregon and California trails. Kansas City began as a crossroads. It is the starting point for the trails out west, and the home of the first railroad bridge crossing the Missouri River in 1869 (GoBridges.com, 2007). The railroad bridge offered the region transformational power by opening railroad transportation in each direction, allowing the north-south rail line to cross the existing east-west rail line. The Triangle project provided the region and MARC the opportunity to make another transformation by opening up traffic east to west and north to south throughout the region.

In the 1960s, the city of Grandview, located in the southwestern corner of Jackson County, had unlimited potential but as traffic began to snarl at the Triangle, the development of the region suffered. Meanwhile, the communities west on I-435, particularly in Kansas, began to thrive due to better accessibility for businesses and commuters. The purpose of the Triangle project was to improve traffic flow and alleviate the choking off of the communities of Kansas City, MO to the north and Grandview, MO to the south. According to Mell Henderson, Transportation Director at MARC, MARC never questioned the project itself in terms of whether it was a good thing or if it had merits. The project was a basic rebuilding of infrastructure and correcting flaws in the

original design which included left lane exits and five times as many movements (exits, entrances and through traffic) as the normal intersection of two major interstates (Henderson, 2006). Throughout the project, MARC accounted for all of the necessary planning components including how to keep traffic open during construction, the connectivity to the existing street network, and the financial feasibility.

MARC played an important role providing technical assistance, a regional perspective, community advisement and programming money. MARC also dealt with prioritization during the ten year project (1997-2007), and analyzed study results to determine the most appropriate solution for the interchange. Traffic flow reports were used to determine the best way to keep intersections open to traffic during construction, improve traffic flow as quickly as possible, avoid massive detours, lengthy closures and limit the risk of accidents in the construction zone. MARC helped create an advisory committee to match local needs with regional concerns, and worked tirelessly throughout the project to find the funds to complete the 252 million dollar project (MODOT, 2006).

The project's history

The Triangle project is designed to enhance an interchange in the southwestern portion of Jackson County, Missouri. In order to fix the problems associated with the confluence of two interstates (I-470 & I-435), one highway (US-71) and seven local routes the Triangle project cost over 250 million dollars. As a state highway, elements of the Triangle's history go back to 1925, when Highway 71 was constructed as an eighteen foot-wide, two-lane concrete

highway on thirty feet of right of way. It was widened to twenty-nine feet in 1934, and then converted to a four-lane, divided highway in the early 1960s. By the late 1960s, MODOT added the I-435 interchange - and tens of thousands more vehicles. In the mid 1970s, I-470 was built to join the interchange, and soon it became known as the Triangle (MODOT, 2007).

At the outset of the Triangle project, there were several projects and studies taking place. MODOT was attempting to fix some traffic flow problems on a two mile stretch of US-71, with no planning study, by putting median lanes in from Truman Corners (Blue Ridge Blvd. & US 71) up to the Triangle. MODOT also had a job to put median lanes on a 5.9 mile stretch of I-435 from State Line Road through the Triangle interchange. At this time, MARC was conducting a study to determine the needs for the I-435 corridor. David Warm of MARC recounts what happened during this process, "We (MARC) were heavily involved in a study along I-435 that was widely presumed at the outset to call for an expansion of I-435. It was through that process that we decided that we didn't need that so we looked at other solutions and abandoned the project and as a result (of the Major Transportation Analysis (MTIA) and Environmental Impact Statement) (EIS)) we saved billions of dollars or millions of dollars anyway" (Warm, 2006).

The Triangle project was developed through a MTIA, EIS and community advisory committee through the MARC MPO. This MTIA illustrated that the initial projects MARC and MODOT adopted were not the appropriate solution to their problems at the intersection. An MTIA identifies which alternative is the

most suitable to solve a transportation problem within a corridor. The MTIA conducted by MARC analyzed the I-435 loop around Kansas City. As a result of the MTIA, MARC discovered that very little transit runs around the loop. The majority of transit in the Kansas City region moves north to south and east to west along arterial streets and does not use I-435 which serves as a bypass circling the metropolitan area (KCATA, 2007). The study also eliminated the need for High Occupancy Vehicle (HOV) lanes and illustrated that median lanes on I-435 were not necessary. The major problem identified was the interchanges needed to be redesigned. MODOT in cooperation with MARC prepared a large traffic model and EIS focusing on the interchange of I-435, US-71 and I-470.

The change in direction by MODOT was facilitated by MARC's suggestion to form an advisory committee and conduct an EIS. Initially, the EIS was not necessary because the state granted MODOT a Categorical Exclusion (CE). The exclusion was possible because the project was deemed as a replacement of existing infrastructure, meaning there would be little or no change to the surrounding environment. The exclusion accompanied by MODOT not seeking public input resulted in MARC stepping forward to encourage MODOT to agree to an advisory committee. Due to the committee and a new EIS, MARC and MODOT determined that the correct policy was an interchange modification.

The essential challenge was to transform an intersection that handled 250,000 cars a day poorly to one that can handle 400,000 cars a day with minimal congestion and a steady pace for traffic. The interchange was not

made to handle the 250,000 motorists which use the Triangle on a daily basis and projections suggest that by 2012 nearly 400,000 motorists will use the interchange daily (Harper, 2004). The complexity of the Triangle is that most interchanges of two interstate highways (I-470 & I-435) consist of 12 movements. These movements are exits, entrances and through traffic. Prior to the modifications, the Triangle consisted of 64 movements and performed a vital function for the area poorly, allowing neighboring Kansas to prosper at Missouri's expense.

The Triangle project was constructed in three phases. The first phase, improving southbound to westbound I-435, was completed in October 2002, 10 months ahead of schedule. Intermediate phases, completed in 2006, reconstructed eastbound to northbound I-435, eastbound and westbound I-470 and added new ramps connecting US 71 to I-435, I-470, Red Bridge Road, Longview Road, Hickman Mills Drive and Blue Ridge Blvd. The final phase, completed in December 2007, replaced US 71 from Bannister Road to Blue Ridge Boulevard. A new Longview Road and bridge over US 71 was completed in the summer of 2008, and roundabouts will be built at Longview Road and the connector ramps flanking US 71 between Red Bridge and Blue Ridge. Over 50 percent of the work on the Triangle project was bridge construction: removing 26 existing bridges, building 22 new bridges, 293 new bridge columns, 2,300,000 cubic yards of embankment, 248,000 square feet of retaining walls and 99,000 yards of rock that had to be excavated (Cashill, 2004).

Map 4.1: Triangle project area



How MARC made a difference

As the regional MPO, MARC's primary responsibility is the coordination of regional transportation planning through active involvement of community groups, local, state and elected officials in a cooperative and collaborative process. In the case of the Triangle, MARC made a difference through the formation of an advisory board to consider the social, economic and environmental consequences of the Triangle project. MARC collaborated with MODOT to conduct an MTIA and EIS. These studies addressed the needs of the region, while considering the effect of each alternative on the region, specifically in terms of land use, performance measures and safety. MARC also made a difference through their financial management of the Triangle project. The sum total of MARC's actions contributed to the economic development of the region and illustrates the diverse and dynamic role an MPO plays in regional transportation policy.

MARC made a difference by continually building regional support for the project. The MPO led a community group of advisors throughout the Triangle process from conducting the planning studies to the design of the interchange. Two factors contributed to the creation of the advisory committee: 1) the community's dissatisfaction with the original design; and 2) MODOT's recent completion of an extensive community involvement process while building the Bruce-Watkins Freeway.

The original proposal for the Triangle met significant public opposition.

The community, represented by MARC approached MODOT and convinced the

transportation department to recreate the project in a manner the community would support. According to Kansas City Councilman Chuck Eddy, "When the Triangle project began there were a lot of people upset because MODOT was just doing their own thing, they did not vet any of it, they did not share, they did not have a community group part of it. We (MARC committee members) went out and screamed and beat our fist on the desk and said you cannot do it this way. MODOT stopped everything and said you know you're right let's reformulate how we do these things" (Eddy, 2006).

In the light of community dissatisfaction with the first design, one of the first actions taken was to form a twenty-five person advisory committee. In conjunction with MARC, MODOT selected their most vigorous opponents to serve on the committee. Members included city council members, state legislative representatives, officials from the City of Kansas City, and Jackson and Cass Counties. Public works, police, and fire department staff from the City of Kansas City and public works staff from the City of Grandview were members of the committee, as were local residents from the numerous neighborhoods surrounding the Triangle. The advisory committee met regularly, went out to the project site and talked to MODOT and worked with them, identified concerns, examined the MTIA, and provided input. The committee was involved in the preliminary design phase of the project, and the concerns they voiced helped bring about a new design that maintained access

to local streets at critical intersections, and kept right-of-way needs to a minimum. According to Kansas City Assistant City Engineer Sherri McIntyre, "The Citizens Advisory Committee definitely raised the level of involvement from the community" (Meyer, 2009).

The Triangle project was not the first time the region embraced community input. Extensive public involvement was also a feature of the Bruce-Watkins project which was carried out from 1987-2001. In this project heavy consideration was given to the benefits to the communities along the stretch of roadway, and aesthetics that would fit into the neighborhoods. According to Linda Clark of MODOT, the Bruce-Watkins project had already demonstrated the benefits of community involvement to MODOT (Clark, 2006). Bruce-Watkins Drive is a 10.2-mile stretch of US 71 in Kansas City, linking downtown to the south side of Kansas City. Its completion provided residents with an alternative route that avoids busy interstates and city streets, thus facilitating traffic flow throughout the city and the surrounding areas. The success and use of community advisement by MARC on the Bruce-Watkins project established a precedent that it is necessary to work with the community. The actions of MARC committees, most notably the Total Transportation Policy Committee (TTPC), reminded MODOT of the benefits of making the extra effort - to step back and redo some of the planning elements (e.g. connectivity to seven local routes, shopping and industry) - to build an interchange that the community desired.

The Triangle project points toward the difference made through community advisement. KMBC's Jere Gish reported a controversial aspect of the project, because MODOT planned to cut off access to Red Bridge Road, which did not sit well with residents. Soon after this a committee of local leaders and residents was established to advise MODOT about the project. Plans were changed and the neighbors were happy (KMBC, 2007). The satisfaction in the process was further conveyed by Grandview Mayor Robert Beckers, "This can do nothing but build, build, build. You're going to see economic development out here. It's going to look like south Johnson County (KS) by the time they're done" (KMBC, 2007). The difference MARC made began with the creation of an advisory board, consideration of performance measures and the economic impact of the design. However, the project would not have been completed without MARC's tireless efforts to secure funding.

Table 4.8: Triangle project funding		
Source of Funds		<u>Funds</u>
Interstate Maintenance		\$125.2 million
National Highway System		\$46.5 million
Surface Transportation Program		\$28.1 million
Bridge Rehabilitation/Replacement		\$5.5 million
Congestion Mitigation/Air Quality		\$650 thousand
Transportation Enhancement		\$396 thousand
Intelligent Transportation System		\$850 thousand
State		\$41.1 million
Local		\$3.9 million
	Total by Project	\$252.7 million
Source: Mid-America Regional Council TIP		

MARC identified and combined nine sources of revenue to create and build the Triangle Project (see Table 4.8). MARC continually worked to find the funding for the much needed interchange modification. In an effort to pay for the project the region used funding from various sources at the disposal of MARC. The total funding amount of 252.7 million dollars included: 125.2 million dollars in Interstate Maintenance funds; 46.5 million dollars in National Highway System funds; 28.1 million dollars in Surface Transportation Program funds; 5.5 million dollars in Bridge Rehabilitation and Replacement funds; 650 thousand dollars in Congestion Mitigation and Air Quality funds; 396 thousand dollars in Transportation Enhancement funds; 850 thousand dollars in Intelligent Transportation System funds; 41.1 million dollars in State funds; and 3.9 million in Local funds (MARC, 2007).

The considerable investment in time, community involvement, and monetary resources by MARC opened up the region for better economic growth. The project improved traffic flow, lowered the accident rate and improved accessibility to commuters interested in shopping and working in the area. The accident rate at the Triangle decreased by a little over one accident a day (360 a year) and the average speed through the interchange during peak rush hour traffic increased from 22.7 miles per hour (mph) to 51.9 mph (MODOT, 2008). According to the Kansas City Business Journal, the benefits of the Triangle construction went beyond creating jobs in public agencies and the construction, design and engineering sectors. In total, 8400 jobs have been created since work began on the 3-Trails Crossing Memorial Highway (formerly

called the Grandview Triangle) (Hubbard, 2009). According to the Grandview Economic Council, since 2007 and the completion of the Triangle project, 44 million dollars in non-residential construction has been invested in Grandview. Accompanied by that investment, more than 700 jobs have been created within the new and expanding companies (Grandview Economic Development Council, 2009).

Summary

The Triangle project offers evidence of the leadership role and financial role that MARC plays in the regional transportation process. It further illustrates MARC making a difference by increasing public saliency (P1), consideration of region wide factors, in particular land use and employment factors (P2: P2b) and an increase in the number and quality of elected officials (P3) participating in the regional transportation process. There is not enough evidence to substantiate that MARC made a difference in regard to quality of life factors (P2a) or equity issues (P2c)

Table 4.9: Propositions supported by Triangle case study

P1	P2	P2a	P2b	P2c	P3
X	X		X		X

MARC, as the MPO serving as the regional body for shared policymaking opened the process to community members who were once shut out of the regional transportation process. The Triangle project was originally conceived as a basic replacement of an existing piece of infrastructure, which allowed MODOT to circumvent much of the regional transportation process. MODOT acquired a Categorical Exclusion (CE) causing concern among MARC members

because MODOT would not have to consider all the environmental impacts or get extensive public input on all reasonable alternatives. This led to the formation of an advisory committee and the conduction of two joint studies (MTIA & EIS) between MARC and MODOT. These collaborative efforts offer evidence of how the efforts of an MPO can make a difference by creating horizontal cooperation and coordination. By creating this level of cooperation MARC was able to make a difference in regard to several of the propositions in this study.

MARC's efforts on the Triangle project did result in an increase in public saliency. MARC created an advisory committee which included city council members, state representatives, and officials from Jackson County, Cass County and Kansas City. The committee, led by MARC, visited the project site and provided input during preliminary phases. This action is documented by 784 articles over ten years (1997-2007), an average of seventy-eight per year. Each of these articles referenced the project and the MPO. This evidence suggests that the MPO's involvement and actions increased the saliency of the issue.

By listening to the community, MARC's efforts on the Triangle project resulted in greater consideration of region wide factors as they relate to land use and economic factors. The analysis of land use makes a difference because the way a region develops its land will influence regional travel patterns and access. The project improved rush hour traffic flow by nearly thirty mph and also reduced the accident rate. These improved performance measures resulted in a direct effect on the economy of the surrounding area. The

Triangle construction created a total of 8400 jobs, 44 million dollars of investment in non-residential construction and 700 jobs in these new companies (Grandview Economic Development Council, 2009). The Triangle gained new prosperity with the increase in employment and non-residential construction. These results were a product of a project that involved high public saliency, improved performance measures and heavy involvement by public officials in the region.

The analysis of the MTIA involved many elected officials from local governments in the MARC region. These officials were members of MARC and participated on the advisory committee. This indicates the difference MARC makes in regard to the number and quality of elected officials participating in the regional transportation process. Members included city council members, state legislative representatives, officials from the City of Kansas City, Missouri, and Jackson and Cass Counties. The influence and direct effect of an advisory committee working with MODOT during preliminary phases is difficult to quantify. However, the success of the project and comments by various public officials offers evidence that MARC and the committee made a difference. The quantifiable data in regard to this proposition is best illustrated through the MARC meeting minutes described in Chapter 6. In the case of the Triangle Project, the formation of the committee, their role in advising and the general satisfaction throughout the MARC community supports this proposition.

The evidence gathered on the Triangle project does not support two of the propositions. MARC's efforts on the Triangle did not result in more consideration of equity factors or quality of life factors. There is no evidence to suggest that people traditionally underserved by existing transportation systems such as low-income or minority households and the elderly were considered in the building of the interchange. Likewise, the evidence is minimal at best to support the premise that MARC considered quality of life factors and does not satisfy the burden of proof for this study. The project did result in reduced congestion through improved traffic flow and fewer accidents, however, the evidence for the consideration of multi-modal transportation and air quality was non-existent.

In summary, the Triangle Project study describes an initial vertical conflict that ultimately resulted in horizontal cooperation, and successful completion of the project. This allows some optimism of the role that an MPO plays in transportation policy as the focal point for shared decision making. The MPO made a difference by garnering regional cooperation after the initial conflict over MODOT's methods. This scenario suggests that there is still a level of top down control exerted by DOTs. In order for an MPO to make a significant difference then their presence alone should be enough to empower regional decision making. In this case, it took community leaders and residents approaching the MPO and expressing their discontent to create the level of cooperation the initial legislation intended. The creation of a community advisory committee points toward an MPO's ability to facilitate horizontal

cooperation once it is demanded by the community. This level of involvement from community leaders and MARC's role in the transportation process increased public saliency. The creation of the advisory committee further facilitated the consideration of employment factors and increased elected official participation. Community members meeting with MODOT officials, visiting the project site and expressing concerns about accessibility improved performance measures. The reduction of traffic congestion made the region more accessible to commuters and shoppers. The final result was more businesses locating in the Grandview area. The increase in elected official participation points toward heightened cooperation and coordination. Evidence of this is the inclusion of state, city and county officials (advisory committee) during the preliminary design phase. MARC created an atmosphere for regional decision making to occur.

The Paseo Bridge Case Study

The Paseo Bridge, which carries Interstate 29 (I-29) and Interstate 35 (I-35) over the Missouri River is set for replacement by MODOT. The 245 million dollar project, officially named kcICON, calls for the widening of the Paseo corridor from Missouri 210 and Armour Road to the northeast corner of the downtown freeway loop of I-29 and I-35. The Paseo Bridge connects 100,000 vehicles a day with thousands of jobs in North Kansas City and downtown Kansas City (MARC, 2007). The bridge is noted for a high volume of rush-hour traffic, causing congestion, a high accident rate and a slow commute. According to projections available through MARC, the regional MPO, the traffic

is only expected to become worse with traffic increasing from 100,000 vehicles a day in 2006 to 120,000 vehicles a day by 2030 (MARC, 2006). The corridor experiences high congestion due to seven interchanges, a half-mile apart on average, where through lanes morph into exit lanes and traffic slows as drivers attempt to squeeze into the flow of traffic. The accident rate is five to six times the statewide average, and the road consists of narrow shoulders which are outdated and met the standards of the 1950s (kcICON, 2007). The antiquated nature of the Paseo corridor limits its ability to perform its role in the region.

The corridor plays a significant role in the economic vitality of the region and nation. North Kansas City is home to many of the regions manufacturing, trade and transportation jobs. The highway cuts through an industrial area, served by railroads, barges and commercial trucks. This portion of highway is part of a 1,500 mile trade corridor connecting Mexico and Canada from Texas through Minnesota.

The Paseo corridor's role in the regional economy resulted in a huge community interest in the project. MARC, as well as a dozen civic leaders - appointed by elected officials, and community groups have been advising the state and had a hand in scoring the project. They are leading, supporting and creating some forums for community dialogue on how it is going to look, whether it is going to have pedestrian access, and how transit is going to work. David Warm, Executive Director at MARC, said that MODOT listened to extensive public comment and incorporated that input into the project

specifications and the judging criteria. According to the Kansas City Star, the region's largest newspaper, "Warm has told the highway commission that the process has worked 'exceptionally well,' adding that highway planners undertook a project that meets community expectations" (Cooper, 2007).

The project's history

The current Paseo Bridge was completed in 1954. Over the last thirty-five years the bridge's condition has deteriorated. The bridge has been closed twice for rehabilitation, in 2003 and 2005 (kcICON, 2007). The focus of the Paseo project is to correct the on and off ramps at various intersections with I-35. For example, at 16th Avenue there is a partial interchange in which the northbound off-ramp forms a loop with a tight turn. The exit at 16th Avenue is often mistaken for a through lane, leading to sudden lane changes. The result is highly congested traffic changing lanes while vehicles are attempting to enter the interstate at Front Street.

The original premise of the Paseo project was to alleviate congestion, however, new federal funds were viewed as an opportunity to provide a bike lane across the Missouri River connecting downtown Kansas City and North Kansas City. The project received 195 million dollars from Amendment 3 (see below), and Senator Kit Bond (Missouri) acquired an additional 50 million dollars from the federal government. On November 2004, Missouri voters approved Amendment 3, a modification in the distribution of state motor vehicle tax which permitted the diversion of 187 million dollars to Missouri roads (mobudget.org, 2008). The plan is to provide 2,200 highway miles of

smoother pavement, accelerate projects listed in the STIP and determine new projects to be completed (MODOT, 2007). The 50 million dollars earmarked for the bridge was viewed by several interest groups as a perfect opportunity to pressure the state to add bike/pedestrian access despite MODOT's assertion that the Paseo Bridge was not the best corridor for pedestrian access.

The initial draft of the Paseo Environmental Impact Statement (EIS) suggested that it was not feasible to include bike/pedestrian access on the new Paseo Bridge. This resulted in public dissatisfaction and accusations of MODOT not being multi-modal in its transportation policy. Before the Paseo EIS, MODOT had spent four years on a MTIA, promoting Broadway as the best corridor for High Occupancy Vehicle lanes (HOV) and bike/pedestrian access. Unfortunately, Broadway cannot be widened to accommodate these modes of transportation. This is due to the fact that the Hannibal Bridge is on one side and the downtown airport is on the other side of the Broadway Bridge. As a result, MARC pushed for a bike/pedestrian crossing to be included in the design criteria for the Paseo Bridge to force architects to find a workable solution for bicyclists wanting to cross the Missouri River. MARC's Board of Directors voted unanimously to ask for a bike lane from Front Street on the south side of the Missouri River to 16th Avenue in North Kansas City. MARC's endorsement ran counter to engineers at MODOT, who claimed a Paseo bike lane would be unsafe and also connect the downtown riverfront to an industrial area crowded with big trucks. The issue is that MODOT did not include an EIS to examine the viability of Paseo bike/pedestrian access, and instead simply stated from the

beginning that it would not work, and did not look at all potential river crossings for pedestrians and bicyclists until MARC stepped forward.

The project began construction in the spring of 2008 with bicycle and pedestrian access provided on the Heart of America Bridge. The Heart of America Bridge carries Missouri 9 traffic across the river and links the kinds of neighborhoods that generate walkers and bikers. South of the Missouri River are the City Market and residential lofts, which the Heart of America Bridge connects to a shopping and restaurant area north of the Missouri River.

How MARC made a difference

The Paseo Bridge provided MARC with an opportunity to make a difference by facilitating the project and addressing needs beyond helping transportation (see Table 4.10). MARC created the River Crossing Task Force (RCTF) and formed a cooperative relationship with state and local leaders. MARC appealed to Senator Kit Bond for additional funds. MARC facilitated the responsible disbursement of funds - KC Port Authority/Highways for Life, SAFETEA_LU earmark and Missouri Amendment 3. MARC made a lasting contribution to the region's quality of life through the creation of a bike and pedestrian bridge across the Missouri River connecting North Kansas City and downtown Kansas City. During the preliminary planning of the Paseo Bridge project MODOT claimed that the Paseo corridor was not the best route for bike/pedestrian access. MODOT did not plan or account for the possibility of bike/pedestrian access in the initial EIS. In response to MODOT, the MARC Total Transportation Policy Committee (TTPC) created a River Crossing Task Force (RCTF) and

conducted a feasibility study for bike/pedestrian access across the Missouri River.

The RCTF was created to develop policy recommendations for bike/pedestrian crossings spanning the Missouri and Kansas Rivers in the MARC region. The task force includes representatives from local governments, bridge owners, MARC committees and local user groups. The RCTF members are:

MetroGreen Civic Leadership Board; Kansas City River Trails; MARC

Bicycle/Pedestrian Committee; MARC Transit Committee; MARC Highway

Committee; Kansas DOT; Missouri DOT; Federal Highway Administration; Kansas

City Port Authority; Clay, Jackson, Johnson, Leavenworth, Platte and

Wyandotte counties; Kansas City, Shawnee, Leavenworth, Bonner Springs and

North Kansas City; Greater Kansas City Bicycle Federation; Missouri Bicycle

Federation; Johnson County Bicycle Club; Patti Banks Associates; Downtown

Neighborhood Association; Regional Transit Alliance (MARC, 2005). The RCTF

provided input throughout the feasibility study and report.

W 14th Av E 14th Av Taney St Riverfront ts Park North Kansas City Charles B Wheeler Downtown Airport W 12th Av Clay St E 11th Av Atlantic St E 10th Av Kansas 9th Av City Burlington St Lorene St (iiii) We Lou Holland Dr Martin Av Rochester Av Missouri Pacific RR Kansas Richard L Berkley Riverfront Park City North Terrace St. John Av Pendleton Av The Concourse. Lexington Av [71] Missouri Av ₹ Elma St Smart Av Missouri Av Garner Av Union Pacific RR ¥ Amie St Kansas City University of Medicine W 5th St Independence Av Admiral Blvd W8th St. E 6th St W 9th St E 7th St BIVE Independence Plaza Park E 8th St Prospect Av St. Louis Av E 8th St E 9th St Union Av E 10th St 0.5 km 35 2009 Rand McNally @ 2008 NAVTEO E 11th St

Map 4.2: Paseo Bridge project area

Source: RandMcNally.com

The findings and recommendations from the feasibility study were presented at a public meeting on October 10, 2006 and the MARC Bicycle/Pedestrian Advisory Committee (BPAC) on October 13, 2006. Four locations were evaluated; (1) a new facility at the Town of Kansas Historical Site - cost 9 million dollars; (2) the ASB Bridge (BNSF railroad) - cost unknown; (3) the Heart of American Bridge - cost 2.3 million dollars; and (4) the Paseo Crossing - cost 6-9 million dollars (MARC, 2006 & KCBike, 2006). This evaluation included a review of all the locations, connections, adjacent land use, and the opportunities and challenges of each. The report did not rule out any location, but identified the Heart of America Bridge as the preferred location while acknowledging the strengths of the other locations (MARC, 2006). BPAC stated:

(1) We recommend that high quality, practical and appropriate bicycle pedestrian accommodations be on or adjacent to the Paseo from Front Street to 16th Street, and that this be explicitly included in the project design and construction. (2) We recognize that the Heart of America is currently an option for bicycle/pedestrian access across the Missouri River and needs significant improvements to increase the safety of all users and therefore we recommend the necessary improvement be made as soon as practicable. (3) MARC and MODOT will work cooperatively with other appropriate stakeholders to further explore

some of the crossings evaluated in this study as well as others (MARC, 2006).

After lengthy discussion the TTPC voted unanimously to approve revised recommendations to be included in the final EIS. The TTPC stated:

(1) We recommend that high quality, practical and appropriate bicycle pedestrian accommodations be on or adjacent to the Paseo from Front Street to 16th Street, and that this be explicitly included in the project design and construction. (2) We recognize that the Heart of America is currently an option for bicycle/pedestrian access across the Missouri River and needs significant improvements to increase the safety of all users and therefore we recommend the necessary improvement be made as soon as practicable by MODOT. (3) MARC and MODOT will work cooperatively with other appropriate stakeholders to further explore some of the crossings evaluated in this study as well as others (MARC, 2006).

On October 24, 2006, MARC's TTPC presented recommendations to the MARC Board of Directors. As an organization that promotes regional planning and cooperation MARC found itself in a potentially awkward position of being at odds with highway engineers. According to Mell Henderson, Director of Transportation at MARC, the vote was not intended to lock MODOT into building a bike/pedestrian lane, but was rather a comment by area residents

that MODOT make an honest evaluation before they rule out any potential bike access on the new Paseo Bridge (Henderson, 2006). MODOT District Engineer Beth Wright said, "We'll strongly look at their (MARC's) recommendation" (Cooper, 2006). TTPC is a very unique committee because it embodies elected officials, all of the engineers, consultants and interest groups from the region (for voting members see Appendix B). It also has representation from the environmental groups, the bicycling groups and the pedestrian supporters.

Table 4.10: Paseo Bike/Pedestrian access timeline

April 2006: MARC adopts a metro-wide River Crossing Policy to guide decision making about the inclusion of bicycle/pedestrian facilities on bridges over the Missouri and Kansas Rivers (see Appendix C).

May 2006: Kansas City, Missouri City Council and Mayor Kay Barnes unanimously approve Resolution 060564, which was sponsored by Councilman John Fairfield and established the city's official position in support of bike/pedestrian access on the Paseo Bridge.

October 2006: 1) MARC Board of Directors voted to recommend MODOT include bike/pedestrian access on the Paseo Bridge. 2) MODOT releases a study of several potential Missouri River crossings and finds no significant safety or engineer problems with the Paseo corridor option.

December 2006: The North Kansas City, Missouri City Council went in the opposite direction of Kansas City, Missouri by opposing bike/pedestrian access on the Paseo Bridge. North Kansas City Mayor Gene Bruns cast the tie-breaking vote.

October 2007: The Kansas City, Missouri City Council and Mayor Mark Funkhouser re-iterate the city's position in support of bike/pedestrian access on the Paseo Bridge by unanimously approving Resolution 071092, sponsored by Councilman Russ Johnson.

Source: Kansas City Star/MARC Board of Director meeting minutes

The TTPC is basically comprised of city and county representatives, transportation agency representatives and non-voting representatives of business, environment and federal government agencies. Five separate "modal" committees have been established to provide input to

the TTPC: (1) Aviation Committee; (2) Bicycle/Pedestrian Advisory Committee (BPAC); (3) Goods Movement Committee; (4) Highway Committee; and (5) Transit Committee. TTPC provides another level of scrutiny that is diverse enough to ensure that a policy is not based upon the preferences of a few jurisdictions but rather uses the consensus of numerous interests and jurisdictions. The TTPC provides recommendations to the MARC Board of Directors for consideration and adoption.

The highway department took MARC's TTPC and Board of Directors recommendations under advisement and did not rule out a bike lane on the Paseo Bridge, but officials stated it would cost 6 to 9.5 million dollars - two or three times the cost of building one on the Heart of America Bridge (Cooper, 2006). State officials warned that there is little room in the budget to add amenities to the Paseo Bridge without sacrificing other parts of the project. Much depends on what type of bridge is built; there is approximately a 50 million dollar difference between a signature bridge and a plain girder bridge according to reports published in the Kansas City Star. While grateful for MODOT's commitment to a bike route on the Heart of America Bridge, advocates for cyclists and pedestrians are determined to continue pushing for a lane on the Paseo Bridge. One bike group suggested that a bike lane on the Paseo Bridge would be a reasonable investment considering the changing demographics and redevelopment opportunities near the Paseo Bridge (Cooper, 2006).

The recommendations from the bike/pedestrian Missouri River Crossing feasibility study were presented to the MARC Board of Directors on October 31, 2006. According to the meeting minutes, as a result of the BPAC, RCTF and TTPC reports, "MODOT informed MARC committees that it has agreed to fund one river crossing based on the findings of the feasibility study, and that a commitment to complete the bicycle/pedestrian crossing on or before 2012 would be added to the final EIS" (MARC, 2006). The board of directors unanimously approved the recommendations of the TTPC. However, the Board raised concerns about the time frame as noted in a statement written in the record before the vote was taken, "The committees are concerned about waiting five years, until 2012 for the necessary improvements to be completed. The Committees' desires are for MODOT to find the resources and complete the improvements before work begins on the new Paseo Bridge" (MARC, 2006).

MARC appealed to Senator Kit Bond, citing the regional significance for trade and safety. This effort resulted in an additional 50 million federal dollars for the project which allowed the region to design and build a structure that the community desired, while addressing the economic significance of the Paseo corridor. In 2005, as Chairman of the Environmental and Public Works Subcommittee on Transportation and Infrastructure, Senator Bond co-authored the six year transportation bill (SAFETEA_LU), in which he secured the funds to boost the bridge corridor project funding to 245 million dollars. The project is being funded in part by 195 million dollars from the state of Missouri which was approved by Amendment 3 (see Table 4.11). Additional funds include: 50

million dollars from the Safety Transportation bill; 10 million dollars from the Kansas City Port Authority/Highways for Life; and a 1 million dollar grant from the Federal Highway Administration. In 2007, at the request of the Missouri General Assembly, MODOT announced the new bridge will be renamed the Christopher S. Bond Bridge (Cooper, 2007).

Table 4.11: Paseo Bridge project funding	
Source of Funds	<u>Funds</u>
Amendment 3	\$195 million
Safety Transportation bill	\$50 million
KC Port Authority/ Highways for Life	\$10 million
Federal Highway Grant	\$1 million
т	otal by Project \$256 million
Source: Mid-America Regional Council TIP	

At the onset of the design of the bridge, MARC stepped up and recommended to MODOT that they engage in due diligence in regard to a Bike/Pedestrian crossing and not rush to rule out any option. If MARC's TTPC did not put forth the effort and have the vested power by the federal government supporting them, the region most likely would not have received a Bike/Pedestrian crossing between North Kansas City and downtown Kansas City. TTPC prepared recommendations for Bike/Pedestrian Access and forwarded these to the MARC board for approval, causing MODOT to make an honest assessment of Bike/Pedestrian access. MARC formed the RCTF to represent the region and to provide feasible options for Bike and Pedestrian Access across the Missouri River. This feasibility study provided the appropriate policy to address community needs.

Community needs were further addressed by the additional funding acquired through MARC's appeal to Senator Kit Bond for an earmark in SAFETEA_LU. MARC put together all of the funding and worked to acquire additional funding in an effort to give the region the bridge they desired and bike/pedestrian access.

Summary

The Paseo Bridge project offers evidence of the policy role and financial role that MARC plays in the regional transportation process. It further illustrates MARC making a difference by increasing public saliency (P1), consideration of region wide factors in relation to quality of life factors (P2: P2a), and an increase in the number and quality of elected officials (P3) participating in the regional transportation process. However, there is not enough evidence to substantiate that MARC made a difference in regard to equity issues (P2c), land use or economic factors (P2b), as shown in Table 4.12.

Table 4.12: Propositions supported by Paseo Bridge case study

P1	P2	P2a	P2b	P2c	P3
X	X	X			X

MARC was able to bring together diverse interest that once had no voice in regional transportation policy. MARC's creation of a River Crossing Task Force with the inclusion of all interested parties led to an increase in public saliency. The task force included bike groups, elected officials, bridge owners, and state officials from Missouri and Kansas which provided public saliency. The creation of the RCTF to resolve the dispute over bike/pedestrian access on the Paseo Bridge offers more evidence. A LexisNexis search for the year 2006,

citing MARC and bike/pedestrian access, uncovered twenty-two articles. To substantiate the significance of these results I conducted the same search for the year 2004 and acquired only six articles. This suggests that the creation of the RCTF by MARC increased news coverage resulting in an increase in public saliency.

Improved pedestrian access, as a result of the work of RCTF, connecting North Kansas City stores and restaurants to downtown Kansas City residential lofts and businesses points toward an improved quality of life for many who live and work in downtown Kansas City. The new access will transcend the geographic barrier separating downtown residents from North Kansas City shops and restaurants. The access will bring the two cities amenities closer than ever before providing a more desirable location for companies and citizens in downtown Kansas City and a more lucrative shopping district in North Kansas City.

In regard to economic factors, there is not enough evidence due to the fact that the project is not complete. This makes quantifiable data in regard to increased employment or investment in the area difficult and unreliable because they are only projections for the future. As far as equity factors, it is important to note that the project was part of workforce utilization partnering agreement which is committed to increasing the number of female, minority and disadvantaged on the project workforce. However, there was no discussion from interviewees on the subject or any sufficient evidence to suggest that MARC played a significant role. MARC staff was present at the community

roundtable meetings which included union representatives, MODOT officials, FHWA members, local contractors and short-listed project teams (kcICON, 2007).

MARC made a difference through the inclusion of a high number of quality elected officials. On the Paseo project MARC included 56 local elected officials in the regional transportation process. These officials participated through various committees and at different stages in the development of a bike/pedestrian policy. They were members of the River Crossing Task Force, the Bicycle Pedestrian Advisory Committee, the Total Transportation Committee and MARC Board of Directors (6 - Bicycle Pedestrian Advisory Committee, 19 - Total Transportation Policy Committee, 31 - Board of Directors). This evidence suggests once again that the MPO was successful in creating horizontal cooperation and coordination.

After the initial concerns from the community about MODOT's ability to deliver something that the community would embrace, MARC engaged the community in the project. Similar to the Triangle, MARC made a reasonable difference. The level of cooperation was not a result of the MPO's presence alone. It took local interests approaching MARC in order for the MPO to begin the process. As in the Triangle, this points toward a top down mentality by MODOT. If MARC's mere presence was enough to empower regional cooperation then MODOT would be less likely to attempt to circumvent the regional decision making process. Once MARC engaged the community their efforts resulted in an increase in public saliency, increased elected official

participation and improved quality of life. The difference was made possible by the creation of the RCTF and the work of MARC committees which brought attention to the project, provided a solution to bike/pedestrian access and included numerous elected officials.

Red Bridge

The Red Bridge project is an 18.2 million dollar project in Kansas City, which received a federal earmark (4.2 million dollars) for the expansion and enhancement of a failing piece of infrastructure. The existing bridge on Red Bridge Road was 75 years old . In 2005, MODOT determined it was a candidate for closure and needs to be replaced (Clark, 2006). In order to satisfy the terms of the earmark the size of the roadway and bridge must be increased. The roadway needs to be increased from a non-improved two-way road to a four lane road to accommodate a potential increase in traffic volume.

The increased size in the roadway and potential increase in traffic has resulted in a vocal contingent of area homeowners taking a firm stance against the proposal. Area residents are upset with the city's failure to include them in the planning early on and contend that the volume of traffic does not merit the scale of the plan. They believe a bigger road, especially a wider much longer and higher bridge would attract more traffic, particularly tractor-trailers, and ruin the rural feel of the neighborhood (Uhlenhuth, 2006). Traffic flow estimates suggest that by 2030 there will be 22,000 vehicles a day using this stretch of roadway, however, traffic volume is not a large concern presently with an average of 13,000 vehicles a day (City of Kansas City Missouri, 2007). In

the near future the traffic is expected to increase due to a housing development planned for the east side of the Blue River, a new intermodal site at Richards-Gerbaur Airport and the relocation of the Honeywell plant (Worth, 2007 and Uhlenhuth, 2007).

Public discontent over the size of the proposed roadway and federal funding defined MARC's role. MARC was relatively powerless due to the acquisition of a federal earmark. MODOT became heavily involved in the process from providing additional funding, inspections and facilitating local hearings. MARC's role in the Red Bridge project does not involve the depth or breadth of the Triangle and Paseo projects. For example, during the Triangle project the public expressed strong opposition to the original concept, MARC helped to reformulate the project with community leaders and created a project that the community embraced. MARC committees discussed the Red Bridge project with members of the community and were involved in determining that the project met the terms of the earmark. The Red Bridge project design does not have unanimous support from the public, but it has satisfied the majority of people in the vicinity of the improvement, allowing the project to move forward toward implementation.

The project's history

The Red Bridge project consists of a series of smaller projects to widen a narrow section of Red Bridge Road between US 71 and State Line Road. These smaller projects are: 1) widen Red Bridge Road from State Line Road to Red Bridge Shopping Center; 2) widen Red Bridge Road from Holmes Road to Blue

River Road; and 3) widen Red Bridge Road from Blue River Road to Grandview Road. Construction on the middle section (Holmes to Blue River) began in 2008. The other sections are scheduled for completion by 2010 (Blue River to Grandview), and 2020 (State Line to the shopping center). The new bridge will be providing a 50 to 75 year service life spanning the Blue River and will also eliminate the existing at-grade railroad crossing which requires building a taller and longer bridge. The new bridge will be 1,200 feet long and will arch the railroad track and the Blue River. In public meetings, officials from MARC, MODOT and Kansas City made the case that the occasional flooding of the river and the railroad track at street level are hazards to drivers and could interfere with the efficient movement of emergency traffic. The new bridge is therefore intended to improve safety, emergency response time and eliminate the disruption of traffic due to trains.

The current plan by Kansas City Public Works, on the western side of the Blue River, calls for a creek to be replaced with a concrete box culvert. This will cause many homes to have their view of sycamore, elm, and hackberry trees replaced with a road. On the eastern side of the river, the new road will go straight through another wooded area and intersect with Blue River Road. The Friends of Red Bridge (FORB), a group of local residents questioning the project, was in favor of a more modest plan, with a bridge that would cross the railroad tracks at-grade, similar to the current bridge. FORB believes the city wants to make Red Bridge an alternative to I-435 in anticipation of heavy traffic from a planned new terminal at Richards-Gebauer Municipal Airport

(FORB, 2007). Their proposal calls for a multiuse (bike or pedestrian) lane on one side of the road and a walking path on the other. FORB published accounts of Kansas City having an ulterior motive to remove a trail and walking path in the future, and replace them with traffic lanes.

Gathering feedback from the community was integral during each phase of the project (see Table 4.13). Two public meetings were held during the concept phase of this project to solicit input from residents of the area regarding the study. The first public meeting was held on January 22, 2004 at

Table 4.13: Red Bridge project community meetings

January 15, 2003: Concept Study presented to Southern Communities Coalition.

October 28, 2003: Concept Study presented to Red Bridge North Neighborhood Association.

November 19, 2003: Concept Study presented to Southern Communities Coalition.

January 22, 2004: First public meeting held at Red Bridge Baptist Church.

January 27, 2004: Concept Study presented to the Center Planning and Development Committee.

May 18, 2004: Second public meeting held at Swope Park Baptist Church.

May 24, 2005: Aesthetics Committee public meeting at St. Catherine of Siena Catholic Parish.

March 7, 2006: Aesthetics Committee public meeting at St. Catherine of Siena Catholic Parish.

Source: Kansas City Star/MARC Board of Director meeting minutes

the Red Bridge Baptist Church and the second meeting was held on May 18, 2004 at Swope Park Baptist Church. City staff also made several presentations regarding the Concept Study at other community meetings, including the Red Bridge North Neighborhood Association (10/28/03), the Southern Communities

Coalition (1/15/03 & 11/19/03), and the Center Planning & Development
Committee (1/27/04). The Concept Study Report for this project was finalized
in August 2004 (Uhlenhuth, 2006). Additional input from the public was also
gathered during the planning and design of this project. An Aesthetics
Committee consisting of area residents was formed and held a series of
meeting to specifically solicit input regarding aesthetic enhancements for the
project. Two additional public meetings were held at St. Catherine of Siena
Parish during the design phase of the project: a public hearing on May 24, 2005
and a public meeting held on March 7, 2006.

During this time period, elected officials were gearing up for an open Mayoral race in February 2007. Dr. Charles Eddy, a term limited Kansas City Councilman, MARC TTPC member and local politician responsible for the acquisition of the earmark, along with several others at MARC, were involved in the Mayoral race and the Red Bridge project. There were four city council people running for Mayor, and this was viewed as a political opportunity to affect Dr. Eddy's campaign if the project did not go forward. The atmosphere at the MARC meetings was summed up by Linda Clark of MODOT, "There are fourteen of them running for Mayor and this is silly season. You aren't getting no decisions, no opinions, no nothing out of nobody in this region until February 28th" (Clark, 2006).

The heightened political nature of the project, the strong opposition and heavy involvement of MODOT in a city project, raised the level of intensity surrounding the Red Bridge project. MARC found itself as being as much of the

problem as the solution. The TTPC fell into infighting, though they bear the responsibility for facilitating regional cooperation.

Blue Ridge Athletic Field Mt Moriah Cemetery E 105th Ter E 106th E 107th Ter E 108th St E 108th St Alex George Park E 108th Ter E 107th Ter E 109th St Gambril Tract Park Grandview Rd E 110th St 109th Ter 109th Ter E Red Bridge Rd E 1 10th St E Red Bridge Rd Minor Park Golf Course E-112th St Minor Park E Minor Dr E-1-13th Ter 113th St Red Bridge Ter Kansas Lister Kansas Warford Playground Terrace Park E 115th St City Longview Rd E 117th St Kemnoodl Lake E 118th Ter E 118th St Kemodles Martha Truman Rd Blue River Parkway Grandview Prospect Av Q Valley Park Dr Greaves Rd @ 2009 Rand McNally @ 2008 NAVTEQ Source: RandMcNally.com

Map 4.3: Red Bridge project area

How MARC made a difference

Though MARC played a much smaller role on the Red Bridge project, MARC made a difference through the responsible disbursement of funds and was involved in the very public and controversial process as an observer to ensure that the requirements of the earmark were satisfied by the project design. Public discontent did little to advance MARC's role beyond processing the paper work. Their role did not limit the criticism by FORB during a controversial process. In fact, the evidence illustrates that perhaps the operation of MARC committees and members created further confusion in the process. MARC's hands were tied due to the federal mandates attached to the earmark. This case illustrates MARC's lack of authority over certain regional projects, especially where communities acquire outside funds. As David Warm suggests, "...some projects come about because of a congressional earmark and then it is a project and you are going to deal with it" (Warm, 2006). In other words, whether or not MARC felt it was a regional priority, it had to program and deal with Red Bridge by facilitating the funding and attending meetings.

At the March 7, 2006 meeting at St. Catherine of Siena Gymnasium, I observed a high level of tension between all interested parties. Members of MARC, MODOT and Kansas City public works were present. As the meeting progressed, Kansas City realized that the project was going to be more difficult than most public works projects (MARC, 2006). City engineers, as well as members of MARC and MODOT saw opposition to the bridge project growing in both size and sophistication. The south Kansas City residents group, FORB,

developed an idea for an alternative plan and expressed their discontent for the current plan. The FORB plan was conceived by Michael Wallwork, a Florida based planner who specializes in "people friendly" street and intersection design. The plan included an at-grade railroad crossing, a bridge in similar size to the existing one, and bike and pedestrian trails along the road, bridge and river. The main concern of area residents was that the larger bridge proposed by the city would make the Red Bridge corridor an alternate for highway traffic. I observed between two and three hundred people at the city-sponsored public meeting, far more than attendees suggested had been present at any previous meeting about Red Bridge Road. The mood of the crowd was summed up by one gentleman who stood at the microphone and, addressing Mr. Stan Harris of the Kansas City Department of Public Works, said "What part of 'no' do you not understand?"

The city of Kansas City and Bucher Willis, the company hired to design the project, conducted a survey of area residents in the weeks prior to the meeting. The city invited members of the Red Bridge area to participate, however, there is no evidence as to how many actually showed up. The audiences were shown a series of slides and asked to write comments about each slide. The photos consisted of various road configurations, hiking trails, biking trails, street lights and railings. According to Charlie Schwinger, project director for Bucher Willis, survey respondents made safety a high priority and the current road's curves did not comply with these standards. Kansas City Councilwoman Cathy Jolly pointed out that 71 percent of the people in the

area who were surveyed said they wanted a much longer bridge that would cross over both the river and a nearby railroad track which would involve the use of eminent domain to remove four homes in order to make room for the improvements.

MARC was involved in the process because federal funds were provided for the project, and MARC members were present at all meetings. MARC invited members of the neighborhood opposition to attend MPO meetings. Upon the advice of Ron Achelpohl, MARC's Assistant Director of Transportation, members of FORB representatives attended an October 2006 meeting of MARC's Total TTPC. According to FORB's website, after the meeting ended, Ron Achelpohl told members of FORB that they should have attended the previous Surface Transportation Program/Bridge Priorities Committee meeting (STP/Bridge Committee). That would have been the best bet to stop the project, but once it was approved there, further approvals were practically automatic. According to an observer at the MARC meetings, who was listed as anonymous on the Red Bridge Road website, the experience of FORB is not uncommon, "If you ask questions at the STP/Bridge committee meeting where this project is discussed, they would likely tell you that the decision would actually be made by TTPC the following week. If you ask at the TTPC meeting they would likely tell you that TTPC accepts the recommendations of the STP/Bridge committee" (FORB, 2007).

Citizens normally do not participate in TTPC meetings and MARC has no provisions for actually taking citizen testimony. Yet, the opponents to the Red

Bridge project were at a TTPC meeting and the committee members let the citizens talk. Committee members contend they were very cordial and hospitable to the citizens, but the citizens were irate as most people are when they are upset with a program (Eddy, 2006). At MARC's TTPC meeting that the opponents of the project attended, Dr. Eddy, the councilman who created the project and acquired the federal earmark, was the Chair. The TTPC alternates the Chairmanship, and with Dr. Eddy as the Chair it put both MARC and Dr. Eddy in a very awkward position. According to Dr. Eddy, "It is hard for me to control a meeting when I am being yelled at personally about the project and that was probably the most unusual experience that any of us (TTPC) had ever gone through. Because rarely does anyone ever come down to the TTPC except for the regular people that are always there" (Eddy, 2006). It is important to note that these meetings though open to the public, are not public meetings in any meaningful sense. The region's public works people talk about projects in the undecipherable language of programming, obligation and authority as it relates to federal mandates, state laws, and MPO rules and regulations. This makes it difficult for a citizen without a construction, engineering or transportation background to keep up with the conversation, much less make an intelligent contribution or informed decision related to the project being discussed.

These same opponents of Red Bridge decided to express their discontent and attempt to get the project stopped at a MARC board meeting. What is important to remember is that the MARC board itself consists of elected

officials from throughout the region. As a result, the city backed off and changed a great deal of the project because in the original plans there were areas that the road was going through and taking property that the city could not take. Kansas City's head of public works, Stan Harris, agreed to scale down some aspects of the plan.

Despite FORB's efforts, Kansas City claimed their plan for a larger bridge and a wider road was a necessity, not only for future traffic but also to satisfy the requirements of the earmark and building in a flood plain. Kansas City and MODOT pointed out that residents of a Federal Emergency Management Agency (FEMA) flood way, have to have flood insurance. The residents' flood insurance states, "If you build a new bridge and do not increase the rise (vertical feet of the structure over river), you violate the flood insurance" (Clark, 2006). FORB's efforts to involve MARC, the organization responsible for resolving these types of situations, failed. Upon the approval of the plan in March 2008, FORB released a press release stating, "...it (Kansas City) had failed to consider a variety of views and failed to achieve a consensus among stakeholders" (FORB, 2008). According to reports in the Kansas City Star, "Jerry Young, a south Kansas City resident, said he remembered arguments about the road as far back as 1999, although the Friends (FORB) contend that the process has been secretive and not open to public input, Young said, 'I've never felt shut out. I think the product we have today is the best for our community" (Uhlenhuth, 2008). The public may not have been shut out but the evidence and results point toward a breakdown in the process. MARC was unable to help the

development of a solution based around regional consensus. However, Linda Clark of MODOT believes,"...the process worked, I just think the people are very unhappy" (Clark, 2006). The reason the people are unhappy is because the design and impact of the new bridge will change the face of the neighborhood. It dwarfs the old bridge and separates motorists from the calming experience of a drive through Minor Park, which visitors to the RedBridge.org website have stated as a major reason for choosing to live in the Red Bridge area.

To create this new bridge and change the face of the existing road,
Kansas City received 4.2 million dollars in the form of a federal earmark, 4.3
million from city sales taxes, and a construction grant in the amount of 1.8

Table 4.14: Red Bridge project funding					
Source of Funds	<u>Funds</u>				
Federal Earmark	\$4.2 million				
Federal Construction Grant (2006-07)	\$1.8 million				
KC Capital Improvements (Bridges)	\$2.1 million				
KC Capital Improvements (Roadways)	\$2.4 million				
Total funds available in 2007	\$9.5 million				
Additional funds needed for completion, 2020	\$8.7 million				
Total projected costs for project	\$18.2 million				
Source: Kansas City Adopted City Budget 2006-07					

million. The additional 8.7 million dollars to pay the anticipated price tag of 18.2 million have not been identified. The funds listed in Table 4.14 will fund the construction of the first phase, the middle portion of the route, from Holmes Road to Blue River Road which includes the new bridge. The major concern during the planning stages of the Red Bridge project was losing the federal earmark due to a small group of people fighting progress. One of the

requirements of a federal earmark is to demonstrate progress within two years of acquiring the earmark or the federal government will redistribute the funds. FORB fought the project for so long hoping the region would lose the earmark and the project would not be financed.

Summary

The Red Bridge project offers evidence of how the acquisition of a federal earmark allows municipalities to work around the regional transportation process, limiting an MPOs ability to make a difference. The inclusion of FORB at MARC meetings points toward an increase in public saliency (P1). Evidence to support the other propositions is weak. There is little evidence of the MPO considering area wide factors - quality of life, land use, employment or equity issues (P2: P2a, P2b, P2c). The evidence to support an increase in public official participation (P3) is limited to officials that participate on MARC committees and is insufficient. The case points toward a limitation in the regional transportation process - the federal earmark for a municipal project.

Table 4.15: Propositions supported by Red Bridge case study

P1	P2	P2a	P2b	P2c	P3
X					

The project offers evidence of how a single-jurisdictional project can impose costs on other jurisdictions or groups of citizens. In the case of Red Bridge, the City of Kansas City acquired an earmark for a new bridge and the region had to coordinate resources and find a level of cooperation to make the project a reality.

The Red Bridge project was not a project that the Kansas City region listed high on their priority list but once the earmark was acquired the regional MPO and other local governments had to address the issue. MARC dealt with public discontent on numerous fronts during the Red Bridge project. They participated in public meetings, FORB members expressed their displeasure at TTPC meetings and MARC Board meetings. Their role in the process was documented by numerous local news sources. The research on the project highlighted 38 articles, according to LexisNexis, that specifically dealt with the conversations between FORB and MARC. This is typically not the manner in which MARC intends to make a regional project salient, but their role in the regional transportation process on previous projects has resulted in the community viewing the MPO as the focal point for transportation policy.

Despite the circumstances, MARC did contribute to the saliency of this issue.

The Red Bridge project additionally offers evidence of how credit claiming and short-term results can influence the regional transportation policy process. The Red Bridge project was a point of contention for several members at MARC, each of whom was running in the open Mayoral race. These political actors put personal interest before regional concerns, making the process more cumbersome and volatile.

The end result was that MARC discussed the Red Bridge project with members of the community and were involved in determining that the project met the terms of the earmark. The Red Bridge project design did not have

unanimous support from the public, but it satisfied the requirements of the earmark allowing the project to move forward toward implementation.

Conclusion

The cases of the Triangle, Paseo Bridge and Red Bridge in the MARC region offer evidence of public saliency. The Triangle and Paseo Bridge offer evidence of MARC's ability to garner regional cooperation in an effort to address certain regional factors. Specifically, these factors were related to employment (Triangle) and quality of life (Paseo Bridge). Evidence of increased elected official participation is apparent in both the Triangle and Paseo cases. There is little or no evidence to substantiate the regional MPO in Kansas City equity factors in any of the cases.

Table 4.16: Propositions supported by Kansas City case studies

	P1	P2	P2a	P2b	P2c	P3
Triangle	X	X		X		X
Paseo Bridge	X	X	X			X
Red Bridge	X					

MARC increased public saliency (P1) through the creation of an advisory committee in the case of the Triangle, the creation of a River Crossing Task Force (RCTF) on the Paseo project, and its role or lack thereof in working with the Friends of Red Bridge to find a locally acceptable solution for the project. Information was readily available, according to LexisNexis searches; 78 articles per year on the Triangle project, 46 per year on the Paseo Bridge and 38 per year on the Red Bridge project. Also there were many articles regarding the Mayoral race mentioned the Red Bridge project which were not included in these numbers. The Triangle Advisory Committee consisted of representatives

of public agencies, elected officials and residents. The RCTF consisted of members from 27 different entities, including local counties, cities, interest groups, neighborhood associations and transportation departments. MARC's dealings with FORB resulted in heightened public saliency. The members of FORB viewed MARC as the organization to confront in an effort to get the city to change the project, but unfortunately MARC's hands were tied due to the requirements of the federal earmark. Each of these cases point toward the public role that MARC plays in the regional transportation process.

MARC made a difference through the consideration of area-wide factors through their consideration of employment issues (P2: P2b) during the Triangle project and quality of life factors (P2: P2a) during the Paseo Bridge project. The premise behind the Triangle project was to open the region up for economic growth. The evidence suggests that the role MARC played contributed to a successful project. Interviewees suggested, "it was a success" and "all you see is growth." However, the numbers illustrate this more succinctly; 44 million dollars in non-residential construction and more than 700 jobs have been created within the new and expanding companies, with a total of 8400 jobs created since work began. In the Paseo project, MARC adopted an areawide river crossing policy forcing the issue of bike/pedestrian access resulting in an improved quality of life for area residents. The creation of this policy pressured MODOT and resulted in new bike and pedestrian access for the residents of downtown Kansas City and North Kansas City. The river crossing will transcend a geographic barrier and provide access to restaurants,

shopping, housing and employment that was previously only accessible by automobile.

MARC created an increase (P3) in elected official involvement through a 25 person advisory committee on the Triangle and through their various committees involved in the river crossing policy: 6 - Bicycle Pedestrian Advisory Committee; 19 - Total Transportation Policy Committee; 31 - Board of Directors. Further evidence of this increased elected official participation is illustrated in Chapter 6.

MARC makes a makes a reasonable difference in regional transportation policy, but are limited to certain areas. These reasonable differences highlight the promise, success and problems involved in regional transportation policy. The Paseo project highlighted some of the emergent policy networks in regional transportation policy (e.g. bicycle groups). This is an example how the enhanced role of MPOs created, "...a mechanism for sparking new activity around transportation" (Weir et al., 2009). The Triangle project illustrates the success of horizontal cooperation through the formation of an advisory board. This suggests that MPOs act as, "...regional arrangements bring together a wider range of stakeholders" (Gerber & Gibson, 2009). This allows the final project to more closely align with regional needs. The Red Bridge project offers evidence of how a single jurisdiction can disrupt the regional decision making process. This type of action can nullify the entire regional transportation process because, in theory, "...local governments, acting independently, produce policies that are different from (and presumably inferior to) outcomes that

would be produced by a regional body" (Gerber & Gibson, 2009). The promise, success, problems and varying roles of MPOs is further illustrated by East-West Gateway's role in regional transportation policy described in the next Chapter.

Chapter 5 - St. Louis

This chapter discusses East-West Gateway Council of Governments (EWGCOG, or East-West Gateway) background, project funding, project selection and three regional transportation projects within their region. East-West Gateway, the regional MPO in St. Louis, has acquired a new role in regional transportation policy since the passage of ISTEA. The increased capacity of this MPO is due to numerous resources provided by ISTEA and subsequent legislation. East-West Gateway is involved in planning and programming (funding and selecting) regional transportation projects. This chapter illustrates this role through East-West Gateway's involvement in three regionally significant projects: The new Mississippi River Bridge, Page Extension, and I-64 reconstruction. These studies further suggest that the MPO plays numerous roles depending upon the project, serving as the facilitator of cooperation, the provider of additional monetary resources and acting as a forum for the regional transportation process.

Background on East-West Gateway (EWGCOG)

East-West Gateway, as the regional MPO for the St. Louis area, is making a difference through the use of numerous resources. It currently incorporates planning studies (e.g. Major Transportation Investment Analysis) flexible monetary resources, federal aid, outside consultants, public comment and various committees to create regional transportation policy. These resources have added depth and breadth to its policies and increased its capacity to make a difference. Prior to ISTEA, East-West Gateway had a minimal role in

transportation policy by performing limited tasks, such as, oversight of regional meetings, filing federal documents and publishing study results for public consumption.

Since the passage of ISTEA in 1991, East-West Gateway is considering more issues and playing a more active role in transportation policy. The designation of East-West Gateway as an MPO means the federal government, Missouri and Illinois have vested authority and responsibility in the organization to develop and adopt regional transportation plans, coordinate regional cooperation, disburse funds and evaluate projects. Transportation planning at East-West Gateway requires the ability to understand and address the complex relationship between the region's mobility, economy and community. As the regional MPO, East-West Gateway is continually challenged to facilitate regional transportation decisions, to maintain existing infrastructure and build new facilities to support growth, while balancing the fiscal and political constraints within the region.

Fiscal and political factors test East-West Gateway and their ability to address regional transportation problems. For example, East-West Gateway is constantly balancing the financial differences between Missouri and Illinois that both fall within its region. Missouri has less revenue than Illinois to spend on roads and more miles of road to maintain, and Illinois has more flexibility in financing large projects. There are other important differences between the two states that East-West Gateway must take into consideration. Missouri has twice the number of lane miles in its highway system, 32,340 to Illinois' 16,500

lane miles (MODOT, 2007 & IDOT, 2007). Illinois ranks fourteenth in revenue per mile (155,879 dollars), whereas Missouri ranks a lowly forty-fifth in revenue per mile (47,463 dollars). Illinois collects a five-cent sales tax for gasoline, whereas Missouri has no state sales tax on gasoline. The Illinois state charges nineteen cents per gallon in tax on gasoline and 21.5 cents on diesel fuel, whereas Missouri's gasoline and diesel taxes are seventeen cents per gallon (Crouch, 2007).

East-West Gateway not only has to balance the differences in state revenues for transportation projects, but also has to deal with differing political structures that determine transportation projects and provide additional funds. In Missouri, raising the state gasoline tax takes a statewide vote. In Illinois, the state legislature can increase the state gasoline tax as it deems necessary. MODOT uses a complex formula to decide how much construction money each of the state's ten districts receives each year. The policy's intention is to remove politics from road spending and limit arguments over who is getting more than their fair share of state transportation funds (Hassinger, 2007). The formula, adopted in 2003, is based on population, employment and estimated miles traveled on the area's major roads and highways (MODOT, 2007). In contrast, IDOT district projects compete against each other for funding through the state's legislative process. Every spring, IDOT submits a list of priorities as part of a six year plan to the Illinois legislature where the projects are evaluated and funding is provided. Once the legislature approves funding for certain projects the governor signs off on the

budget (Stack, 2007). According to Les Sterman, former executive director of East-West Gateway, "Illinois preserves enough flexibility in its program that if something big does come along, it has the ability to pay for it" (Sterman, 2007).

East-West Gateway has dealt with differing characteristics between the two states in the St. Louis area since its inception in 1965, and has adopted a sole focus in its transportation policy. Initially, as the region's Council of Governments (COG), and later as the designated MPO, East-West Gateway traditionally put congestion relief at the center of its transportation policy. The advent of congestion as a regional problem in St. Louis, began during the 1950s with the creation of the Interstate Highway System. This highway system paved the way for new levels of commercial and social activity. In 1956, the effects of suburban development were already being seen in the St. Louis region with the construction of the region's first Interstate, Interstate 70 (I-70). The new roadways of I-70, Interstate 55 (I-55) and Interstate 44 (I-44) provided an opportunity for significant expansion outward, primarily to the north and west in the St. Louis region. St. Louisans began to feel an eagerness to move away from the congestion, noise and pollution created by the factories which comprised more than 50 percent of the region's employment base (EWGCC, 1999). At the same time, residents of St. Louis City became aware of the attractiveness of a suburban lifestyle, less expensive land in the outer ring and affordable mortgages available through the GI bill (EWGCC, 1999).

East-West Gateway was already dealing with the problems created by these circumstances at the time of ISTEA's passage. Between 1950 and 1990, the amount of developed land in the St. Louis region increased by 355 percent and the number of passenger vehicles registered in the region nearly tripled (EWGCC, 1999). Currently, in the bi-state St. Louis area, 17,662 miles of publicly-funded roads are in place (Table 5.1) to connect cities, neighborhoods, and employment centers within the region (EWGCC, 2006). The increase in miles of roadway over the years in combination with an increase in the number

	<u>Urban</u>	<u>Rural</u>	Total Miles
City of St. Louis	1,178	0	1,178
Franklin County	147	2,236	2,383
Jefferson County	711	1,467	2,178
Madison County	1,375	1,101	2,476
Monroe County	58	620	678
St. Charles County	865	1,024	1,889
St. Clair County	1,185	1,020	2,205
St. Louis County	4,496	179	4,675
Regional Total	9,850	7,812	17,662

of automobiles provided easier accessibility to all areas at significant costs to the region. According to MODOT, traffic congestion causes the average peak period traveler to spend an extra thirty-eight hours of travel time and consume an additional twenty-six gallons of fuel annually (MODOT, 2007). In St. Louis alone, congestion wastes in excess of 26 million gallons of fuel annually, causes

39.9 million hours of travel delays per year and costs 675 million dollars annually (MO Governors office, 2008 & MODOT, 2008).

In 1992, in response to ISTEA and in an effort to better address regional transportation problems, East-West Gateway created a highly structured evaluation process and incorporated more resources for planning. This included the ability to review all projects receiving federal funds, authority to program projects in the region's three official transportation documents (LRTP, TIP and UPWP), which include population and employment estimates, land use and transportation facility inventories and maps, environmental quality assessments, computer models of existing and future travel patterns, activities to engage interest groups and community residents, and the ability to move transportation money to the planning side. This provides East-West Gateway a larger and more significant role in regional transportation.

East-West Gateway embraced its enhanced and varying role in transportation policy on different projects and programs. East-West Gateway was engaged in the physical outcome of the St. Louis commuter rail, MetroLink. The agency conceived and planned the project, and performed some preliminary engineering before turning it over to Metro (Bi-State Development Agency), a regional transit agency. In other cases, East-West Gateway has identified a need and turned the project over to the state(s). For example, in the case of the new Mississippi River Bridge, East-West Gateway identified the need and turned the project over to Missouri and Illinois to design the project and determine the best location. On rare occasions, such as

the Page Extension, East-West Gateway, as the regional MPO, is approached by local governments to fill gaps in funding. According to Les Sterman, former Executive Director of East-West Gateway, "...people call us all the time and say we got this project we know we will never get it funded in your process. We (constituents) are going to Congress to try to get an earmark, will you help us? We (EWGCOG) actually write support letters (for these constituents to take to their representatives identifying the need and viability of the project) and help out in a variety of ways, people come to us for ideas for funding and we try to help out the best we can" (Sterman, 2006).

Case Studies

This study examines three projects in the East-West Gateway area. The cases of the new Mississippi River Bridge, Page Extension and Interstate 64 offer the ability to determine if East-West Gateway is making a difference in regional transportation policy. The new Mississippi River Bridge offers an opportunity to evaluate the work of East-West Gateway as they attempt to build regional consensus and cooperation between the two states, acquire federal funds, and access external and public input. The Page Extension provides the ability to assess East-West Gateway's contribution to the regional transportation process through regional consensus, cooperation between two counties, public input, environmental concerns and acquisition of additional funding to complete the project. The I-64 project allows for an analysis of East-West Gateway through political brokering, public input, regional consensus and ability to gain federal support. Each of these projects was designed to

accomplish certain regional goals and offers the opportunity to evaluate East-West Gateway's ability to help the region attain these goals.

Transportation projects at East-West Gateway are derived from goals and planning procedures within its LRTP for policy setting, planning and development and project implementation. These goals and planning procedures support the decision making process under which more than 18 billion federal and local dollars will be invested in regional transportation infrastructure and operations over a 20 year period from 2005 to 2025 (EWGCC, 2005). In the East-West Gateway process, transportation solutions become funded transportation projects. Proposals are solicited from local jurisdictions, transit providers, and state departments of transportation. These proposals are then evaluated based upon the transportation needs and priorities articulated in the LRTP. Projects that best match these criteria are selected for inclusion in the TIP - the three year list of projects scheduled for design and construction backed by federal funds. The TIP acts like an accountant's balance sheet. The total cost of selected projects, also known as programmed projects, cannot exceed federal and state monies earmarked for region wide transportation improvements.

The FY 2005-2009 TIP covered a five year period and programmed about 2.46 billion dollars in funding for 660 projects (EWGCC, 2004). The total regional program summarized in the FY 2006-2009 TIP (Table 5.2) covers a four year period and contains 689 projects at a total cost of about 2.28 billion dollars (EWGCC, 2005).

County	Preservation	Capacity Adding	Operation & Safety	Transit Expansion	Other	TOTAL
Franklin	\$48,328,595	\$50,987,000	\$1,218,000	\$0	\$3,762,000	\$104,295,59
Jefferson	\$27,833,791	\$1,720,000	\$49,200,000	\$0	\$224,000	\$78,977,79
St. Charles	\$48,339,251	\$109,560,000	\$32,818,880	\$0	\$5,745,063	\$196,463,1
St. Louis	\$400,305,699	\$54,148,000	\$45,779,470	\$0	\$20,035,826	\$520,268,9
St. Louis City	\$234,978,268	\$2,996,000	\$4,652,906	\$0	\$12,674,966	\$255,302,1
Multi-County	\$16,284,000	\$291,000	\$17,253,297	\$316,062,625	\$83,368,666	\$433,259,5
Regional Missouri	\$75,519,000	\$0	\$48,818,000	\$0	\$1,872,000	\$126,209,0
Total	\$851,588,604	\$219,702,000	\$199,740,553	\$316,062,625	\$127,682,521	\$1,714,776,3
Madison	\$46,160,600	\$69,064,000	\$33,709,651	\$0	\$25,778,525	\$174,712,7
Monroe	\$6,796,263	\$86,000	\$722,000	\$0	\$0	\$7,604,2
St. Clair	\$92,265,592	\$22,313,000	\$3,248,400	\$6,928,025	\$16,376,281	\$141,131,2
Multi-County	\$5,025,000	\$44,215,000	\$1,601,000	\$0	\$29,360,477	\$80,201,4
Regional	\$33,865,000	\$0	\$8,779,000	\$0	\$2,200,000	\$44,844,0
Illinois Total	\$184,112,455	\$135,678,000	\$48,060,051	\$6,928,025	\$73,715,283	\$448,493,8
Multi-State	\$150,000	\$2,885,000	\$0	\$0	\$115,874,816	\$118,909,8
Regional Total	\$1,035,851,059	\$358,265,000	\$247,800,604	\$322,990,650	\$317,272,620	\$2,282,179,9
Regional %	45.40%	15.70%	10.90%	14.20%	13.90%	100.00

Recent programs have emphasized preservation of the existing infrastructure, consistent with the goals stated in East-West Gateway's LRTP. The TIP also continues to illustrate the region's emphasis in preservation of existing infrastructure, committing forty-five percent of the program (1.04 billion dollars over a four year period) to resurface and reconstruct roads, repair/replace bridges, and replace aging transit assets. Sixteen percent of the FY 2006-2009 program (358 million dollars) is allocated to adding capacity in

the form of new roads and new lanes on existing roads. Projects to improve the operations and/or safety of the region's transportation facilities account for 248 million dollars (about 11 percent of the total program). The "Other" category includes such projects as transit capital improvements, transit operating costs, and system enhancements.

The TIP is a product of the LRTP and the primary document outlining the fiscal priorities of transportation policy. The TIP is part of the policy-setting procedures at East-West Gateway and provides a foundation for planning and decision making. East-West Gateway's primary policy document outlining transportation goals and region wide priorities is the LRTP. This twenty-year plan, based upon social, environmental, energy and economic factors, provides the framework for future transportation decisions.

Since 1992, the East- West Gateway project evaluation process has consisted of six focus areas: (1) access to opportunity; (2) congestion relief; (3) goods movement; (4) preservation; (5) safety and security; and (6) sustainable development (EWGCC, 2005). The assessment of access to opportunity allows East-West Gateway to address the mobility of low-income communities and people with disabilities. The evaluation of congestion relief ensures that the region's roadways do not reach levels of congestion which negatively influence productivity and quality of life. The analysis of efficient movement of goods allows for improved movement of freight within and throughout the region by rail, water, air and road transportation modes. Preservation of existing infrastructure enables East-West Gateway to maintain the current road, bridge,

transit and intermodal assets in good condition. The focus on safe and secure operation in the region is intended to decrease the risk of personal injury and property damage on, in and around transportation facilities. Sustainable development involves coordinating land use, transportation, economic development, environmental quality, energy conservation, and community aesthetics (EWGCC, 2005).

East-West Gateway's transportation agenda as defined in their LRTP provides the criteria for the planning and development of the region's transportation needs. Public works employees, local leaders and citizens help identify transportation needs, formulate solutions and select a regionally preferred alternative. These solutions are measured against the criteria of the LRTP through results of various planning studies. An example of a planning and development tool is the Major Transportation Investment Analyses (MTIA) or Major Investment Study (MIS). As defined in East-West Gateway's LRTP, "A Major Transportation Investment Analysis (MTIA) is a type of evaluation and decision making process for highway and/or transit improvements which have the potential for incurring substantial costs or causing significant alteration of travel patterns" (EWGCC, 2005). The principal aim of an MTIA is to define the general scope and design concept of the preferred transportation solution within a particular corridor. The MTIA identifies and evaluates potential largescale, costly transportation solutions, conducted with partner agencies such as the Missouri and Illinois departments of transportation and the Bi-State Development Agency.

Once policy setting, planning, and development procedures are completed at East-West Gateway a policy moves to the project implementation stage, where a project is designed and constructed. Responsibility for implementation rests solely with a project's sponsor (e.g. MODOT, IDOT), with no formal role for East-West Gateway. Ideally, a project's sponsor and East-West Gateway work closely together to ensure consistency between transportation policy and the completed transportation project.

Since the passage of ISTEA, East-West Gateway's planning has focused on this framework and offers the MPO the ability to better identify problems and create more inclusive policies. Prior to ISTEA, East-West Gateway would conduct traffic forecasts to determine where traffic would exceed capacity and color the area red. By doing this, East-West Gateway developed a "cancer map" illustrating thirty-five to forty red lines, each representing a project they would like to pursue (Sterman, 2006). ISTEA encouraged East-West Gateway to consider the transportation system more broadly. For example, East-West Gateway launched a significant program called the St. Louis Jobs Initiative. They leveraged into the program from the transportation component, recognizing that there are significant transportation needs for reverse commute and people without autos. East-West Gateway received private grants and used a portion of their federal money to carry out a multi-faceted program that not only provided transportation resources but also offered job training, coaching and placement. The St. Louis Jobs Initiative is the type of policy that would not have been possible prior to ISTEA and illustrates the enhanced role

MPOs like East-West Gateway are now serving as they recognize that transportation policy is not only congestion relief, but includes many other goals that regional transportation can address.

East-West Gateway's use of numerous resources and their criteria for policy determination has offered them the ability to make their planning more comprehensive than it was prior to ISTEA (Table 5.3). Included in East-West Gateway's comprehensive process for regional transportation policy are their monetary resources.

Till Far Follows (C.)					
Table 5.3: East-West Gateway moneta	· ·	2006	2007		
	2005	2006	2007		
Resources:	*	400.001.100	*.a a== aaa		
Federal grants	\$13,609,497	\$20,094,192	\$12,957,902		
State appropriations and grants	36,190	105,342	155,197		
Transportation Development Tax Credit	2,552,000	0	0		
Local contributions:					
Cash-per capita	310,367	310,367	310,367		
Transportation Project Assessment Fee	335,089	223,621	177,806		
Cash-other	550,831	44,253	42,893		
In-kind services	888,668	524,588	678,078		
Miscellaneous Income	112,090	163,950	96,972		
TOTAL RESOURCES	\$18,394,732	\$21,466,313	\$14,419,215		
Expenditures:					
Salaries, benefits	\$3,510,816	\$3,492,462	\$3,732,170		
Public agencies, planning consultants	5,057,696	5,613,688	5,441,320		
In-kind services	888,668	524,588	676,430		
Grant funded equipment	5,361,136	12,064,700	4,672,705		
Operating expenses	737,204	839,213	840,935		
TOTAL EXPENDITURES	\$15,555,520	\$22,534,651	\$15,363,560		
SURPLUS/(DEFICIT)	\$2,839,212	(-\$1,068,338)	(-\$944,345)		
		,	•		

Source: East-West Gateway Coordinating Council Annual Report 2005, 2006, 2007

East-West Gateway has accessibility to funds through numerous sources including an annual budget for administrative expenses, state grants, federal grants, federal earmarks and the flexible funding categories included in their TIP that come directly to East-West Gateway for responsible disbursement. The TIP includes numerous categories (Table 5.4) in which funds are distributed.

Table 5.4: East-West Gateway Transportation Improvement fund categories

*Urbanized Area Formula Grant Program

*Elderly and Persons with Disabilities Program

*Nonurbanized Area Formula Grant Program

*Accelerating Safety Activities Program (ASAP)

*Statewide Bridge Rehabilitation and Replacement (BR)

*Metropolitan Bridge Rehabilitation and Replacement (BRM)

*Off-System Bridge (BRO)

*Congestion Management Air Quality (CMAQ)

*Congressional High Priority Project (HP)

*Interstate Maintenance (IM)

*Intelligent Transportation Systems (ITS)

*Job Access Reverse Commute Program (JARC)

*National Corridor Planning and Development Program (NCPD)

*National Highway System (NHS)

*NHTSA Safety Grant

*Congressional General Provision

*Safety

*STP-Safety Program (SP)

*Safe Routes to School (SRTS)

*Statewide Surface Transportation Program (STP)

*Metropolitan Surface Transportation Program (STPM)

*Transportation and Community and System Preservation Program (TCSP)

*STP-Transportation Enhancement Program (TE)

*Alternative Analysis Program

Source: East-West Gateway Coordinating Council

The use of these varying monetary resources and the ability to move federal funds from program to program is just another tool available to East-West Gateway to address regional transportation challenges. Examples of regional challenges and varying monetary resources are illustrated in the cases of the new Mississippi River Bridge, Page Extension and Interstate 64 projects.

East-West Gateway's increased role in the region's transportation policy advanced their process for evaluating problems to a more inclusive level. East-West Gateway is evaluating transportation solutions in terms of their relationship to the larger social system within the region, resulting in a more comprehensive process and use of more alternative avenues for funding. For example, on the new Mississippi River Bridge they acquired an earmark in SAFETEA_LU and eventually coordinated a regional solution; on the Page Extension they used Missouri Amendment 3 and Proposition A (1987) money to fund phase one and provided additional funds for a phase two which was underfunded; and on the I-64 project they supported the design-build concept in an effort to decrease the project's timeline and keep it on budget.

New Mississippi River Bridge Case Study

After decades of discussion, planning and delays, the Illinois and Missouri Departments of Transportation eventually came to an agreement to build a new 640 million dollar, four lane bridge across the Mississippi River on the northern edge of downtown St. Louis. The new Mississippi River Bridge is a bistate project on both MODOT and IDOT systems. East-West Gateway wrote all of the original reports, conducted all of the original research and then turned the project over to Illinois and Missouri to design.

East-West Gateway, local leaders and businesses contend a new Mississippi River Bridge is vital to the region for congestion relief and economic growth. The St. Louis riverfront, on the Poplar Street Bridge, is one of three areas in the country where two or more interstates make a river crossing using

a bridge that is at least 40 years old. The other two are Cincinnati, Ohio where Interstates 71 and 75 cross the Ohio River and Kansas City, Missouri where Interstates 29 and 35 cross the Missouri River. By 2020, rush hour traffic on the Poplar Street Bridge is projected to last three hours, up from 1.5 hours a day in 2006 (RCGA, 2006). With congestion on the rise and 10,964 peak hour trips in the morning across the Mississippi River on all four bridges combined, the region had to pursue a new Mississippi River Bridge (EWGCC, 2005). In southwestern Illinois, 70,000 residents commute across the river to Missouri on weekdays. These commuters represent the majority of the 121,800 average daily crossings on the Poplar Street Bridge (I-70, I-55 & I-64). Only 14,000 Missourians in the St. Louis area make the reverse commute, according to East-West Gateway (EWGCC, 2007). Thus although the bridge is important to the economic future of the whole St. Louis region, Illinois seems to have a stronger incentive to build the bridge. According to the St. Louis Regional Chamber and Growth Association (RCGA), the new bridge will result in 15 to 20 billion dollars in total economic output for the bi-state region during the life of the new bridge. The new bridge is also expected to support an annual average of between 1450 and 1900 full time jobs (RCGA, 2007). A new bridge will make it easier for people within the region to get to their jobs, create the ability to compete domestically and globally as a Midwestern hub for the distribution of goods, and help reduce the severe congestion on the Poplar Street Bridge.

In an effort to address the congestion on the Poplar Street Bridge, members of East-West Gateway mounted a federal lobbying effort for a new Mississippi River Bridge. In 2005, with the adoption of the most recent transportation legislation - SAFETEA_LU, Congress agreed to spend 239 million dollars on a new eight-lane bridge that would relieve traffic pressure on Poplar Street Bridge and serve as a "signature" bridge to blend architecturally with the Gateway Arch. The earmark was significant but it only covered a portion of the cost for a new river crossing, leaving East-West Gateway to coalesce regional support and financing to make the bridge a reality.

The project's history

East-West Gateway first issued reports about the Mississippi River Bridge in the early 1990s, but involvement in the bridge dates to the early 1970s.

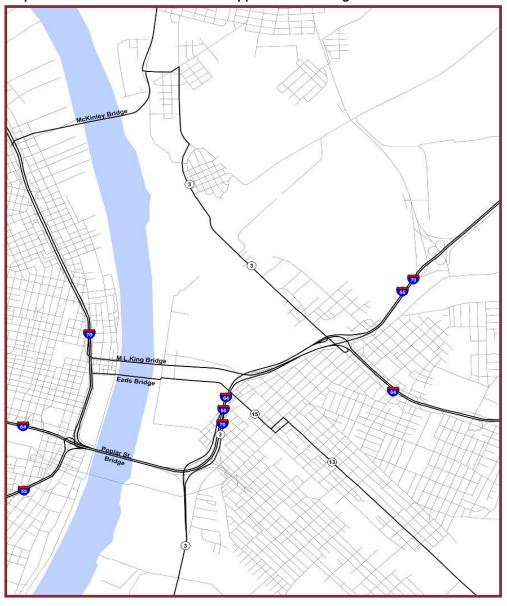
East-West Gateway's initial recommendation and first step was to rehabilitate the existing older bridges - Martin Luther King Bridge, Eads Bridge and McKinley Bridge - to move traffic more efficiently. All of these bridges were toll bridges at the time and East-West Gateway recommended removing the tolls to get more people to use them, and all the bridges were rehabbed between 1989 and 2007.

The Martin Luther King Bridge rehab was completed in the spring of 1989 for 24 million dollars. The bridge relieves traffic by connecting the concurrent freeways of I-55, I-70, and I-64 in East St. Louis, and Illinois with the downtown St. Louis streets, 3rd street, Memorial Drive and Convention Plaza. The bridge was built in 1951 as a toll bridge to relieve congestion and was owned by the City of East St. Louis. At one time, it carried US Route 40 and US Route 66 across the river. In 1967, the Martin Luther King Bridge fell into disrepair

because toll revenues declined due to the construction of the Poplar Street Bridge, which attracted more traffic because it did not have tolls. The declining revenues and decreased traffic led to the eventual transfer of the Martin Luther King Bridge dually to the Missouri and Illinois Departments of Transportation and removal of tolls in 1987 (Historic Bridges of US, 2007).

The rehab of the Eads Bridge was completed in 2000 and allowed for the restoration of vehicular traffic on the bridge for the first time since 1991. The Eads Bridge was the first bridge to cross the Mississippi River in St. Louis. It permitted transcontinental rail passage through Illinois and Missouri and currently connects downtown St. Louis to Route 3 in Illinois. The Eads Bridge rehab project cost 24.8 million dollars to re-deck the existing infrastructure (BridgePros, 2007 and Historic Bridges of US, 2007).

Rehab on the McKinley Bridge, located north of the Eads Bridge connecting Route 3 in Illinois to Interstate 70 and Salisbury Street in St. Louis, Missouri, was completed in 2007. The McKinley Bridge project was a 45 million dollar construction project which consisted of the removal and reconstruction of the existing St. Louis, MO and Venice IL approaches. removal of an existing toll collection facility, and the removal and replacement of the roadway and navigational lighting (Historic Bridges of US, 2007). The location of these bridges in the St.Louis region is shown in Map 5.1.



Map 5.1: Downtown St. Louis Mississippi River Crossings in 2007

Source: East-West Gateway Coordinating Council

Table 5.5: Mississippi River Bridge timeline

1990: The Illinois Department of Transportation started building support for a new Mississippi River Bridge Project.

1993: Illinois and Missouri begin looking for a location to put the new bridge.

2000: Illinois and Missouri in cooperation with East-West Gateway begin designing a new bridge.

2002: A New Mississippi River Bridge is identified as a high priority project by the Missouri Highway Commission.

2005: Congress approves 286.4 billion dollar transportation funding bill that contains 239 million for the bridge project.

2006: East-West Gateway hires expert panel to review Mississippi River Bridge.

2007: Mississippi River Bridge Expert Panel study results are released and East-

West Gateway calls special meeting and vote on the future of the project.

2008: Illinois and Missouri announce an agreement to build a four lane (coupler) bridge across the Mississippi River connecting downtown St. Louis and Illinois.

Source: St. Louis Post-Dispatch & EWGCC

In the early 1990s, once the rehabilitation of existing river crossings had begun, it was apparent that the region needed even more capacity crossing the Mississippi River. The timeline for the development of this project is shown in Table 5.5. In fact, the completion of the rehab projects in 2007 would leave the region with fewer river crossings than it had in 1966. This was because of the closure of the MacArthur Bridge to vehicle traffic in 1981 due to pavement deterioration. The MacArthur Bridge was one of several bridges in St. Louis which carried U.S. Highway 66 until the completion of the nearby Poplar Street Bridge. Indeed, in 1966 there were twenty-two lanes crossing the river,

whereas at the end of 2007 there were eighteen lanes (Stack, 2007). Illinois began to push for a new crossing by approaching East-West Gateway, MODOT, and business leaders. Missouri and Illinois both realized the current state of affairs necessitated another Mississippi River crossing. Illinois' success in identifying the need and conveying the benefits of a new river crossing was made evident by East-West Gateway recommending that a new bridge be built and handing the project off to Missouri and Illinois (Sterman, 2006).

In 1993, Illinois and Missouri began looking for a location to build the new bridge. MODOT and IDOT began the process by conducting environmental studies and early design. There was never disagreement about the necessity of a new river crossing connecting downtown St. Louis to Illinois or the requirements to make the new bridge beneficial to both sides of the river until they started talking about money. East-West Gateway programmed a new river bridge in their LRTP and MODOT and IDOT had to identify a financing source for it, as is usual when a program or plan goes in the LRTP. Missouri, Illinois and the business community suggested they would acquire an earmark in the next transportation bill from Congress.

In 2000, Illinois and Missouri in cooperation with East-West Gateway began to discover the fiscal reality of building a new Mississippi River Bridge. During the design phase, the project's estimated cost closed in on 2 billion dollars. In an effort to bring new revenue into the region East-West Gateway was prompted to put a provision in their LRTP that the bridge would be built only if 50 percent of the money comes from a federal earmark. However, due

to a lack of monetary resources a fifty-fifty match did not appear to be realistic. As a result, East-West Gateway drafted a general statement suggesting the project was not fiscally feasible and that some new revenue source would have to contribute to building the bridge. The federal government offered little optimism that it was a source for additional revenue. The terrorist attacks on September 11, 2001 and the war in Iraq meant a lot of funds were going elsewhere, and infrastructure was low on the Bush administration's agenda. Because funding transportation was a low priority for the federal government, and Missouri is a low tax state, it was difficult to conceive how the project could be funded (Hassinger, 2007).

In 2002, a new Mississippi River Bridge was identified as a high priority project by the Missouri Highway Commission. However, Missouri restated its top priority was I-64, not a new Mississippi River Bridge. Because Illinois still had the Mississippi River Bridge as its top priority there were very heated and politically volatile discussions about which was the right project. Missouri strongly supported an unsolicited proposal from a private vendor to build the bridge and charge tolls. At peak times, the toll charges would be three dollars for cars and six dollars for trucks and at non-peak times, these would be one dollar and three dollars respectively (Hassinger, 2007). In response to the Missouri proposal, Illinois brought forward a proposal for a much less ambitious bridge they felt could be funded entirely with Illinois money.

In 2005, the local business community (e.g. St. Louis Regional Chamber and Growth Association) and local elected officials, many of whom served on

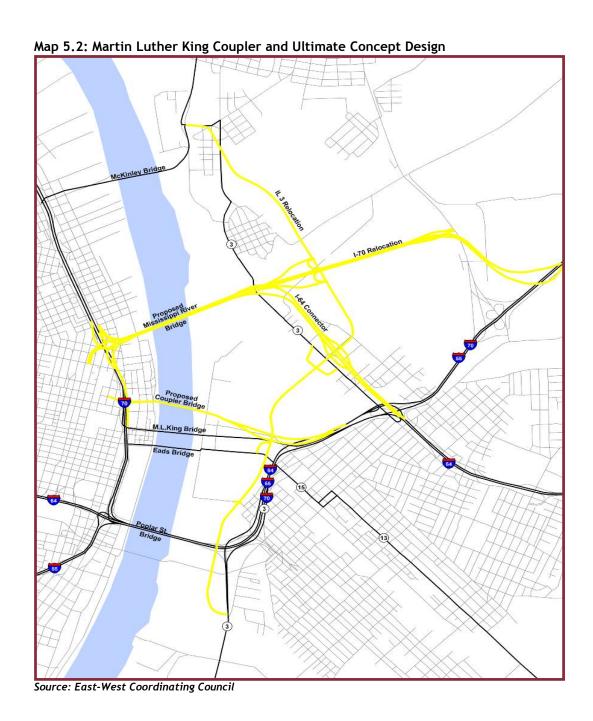
East-West Gateway committees, were successful in the acquisition of a federal earmark for a new Mississippi River crossing. The federal funds for this new bridge were the largest amount of funds dedicated for a single project in the bill (EWGCC, 2007). Congress approved a 286.4 billion dollar transportation

Table 5.6: Federal earmarks for Mississippi River Bridge, 2007	
Federal Mississippi River Bridge Project Funding (SAFETEA_LU earmark for MRB project)	
SAFETEA_LU Legislation for Missouri - Highway Bridge Program funds (12.5 million per year for 4 years) To the State of Missouri for construction of a structure over Mississippi River to connect the City of St. Louis to the State of Illinois.	\$50 million
- Transportation Improvement funds Mississippi River Bridge St. Louis, Missouri	\$25 million
SAFETEA_LU Legislation for Illinois - National and Regional Significant funds Mississippi River Bridge and related roads	\$150 million
-Transportation Improvement funds Construct new Mississippi River Bridge and related roads in the vicinity of East St. Louis, Illinois	\$14 million
Total funds	\$239 million
Source: MODOT & IDOT	

funding bill that contained 239 million dollars for the Mississippi River Bridge project. Despite the additional revenue, the region had minimal funds to contribute to the construction of a new Mississippi River Bridge project, and this is where things started to unravel. East-West Gateway could not unite the regional leadership to put that much money into a single project. East-West Gateway and MODOT were aware that it would be a tough project to fund (Sterman, 2007). Under the prevailing funding scenario in Missouri, neither MODOT nor East-West Gateway could afford to take money out of the region.

No one could identify any alternative funding sources and the project became an issue that few in the region wanted to address.

In 2006, East-West Gateway created an expert panel to take hold of a situation that appeared to be spiraling out of control due to funding issues. The creation of the expert panel was intended to identify all the possible alternatives sources of funding for the region regarding the building of a new Mississippi River crossing. In early 2007, the expert panel provided a list of all the possible choices to East-West Gateway. The panel suggested the following choices: the region could appeal to the federal government for additional funds by promoting the national significance of a new river crossing; build a smaller more cost effective bridge - a companion bridge to the MLK Bridge; use existing funds to further improve existing river crossings and infrastructure; or do nothing. The final decision was determined by a vote in February of 2007 at East-West Gateway. The vote determined that the region would follow the second option described above and build a coupler bridge (a four lane, single direction bridge) just north of the existing MLK Bridge (see Map 5.2) as part of an Ultimate Concept addressing connectivity between Missouri and Illinois that would relocate a portion of I-70.



How East-West Gateway made a difference

East-West Gateway made a difference through the formation of an expert panel to consider all the possible options to relieve congestion on Mississippi River crossings. The creation of an expert panel forced all parties involved to sit down and discuss what the realistic options were. It provided an opportunity to vote on the direction the region should go with the project. The new Mississippi River Bridge is an example of East-West Gateway making a difference by brokering a regionally acceptable, regionally affordable option through elected official involvement and eliminating the possibility of losing the largest earmark in SAFETEA_LU history, due to political infighting.

For thirteen years (1992-2005), East-West Gateway, business and local leaders had described a new Mississippi River Bridge as one of the most important transportation priorities in the St. Louis Region. Serious dialogue about paying for the bridge began in the summer of 2005. According to reports in the October 26, 2005 edition of the St. Louis Post-Dispatch, Missouri's transportation director, Pete Rahn stated, "Let Congress pay for it...this is a project that has never been on our front burner" (Crouch, 2005). Pete Rahn's stance angered his counterparts in the Metro East area. Illinois doubted that a new bridge was a priority for Missouri and suggested that MODOT should consider that states must always put up at least twenty percent of the costs of transportation projects (Stack, 2007). According to interviewee comments and reports in the St. Louis Post-Dispatch, prior to the change in leadership at

MODOT, East-West Gateway and members of the community felt the region had an agreement on a new Mississippi River Bridge. In 2001, before Rahn became transportation director in Missouri, Les Sterman stated that Missouri and Illinois agreed to pay half the project's costs (Sterman, 2005). Bruce Holland, owner of a Metro East construction company and a participant in the process for ten years, was quoted in the Post-Dispatch stating, "There was not a disagreement until Pete Rahn came along, the impression was that Missouri, Illinois and East-West Gateway were going to find a way to fund it" (Crouch, 2007). Illinois offered Missouri a loan to build a signature bridge since Missouri had lent Illinois funds to build bridges in Hannibal, MO and Cape Girardeau, MO. In January 2007, Missouri rejected the loan citing the fact that they would have to find the revenue to pay it back. Illinois Representative Jay Hoffman said it demonstrated Missouri's unwillingness to cooperate. The US Representative from Illinois, Jerry Costello, suggested that the bridge did not appear to be Missouri's number one priority, or there would need to be more movement to resolve the issue. Missouri leaders countered this argument by stating that they truly wanted to build the signature bridge, however, the problem was finding a large pot of money (Crouch, 2007). Suspicion and distrust undermined the attempts to make a deal.

After over a decade of discussions about the Mississippi River Bridge project, the two states were taking firm stances on their priorities and funding, while East-West Gateway was in the middle trying to balance the need, fiscal constraints and political strife. In my Fall 2006 meeting with Les Sterman,

Executive Director of East West Gateway, he suggested that it was time for the region to think about alternatives. Sterman stated that the region needs to consider, "...alternatives we can afford, given the current fiscal and political constraints" (Sterman, 2006). Reports in the January 9 2007, Post-Dispatch suggested that St. Louis Mayor Francis Slay viewed the river crossing in a similar manner, suggesting that not enough effort had been put together and too much effort had been put into taking positions (Crouch, 2007). At this time the region was not experiencing any movement on the project.

East-West Gateway's ability to make a difference and move the project forward was contingent upon their ability to resolve funding issues. Missouri had less money to devote and was not willing to commit as much to the project as Illinois. Because the two states have different ways of paying for transportation projects, Illinois has more flexibility in financing large projects and Missouri is often handcuffed when big-ticket needs come along due to their funding formula. Under the formula, the St. Louis, MO area: the city of St. Louis, St. Charles County, Franklin County, Jefferson County, and St. Louis County, get about a third of the state transport budget, or nearly 70 million dollars a year, for new projects (Hassinger, 2007). To use transportation money for a Mississippi River bridge, Missouri officials said they would either need to take money from other parts of the state, or the St. Louis area could spend all of its designated money on a bridge, foregoing other projects for years.

Due to these constraints, Missouri leaders viewed a toll bridge as their only option. East-West Gateway had discussed tolls with area leaders for ten

years which proved to be a point of contention for Illinois and Missouri. Missouri's transportation director, Pete Rahn, wanted to sell the future bridge to a private entity, which would build it, maintain it and levy tolls. Illinois leaders strongly opposed tolls, arguing they would not raise enough money and would hit Illinois commuters the hardest. Missouri officials, including Pete Rahn, believed tolls were a fair solution because the four other (free) downtown bridges would remain. Turning the project over to a private entity would give the two states a new bridge at no cost. This would also free up money that would otherwise be spent maintaining it. The disagreement over tolls was a focal point of contention and East-West Gateway could not get either side to budge.

East-West Gateway recognized the need for a new bridge and dwindling regional cooperation prompted the formation of an expert panel. The panel was created to review everything that East-West Gateway, Missouri and Illinois had developed since day one. The goal of East-West Gateway was to use the information obtained from the review to coalesce more regional agreement on the direction of the Mississippi River Bridge project. East-West Gateway decided to take a stand because the stalemate had dragged on for too long (2005-2007). Alan Dunstan, Madison County Board chairman and East-West Gateway member said, "we are out of time," and Mark Kern, St. Clair County Board chairman and East-West Gateway member suggested, "We have afforded ample time for all sides to weigh in, now is the time for us to act and get this project moving" (Crouch, 2006).

The panel of national transportation experts assembled by East-West Gateway was intended to establish common facts intended to help Missouri and Illinois move closer to building a bridge. The panel convened on January 8-9, 2007, in St. Louis, as part of a 50,000 dollar study paid for by East-West Gateway. The Expert Panel was comprised of ten nationally recognized experts with extensive experience in all aspects of planning, funding and implementation of major transportation infrastructure projects. The panel consisted of three former high-ranking officials from the Federal Highway Administration (FHWA), including two former Associate Administrators and the former head of the FHWA's Office of Engineering Research and Development (for a complete list of expert panel members see Appendix E). The panel's diversity of expertise and experience was designed specifically to address the complex technical, financial and political issues associated with a new Mississippi River Bridge. That expertise included: transportation funding and finance, with particular emphasis on innovative finance techniques (such as tolls) and public-private partnerships; transportation planning and traffic engineering; and transportation policy, resource allocation and institutional strategy. The Panel members offered hundreds of years worth of collective experience in planning, funding and implementation of major transportation projects.

The expert panel released their findings at East-West Gateway on January, 31, 2007. The panel determined a new Mississippi River Bridge is the region's greatest need - the number one facility, and a lack of monetary

resources is the number one problem. The bridge panel further determined that the MLK coupler, an alternative to a signature bridge, proposed by Illinois has merit. It cost 400 million dollars less than a toll bridge with similar reduction of congestion. The panel identified time as the main enemy, in that every month of delay would increase the construction cost and the resulting cost to commuters and shippers, due to inflation and increased fuel consumption. The region has already witnessed what time can do to construction costs. As Les Sterman pointed out, the signature bridge began (1995) at a price tag of 900 million dollars and by 2005 the cost inflated to 1.6 to 1.8 billion dollars (Sterman, 2005). The panel further confirmed that current funding sources would not support a new bridge. In an effort to close the gap in funding the panel proposed some options for East-West Gateway and the region to consider. These included selling naming rights for the bridge, contributions from St. Louis businesses, and a regional transportation tax. The panel further suggested that a new bridge's "national significance" might be used to leverage more federal funds. Their analysis of tolls suggested that it was doubtful that tolls could make up the financing gap on a new bridge, because the area has plenty of free bridges as alternatives. For example, the Poplar Street Bridge could remain a bottleneck if a new bridge is tolled. The existence of four free bridges leading into St. Louis would divert traffic from a tollway, which would attract a maximum of 28,000 vehicles - too few to make tolls a realistic option (Aldaron, 2007).

On Wednesday, February 21, 2007, East-West Gateway held a special meeting to discuss the findings of the non-expert panel and carry out a non-binding vote on how Missouri and Illinois should move forward on the new Mississippi River Bridge.

East-West Gateway presented the region's options at the meeting and called a vote. The Illinois proposal (option 2) to build a coupler bridge using mostly Illinois money obtained the most votes. The options facing East-West Gateway were: 1) Figure out how to pay for the scaled back version of an eight-lane "signature" bridge, at nearly one billion dollars. This option would involve finding additional sources of state revenue or coming to an agreement on tolls. According to the panel, it would take several years to explore Missouri's proposal to lease the bridge to a private investor who would build and maintain the structure for a least fifty years and collect tolls to recover costs and make money. 2) Build a companion bridge (MLK coupler) at the Martin Luther King Bridge, for about 450 million dollars. It would involve building a four-lane bridge north of the current Martin Luther King structure, and it would carry westbound I-70. The existing bridge would be renovated, with its four lanes becoming three wider ones, and would carry eastbound I-70. 3) Forget adding lanes and instead, use the 239 million dollars from Congress to improve connections to existing downtown bridges, particularly the Poplar Street Bridge. This option leaves open the possibility of building a new bridge, depending on timing and money. 4) Do nothing. This would allow money to be spent on other local projects - 50 million dollars from East-West Gateway and

261 million dollars from Illinois. The longer Missouri and Illinois defrayed the project the greater the chance of losing one of the largest earmarks of SAFETEA_LU history - 239 million dollars (Stack, 2007; MODOT & IDOT, 2007). The US Senate Transportation Committee continually evaluates progress on earmarked projects and if a region shows no progress the committee can take the money and designate it for a different region and project.

The East-West Gateway vote broke down along state lines with every Missouri member voting against the coupler bridge and each Illinois member voting for the coupler. The vote was twelve to ten in favor of the MLK proposal because two Missouri members were not present. The vote stated that the region agrees to let Illinois spend its money and build a coupler bridge adjacent to the current MLK Bridge. According to Ed Hassinger, District Engineer at MODOT,

"I have never seen that before, it was the first time. I mean there has been some dissension on the board but it is usually not like that. It is almost like drawing party lines, yes it is, right down state lines. The chairman who is from Illinois thinks that this is valid and says that this is what is going to happen. And our director has said that if it is along state lines that it means nothing" (Hassinger, 2007).

Mark Kern, East-West Gateway member from Illinois, suggested that if the region does not act on the proposal, "...there is real danger that there will be no bridge - federal money will be lost and the cooperative relationship between the two states and our local governments will be irrevocably damaged" (Crouch, 2007). St. Louis County Executive, Charlie Dooley, East-West Gateway member from Missouri, suggested, "It's a mistake to draw a line in the sand and say this is the way it's going to be" (Crouch, 2007).

East-West Gateway intended for the vote to send a strong message. The message solicited responses from each state's capital. According to the February 28, 2007 Post-Dispatch, Missouri Governor Matt Blunt stated that East-West Gateway, "...did not allow time to review a new proposal that has come forward" (Shields, 2007), whereas Illinois Governor Rod Blagojevich suggested the vote, "...took a big step in the right direction" (Shields, 2007).

The vote highlighted the partisan nature of the dispute, and brought the two sides closer to an agreement than ever before. East-West Gateway, Missouri and Illinois realized that this rift could damage their relationship in the long term, and send a sour message to residents in the region. According to Ed Hassinger, "This is a rift that may change the dynamics in the cooperative relationship between MODOT, IDOT and East-West Gateway" (Hassinger, 2007). This possibility resulted in the two states spending the next year coming to an agreement.

On February 28, 2008, a year after the final vote, Illinois Governor Blagojevich and Missouri Governor Blunt officially announced the two states had reached an agreement to build a new, 4-lane bridge (MLK coupler) one mile north of the Martin Luther King Bridge which serves as the first phase of

an "Ultimate Concept" to build a new, modern river crossing between Missouri and Illinois. The two states lack sufficient funding to construct all components of the project at the same time. The estimated cost of the Ultimate Project Concept is between 1.8 billion dollars and 2.2 billion dollars. The scope of work announced on February 28, 2008 is the first phase of the project. The first phase of the bridge is projected to cost 640 million dollars with Missouri allocating 93 million dollars and Illinois allocating 213 million dollars for the

Table 5.7: Mississippi River Bridge initial phase funding

Funding by component:

Component DescriptionEstimated AmountIllinois Relocated I-70 Roadways\$264 millionMississippi River Bridge\$306 millionMissouri North I-70 Interchange\$70 millionTotal Estimated Cost\$640 million

Funding by source:

SourceAmountIllinois Funding\$313 millionMissouri Funding\$88 millionFederal Funding\$239 millionTotal Funding\$640 million

Source: East-West Gateway Coordinating Council

bridge. Missouri will also allocate 70 million dollars for roadway connections and Illinois will allocate 264 million dollars. Construction on the new bridge could begin in 2010 and is expected to last four to six years (IDOT, 2007 & MODOT, 2007). Breakdown of the funding is shown in Table 5.7.

East-West Gateway made a difference by garnering regional cooperation and brokering a political deal between two states with distinct and opposing

^{*}Calculations are based on construction beginning as early as 2010 and lasting four to six years.

views. For over a decade, East-West Gateway struggled to find agreement between Missouri and Illinois. The only commonly shared means for cooperation between the two states was East-West Gateway where plans were discussed, funding options evaluated and the political realities of the region highlighted. In an effort to move a stagnant process along, East-West Gateway hired a panel of transportation experts to ascertain common facts, and provide advice on financing and design for Missouri and Illinois. The panel provided a list of recommendations to the states' and East-West Gateway which ultimately provided the solution adopted by the region - the MLK coupler. The Martin Luther King Coupler Bridge offers the region four additional lanes of river crossing at a substantial savings. The coupler bridge is estimated to cost in the region of 640 million dollars, much better value for money than a signature bridge, with estimates ranging from 910 million to 1.8 billion dollars.

Summary

The new Mississippi River Bridge project offers evidence of East-West Gateway leading the regional transportation process. The case illustrates East-West Gateway making a difference by increasing public saliency (P1) and elected official involvement (P3). There is little evidence at this point in the project to support East-West Gateway's consideration region wide factors (P2: P2a, P2b, P2c) (Table 5.8)

Table 5.8: Propositions supported by new Mississippi River Bridge case study

P1	P2	P2a	P2b	P2c	P3
X					X

East-West Gateway's creation of an expert panel and calling a regional vote increased public saliency. The seriousness of the issue was highlighted by the neutral outside consultants gathered to advise Illinois and Missouri. From the time the expert panel was created (December 2006) and the vote (February 2007) there were forty-two articles on the panel or vote in the Post-Dispatch and Belleville News Democrat. Of these forty-two articles, twenty-two appeared in January, and eight appeared during the week of the vote (Feb. 20-27). The articles, with quotes from numerous state and local leaders, highlighted the partisan nature of the debate. For instance, the exchange between Missouri Governor Matt Blunt and Illinois Governor Rod Blagojevich published in the Post-Dispatch is a great example of how East-West Gateway's action's increased the saliency of the issue. They forced state and local leaders to find a regionally acceptable solution, prompting local news sources to cover the issue. East-West Gateway's efforts and stance on taking a vote brought attention to the state of the project and provided an additional level of scrutiny by constituents observing the process, and watching to see how their regional leaders resolved the problem.

It is difficult to determine whether East-West Gateway's actions will result in support of the propositions addressing region-wide factors. Several of the variables (e.g. land use, equity, quality of life) in the region-wide propositions are contingent upon the work of East-West Gateway during the design phase of a project and upon the project's completion. While this study was being written, many of the meetings that would offer additional evidence

were just beginning. For instance, on April 16, 2009 a public meeting was scheduled to discuss road closures, detours, bridge demolition, bridge replacement, property impacted, and an overview of the first phase. At these meetings the discussions about land use and the environmental impact were to be discussed. On July 7 and 8, 2009 IDOT and MODOT planned two public meetings to discuss a dual Disadvantaged Business Enterprise (DBE) goal for the project. These two DBE's will offer contracts for work on the new bridge to minority businesses and women-owned businesses (MODOT & IDOT, 2009). These meetings would have provided evidence in regard to equity issues. The project did include some discussion of employment factors. These were limited to arguments for a new bridge by members from Illinois and the RCGA. There is little evidence to suggest it was a major concern for East-West Gateway. All the evidence points toward their concern to get a project that each state could agree upon.

East-West Gateway made a difference through the inclusion of a large number of major elected officials. The study alone highlights comments and concerns by numerous state and local officials. These include: Illinois Governor Blagojevich; Missouri Governor Blunt; St. Louis County Executive, Charlie Dooley; Alan Dunstan, Madison County Board chairman; Mark Kern, St. Clair County Board chairman; and East-West Gateway Executive Director Les Sterman. The East-West Gateway vote included twenty-two elected officials - 12 from Illinois and 10 from Missouri. In the forty-two articles published local newspapers during the height of the bridge debate there are thirteen different

state and local officials quoted in the Post-Dispatch and seven quoted in the Belleville News Democrat.

The case points toward the role the MPO plays as the focal point for regional transportation decisions. The evidence suggests that the MPO was able to create a modest level of horizontal cooperation between Illinois and Missouri due to the advisement of an expert panel and an organizational vote. In many instances the vote may be seen as a coercive measure, however, it illustrates the capabilities of the MPO to bring together two government entities and accept their role in shared policymaking. As a regional governance institution the MPO's role is to bring together two or more government entities in the planning or provision of public goods (Gerber & Gibson, 2009). The MPO's ability to take a non-binding vote and garner coordination highlights the potential and promise of these regional bodies. This was a direct result of East-West Gateway increasing public saliency and elected official involvement.

Page Extension Case Study

The Page Extension project is the continuation of Page Avenue (County Highway D), from the west side of Interstate 270 (I-270) in St. Louis County across the Missouri River into St. Charles County. The project is on the MODOT system and is illustrative of a regional project facilitated by East-West Gateway, involving St. Charles County and St. Louis County. East-West Gateway programmed the project, facilitated priorities and acquired additional funds.

As the population of St. Charles County has grown rapidly since the 1970s, congestion over the Missouri River into St. Louis County increased, and it

became apparent there was a need for more crossings between the counties. According to the St. Louis Regional Chamber and Growth Association (RCGA), St. Charles County, with a population of 337,572, has been one of the fastest-growing counties in the country for decades. The county experienced 55 percent growth in the 1980s, 33 percent growth in the 1990s, and another 13 percent growth between 2000 and 2004 (RCGA, 2007). The county's rapid growth increased vehicular traffic on the three bridges connecting St. Charles County and St. Louis County.

In 2002, approximately 350,000 vehicles crossed the three bridges between St. Charles and St. Louis counties on a daily basis: first, the Blanchette Bridge (I-70); second, the Discovery Bridge (Route 370); and third, the Daniel Boone Bridge (Route 40/I-64). The Blanchette Bridge carried 206,000 vehicles on I-70 on a typical weekday - the most in the St. Louis area - while the Daniel Boone Bridge on Highway 40-I-64 carried another 81,000. Highway 370, a six lane route, with 63,000 vehicles a day was the least traveled of the three river crossings (Leiser and Crouch, 2003). The Page Extension was designed to relieve the congestion of commuter and interstate freight traffic along I-70 and other major highways in the St. Louis area.

Construction on the Page Avenue Extension, officially called Missouri Route 364 began in July 1997. Transportation officials expected the 325 million dollar Page Extension to remove about 60,000 vehicles a day from the other river bridges (I-70, Missouri 40/61, and Missouri 370). They anticipated that about 85 percent of the motorists would use Page Avenue instead of I-70. An

additional ten percent of the traffic would choose to cross the river on the new extension rather than the Daniel Boone Bridge on Highway 40-61 (Crouch, 2003). According to a 2004 traffic study, the construction of Route 364 reduced traffic volumes on I-70, Route 40 and I-370 by nearly twenty-six percent. In 2005, as many as 116,000 vehicles a day used the bridge (MODOT, 2007). Route 364 is to be completed in three phases with phase one, Page Avenue west of I-270 to Highway 94, completed in 2003. Funding for phase one of the project was split between state and federal funds. Twenty percent came from the state and eighty percent were federal funds. Phase two, Highway 94 east of Harvester Rd. to Mid-Rivers Mall Drive is scheduled for completion by the Fall of 2009. As of 2007, Phase three (Mid-Rivers Mall Drive to I-64) had not secured funding and no completion date has been determined.

The project's history

East-West Gateway determined there was a need for the freeway in 1969. East-West Gateway studied the feasibility of the Page Avenue Extension from October 1969 to August 1970, and concluded Page Avenue was a necessity for the region. Since 1970, the region held numerous public meetings including meetings with local residents, subdivision trustees, local governments, St. Louis County, and St. Charles County officials to discuss the project.

In the 1970s there was a debate as to whether to build the Page Extension project (then known as the Brown Road Extension) or the Missouri 370 project between St. Charles County and St. Louis County. According to Ed Hassinger, MODOT District Engineer, at that time the St. Louis region was

having a difficult time agreeing on which Missouri River crossing to build first.

MODOT stepped in and told the region to inform them once a decision had been made on which project to build first. Meanwhile, MODOT was going to spend the money on projects in Kansas City.

In the early 1980s, due to structural defects, the Old Rock Road Bridge over the Missouri River needed to be replaced. This forced the issue of Missouri 370 being built before the Page Extension (MO-364). In 1988 construction began on a new interchange at I-270 and Missouri 115 (later designated Missouri 370) in St. Louis County, and also on a new Missouri River crossing between St. Louis County and St. Charles County on Missouri 115 (MO-370). In 1993, after the opening of the first leg of the project it became apparent the region needed an additional crossing to provide a greater impact.

During the construction of MO-370, East-West Gateway, St. Louis County and St. Charles County, were planning for another river crossing and moved forward with the MO-364 process. In 1984, it became evident that earlier proposals to connect the freeway to I-70 were no longer feasible due to the rapid growth of the city of St. Peters. Several cities in St. Charles requested a location study on the Page project and proposed a new alignment called the Red Line connecting the highway to I-64. The Missouri Department of Transportation (MODOT) authorized the project in the fall of 1986. In the spring of 1987, Missouri voters approved a fuel tax increase which included funding for the project. MODOT held numerous meetings but the alignment was not approved until June 1990. The public hearing to select the alignment for Page

Table 5.9: Page Avenue Extension timeline

1969: East West Gateway Master Plan for the St. Louis Area includes the Page Extension.

1970: The Missouri Highways and Transportation Commission authorizes a detailed study for extending Page Avenue.

1984: Several cities in St. Charles request a location study on the Page project.

1987: Proposition A: A gasoline tax increase of 4 cents a gallon is approved by Missouri voters. The first phase Page Avenue is now funded.

1989: The Red line is given tentative location approval by the Commission.

1990: The Page public hearing is held in St. Charles. Approximately 1,100 attend and strongly support the Red line for the project. The Commission approves the Red line and Creve Coeur Park mitigation plan for the Page extension.

1995: The National Park Service issues the Record of Decision for the additional parkland.

1996: Page Avenue is assigned the name MO Route 364, bids are received for the Bike trail in Creve Coeur Park, the first Page Avenue project (\$486,000) and the Page Avenue groundbreaking ceremony is held at Creve Coeur Park.

1997: Bids are received for the Bennington Place bridge, the first roadway contract (\$3.18 million) and the Missouri River bridge land piers (\$8.6 million).

1997: The St. Louis County Council approves the acceptance of the mitigation land and gives MODOT the right of way and easements through the park. Approximately 1000 signatures are received by St. Louis County, which provides 40 days to obtain 23,000 signatures to put the Page Avenue ordinance to a vote.

1998: St. Louis County voters approve project to allow St. Louis County to provide an easement to MODOT through Creve Coeur Park and MODOT will give St. Louis County 1,005 additional acres for the park.

1999: The contract to construct the bridge over Creve Coeur Park was awarded for \$73.4 million and the contract to construct the remainder of the bridge over the Missouri River was awarded for \$79.3 million.

2001: The last Page Ave. roadway contract awarded. The \$18.8 million project includes concrete paving, signs, traffic signals, and lighting in St. Louis County from west of Bennington Road to the Missouri River.

2003: Page (MO Route 364) opens to traffic.

Source: MODOT

Avenue was held in June 1990. The environmental impact study was completed in November 1992 and the project was then set to receive final clearance from the federal government. However, at this time, Secretary of the Interior Bruce Babbitt took office and ordered more environmental studies resulting in more land mitigation for intrusion into Creve Coeur Lake Memorial Park. The timeline of the project is summarized in Table 5.9.

The Environmental Impact Statement (EIS) was approved in December 1992. In the fall of 1995 the federal government gave the final clearance for the project 11 years after active planning began. For nearly 27 years the roadway was simply referred to as the Page Avenue Extension, but in February 1996 MODOT gave the freeway an official designation of Missouri 364. Construction on the freeway was divided into three separate phases and the first phase began in 1997. The total cost to construct Page Avenue from Bennington Place to Route 40 was estimated at 600 million dollars.

The first phase of Page Avenue project opened on December 14, 2003. Phase one originally included work from I-270 to Route 94 through the Creve Coeur Lake Memorial Park including Veterans Memorial Bridge spanning the Missouri River between St. Louis and St. Charles counties. The scope of the construction was expanded due to concerns with traffic congestion. MODOT decided to extend the freeway further west along its concurrency with Missouri 94 to Harvester Rd. Two major bridge structures were required to carry this out. These were Veterans Memorial Bridge and Creve Coeur Lake Memorial Park

Bridge at 79 million and 74 million dollars respectively. The total cost to construct this phase was 394 million dollars (Table 5.10).

Table 5.10: Costs of Page Avenue Extension - Phase 1

Contractual Obligation Cost

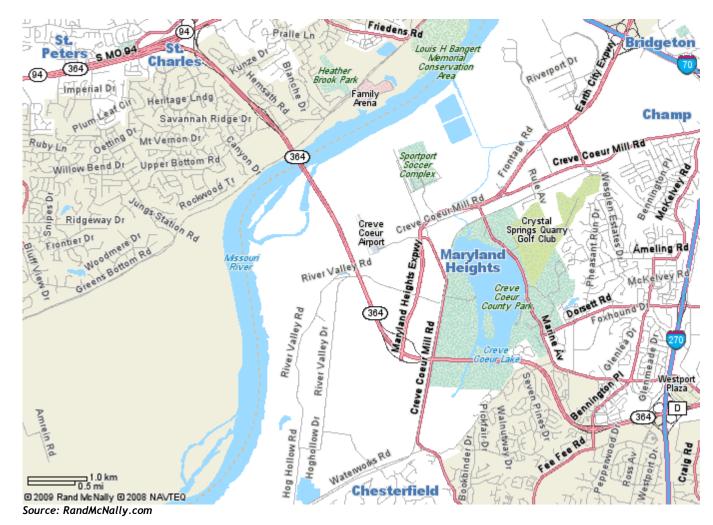
Construction \$350 million
Right of Way \$26 million
Park Land Mitigation \$18 million

Total \$394 million

Source: MODOT

Phase one also included improvements to the Creve Coeur Lake Memorial Park. The park doubled in size and an existing bike trail was linked to the Katy Trail in St. Charles County via the Veterans Memorial Bridge. The bike trail in St. Louis County covers part of the 1,005 acres that had to be acquired as mitigation - a federal requirement - for Page Avenue's extension over the Creve Coeur Park. On the west side, in St. Charles County, the bridge and bike path connect to the Katy Trail. The freeway is proposed to continue from Missouri 94 southeast to the Missouri N intersection. MODOT has begun construction on the second phase of the Page Extension. Construction on the project began in the fall of 2006 and is scheduled to be completed by winter 2009.

Map 5.3: Page Extension



How East-West Gateway made a difference

The Page Extension provided an opportunity for East-West Gateway to make a difference. East-West Gateway helped St. Charles County with priorities during the second phase, and with financing over an extensive period of time. East-West Gateway provided some support to the region regarding environmental issues. The freeway's alignment would take it through the Creve Coeur Lake Memorial Park and the floodplain of the Missouri River, drawing opposition from environmental groups including the Sierra Club and the Missouri Coalition for the Environment. The project suffered significant cost overruns and, at the beginning, critics claimed it would contribute to urban sprawl. Opponents of the extension continually stated that the new roadway would damage Creve Coeur Park, contributing to the exit of the middle class from St. Louis and inner suburbs (Dummit, 1998). Funding shortages for the project resulted in East-West Gateway coordinating priorities for phase two and the failure of Proposition B has resulted in East-West Gateway and St. Charles County postponing the construction of phase three.

Rising costs and uncertainty about the project's impact on urban sprawl resulted in many St. Louis County municipalities passing resolutions opposing the freeway. Several of these localities called for East-West Gateway to postpone or pull funding for other projects programmed in St. Charles County. The project consisted of 57 million dollars in cost overruns due in large part to high steel costs which added 23.8 million dollars. East-West Gateway agreed to cover increased costs in Page Avenue, but St. Charles County would have to

make some sacrifices. Members of East-West Gateway said St. Charles County - believed by many to be the chief beneficiary of the new span - should have some if its other projects postponed. The board unanimously decided to postpone a 7.7 million dollar upgrade to seismic retrofit Highway 40 in St. Charles County. In exchange East-West Gateway would cover the cost overruns for Page Avenue (Leiser, 1999).

Opponents of the project at East-West Gateway pushed for the MPO to scrap its support and to divert federal transportation dollars to fixing roads and bridges and spending more on mass transit in the St. Louis metropolitan area. These impending threats spurred St. Charles County officials to spend 150,000 dollars to help finance two educational campaigns designed "to counter a drumbeat of opposition," Ortwerth said. Both these educational efforts were necessary to counteract what he called "fallacies" about the Page Extension, such as suggestions that the new bridge would encourage urban sprawl. Joe Ortwerth recalled that it was unlikely that East-West Gateway would pull federal funds on the project, "but every year we (St. Charles County) have to fight a battle to get funds for Page," The more that the opposition to Page went unanswered, he said, "the more those funds were placed in jeopardy" (Ortwerth, 2007).

East-West Gateway makes financial adjustments to projects, such as the added costs for fixing the Poplar Street Bridge in Downtown St. Louis as well as Louis region was lobbying (East-West Gateway) for Page and their focus was to sell the project to the State Highway Commission in an attempt to convince the

commission it was worth funding. Ultimately, Governor Ashcroft decided it should be included in the Proposition A package. In 1987, the initial funding for Page was promised in proposition A. Missouri for the first time in several years gave an increase in gas tax and stated that the Page Extension was a project the tax would fund. The state of Missouri initially committed to paying twenty percent of the Page Extension costs. However, this was a commitment that could not be fulfilled by Missouri due to budget constraints (Ortwerth, 2007).

Critics of the Page Avenue Extension complained that the state left nearly 200 million dollars out of its cost estimate of 542 million dollars. This 200 million dollar figure is what inflation was projected to add to the costs over the course of the project. Tim Fischesser, executive director of the St. Louis County Municipal League, a leading opponent of the project, argued that the true cost was 937.6 million dollars. He said his total took into account inflation and the cost of improvements to other highways due to the additional traffic the extension would bring them. Linda Wilson, a spokesperson for MODOT, noted that the 47.3 million dollars already awarded for seven contracts to construct the extension was 15.7 percent less than expected (Sutin, 1998).

In addition to East-West Gateway constantly trying to balance the financing of the multi-phase project, the region had to deal with environmentalists during the initial phase of the project. The Missouri Coalition for the Environment unsuccessfully fought to block the extension. Their attempts frustrated members of East-West Gateway, St. Louis County officials

and St. Charles County officials (Goodman, 2000). The environmental groups filed lawsuits from a variety of angles, and they had some leverage on the issue of Creve Coeur Park. St. Louis County and East-West Gateway discussed building the road through the park with the US Department of Transportation (USDOT) and Federal Highway Administration (FHWA) prior to the project. These talks revolved around the issue of expanding the park using federal funds while leaving a corridor open for Page Avenue to cut through in the future. The federal government stated that was not a problem. However, years later, the federal government objected to the project on the basis it would be intruding on federal park lands. This was the tough part of the process which ultimately resulted in a public vote (Hassinger, 2007).

The long fight over extending Page Avenue reached a climax in late 1998 that put the region's efforts in jeopardy. A petition to put the freeway up for referendum was submitted in 1998, and enough signatures were collected to force a vote. The vote was on a St. Louis County ordinance to grant right-of-ways and easement for the expressway through Creve Coeur Park. On November 3, 1998, voters in St. Louis County approved right-of-way for the 10-lane highway and bridge by a 61 percent margin (Sutin, 1998 & Dummit, 1998). With funding in place, the vote allowed construction to continue on the first phase.

Financing the approved extension did not become an issue until the second phase. The total cost to complete the first project in phase two is estimated at 32.5 million dollars. After the completion of phase one, funds

were limited and East-West Gateway helped St. Charles County with priorities. East-West Gateway programmed each project over a period of time in an effort to have the money and get critical elements for the freeway to function completed. East-West Gateway officials are looking for other funding to carry through the project, and are lobbying MODOT for the use of 9 million dollars for the purchase of right-of-ways near the planned extension. That money was programmed in 2003 for resurfacing Highway 94 between Highway 40 and Mid Rivers Mall Drive. That project would still be completed, but held off a year. According to Joe Ortwerth, "When the voters decided not to approve proposition B, I'm sure they had many good reasons, but the fact of life remains, when they turned it down, they basically decided to scuttle any further work on the Page Avenue bridge project" (Cole, 2002). The region may have to wait awhile for completion of the third phase due to the failure of Proposition B because state funds are limited and significantly less than if the proposition would have passed. The start of construction on the pending phase two project will be in 2010, meanwhile, phase three will be delayed until at least 2011, according to an East-West Gateway schedule. With Proposition B funding, the project could have moved forward between 2003 and 2011. Proposition B would have raised about 500 million dollars for statewide transportation improvements through a 4-cent per gallon fuel tax, as well as a half-cent sales tax increase. If passed, it would have provided 79 million dollars of the 130 million dollars needed for the Page Avenue extension (EWGCC, 2007). Proposition B garnered only 255,575 yes votes and 674,749 no votes. The

proposition won only one of Missouri's 115 counties (114 counties and St. Louis City). The final tally was 75 percent against and 25 percent for the new tax (Missouri Secretary of State, 2002).

Funding has now been secured to extend the freeway from west of Harvester Rd to west of Jungermann Road, and construction could begin by 2010. Some right-of-way is being bought and some design work has been completed. However, no money has been allocated for construction, and no dollars to purchase the right of way and finish construction on Phase two of Route 364 from west of Jungermann Road to Mid Rivers Mall Drive is 70 million dollars (MODOT, 2007). The phase three projects remain unfunded, however most of the design work has been completed and MODOT has purchased approximately 50 percent of the right of way needed. There is little money available at this time to buy more property, no other money has been allocated for construction and no construction start dates have been set. The estimated cost in 2008 dollars to purchase the remaining right of way and construct Phase three of Page Avenue is 140 million dollars (MODOT, 2008).

The opening of the freeway (MO 364) increased the number of lanes across the Missouri River in the St. Louis metropolitan area from 23 to 33. It provides an alternate route to the Daniel Boone Bridge, Blanchette Memorial Bridge, and Discovery Bridge crossings. MODOT investigated traffic volumes on MO 364 for Monday through Friday only. In March 2004, MO 364 only carried approximately 45,000 vehicles a day Monday through Friday. By the fall of 2004, MO 364 carried nearly 54,000 vehicles a day Monday through Friday. MO

364 serves mainly as a commuter route with strong traffic volumes Monday through Friday, especially during the morning and evening rush hours. MODOT officials are very pleased with the latest traffic counts, which show that traffic volumes are continuing to increase since initial numbers were released in March 2004. In addition, traffic volumes at the three other Missouri River crossings have decreased significantly since MO 364 opened to traffic, with a 26 percent decrease on I-70, US 40/61 and MO 370 (MODOT, 2007).

Table 5.11: Total traffic volumes (Monday through Sunday) for Missouri River crossings between St. Louis and St. Charles counties.

I-70 186,773 (fall 2003) 165,079 (fall 2004) Decrease = 21,694 (12%)

Missouri 370 59,907 (fall 2003) 56,782 (fall 2004) Decrease = 3,125 (5%)

US 40/61 85,183 (fall 2003) 77,523 (fall 2004) Decrease = 7,660 (9%)

Missouri 364 49,969

Source: MODOT

Summary

The Page Extension project offers evidence of East-West Gateway supporting the regional transportation process. There is evidence to support the premise that the project was publicly salient (P1), however, no evidence supports the premise that this was a result of East-West Gateway's efforts. The evidence does support the proposition that East-West Gateway considered quality of life factors (P2: P2a). There is no evidence that points toward East-West Gateway's consideration of employment factors (P2b), equity issues (P2c) or elected official involvement (P3).

Table 5.12: Propositions supported by Page Avenue Extension case study

l	P1	P2	P2a	P2b	P2c	P3
		X	X			

East-West Gateway did not contribute to the public saliency of the Page Extension. The evidence suggests that the issue was already highly salient without the efforts of East-West Gateway. The saliency of the project was because of a regional vote to approve the right-of-way through Creve Coeur Park. This was due to strong opposition from environmental groups including the Sierra Club and the Missouri Coalition for the Environment, as well as the concern that the new roadway would contribute to urban sprawl, driving the middle class from St. Louis County to St. Charles County. This suggests that in this particular case the efforts of East-West Gateway in public saliency were not required, therefore allowing it to focus on other issues. News articles often focused on the controversial environmental issues. In fact, the LexisNexis search determined that 72 percent of the articles in regard to the Page

Extension were about either environmental or urban sprawl issues. Only 12 percent of the LexisNexis hits mentioned East-West Gateway. These covered the additional funding that the MPO gave St. Charles County to pay for cost overruns. The most significant effort to make the issue publicly salient was the public campaign put forth by St. Charles County. The county spent 150,000 dollars in an attempt to counter the opposition's point of view that the project contributes to urban sprawl and is harmful the ecosystem.

East-West Gateway did contribute to the quality of life through their efforts on the Page Extension. The Page Extension improved the quality of life for the St. Louis region by connecting recreational resources in St. Louis and St. Charles counties. The extension connects Creve Coeur Park in St. Louis County and the Katy Trail in St. Charles County via bicycle and pedestrian traffic. The completion of the first phase allowed residents on either side of the river to enjoy these recreational benefits without the use of an automobile. The significant contribution that allowed for this improved quality of life is East-West Gateway covering the cost overruns of 57 million dollars. The additional funds helped to complete an alternate route to the Daniel Boone, Blanchette Memorial, and Discovery Bridge crossings which resulted in a 26 percent decrease in traffic volumes on these three crossing combined (MODOT, 2007).

The MPO's role in the project does not point toward the consideration of other regional factors, such as employment or equity issues. The Page Extension serves as a direct connection to Earth City, Maryland Heights and the Westport area in St. Louis County. In St. Charles County the direct connection

is primarily to residential areas. In St. Louis County there are numerous places of employment, particularly due to a large industrial park in Earth City. However, the interviewees and news sources never cited employment as a reason or a priority. The driving force behind the project was to mitigate traffic between the two counties.

The case offers no evidence that East-West Gateway increased the participation of elected officials. The evidence does suggest that East-West Gateway guided a cooperative and comprehensive planning process. They helped to conduct the environmental studies, provided additional funding to cover shortages and prioritized funds and project selection in the second phase.

The MPO's contribution to quality of life factors illustrates how these regional governing bodies can align with regional interests to make a difference. The project's ability to reduce congestion, provide an additional connection between the two counties and connect people without autos across a geographic boundary influenced demographic patterns and job access. "By influencing demographic patterns, job access, and income, transportation decisions exert a profound impact..." (Weir et al., 2009). In this case the impact was an improved quality of life.

Interstate 64 Reconstruction Case Study

Interstate 64/US 40 (I-64), locally known as Highway 40, is a 70 year old stretch of roadway on the MODOT system that dissects the St. Louis region into north and south. The highway runs east and west from St. Charles County

through downtown St. Louis. For decades, I-64 has been the main thoroughfare for the St. Louis region, connecting corporate downtown St. Louis with Clayton, Missouri, a large office and business district located in Mid-St. Louis County, and the prosperous arterial corridor of St. Louis County. The largest highway rebuilding and first design-build project in Missouri's history began on this stretch of roadway in St. Louis County and the city of St. Louis during the spring of 2007. It was finished in December 2009.

According to MODOT, the 535 million dollar project would replace deteriorated road pavement and bridges, making travel through St. Louis safer, easier and less congested. On average, about 170,000 vehicles a day travel along the stretch of I-64 that have been rebuilt. There will be improved traffic flow through better design, with elimination of short, tight entrance/exit ramps and merges, and the addition of dedicated exit lanes and wider shoulders. The construction involves the rebuilding of 32 overpasses, replacing 12 miles of roadbed and the interchange of I-64 and I-170 (MODOT, 2007).

Momentum to rebuild I-64 began taking shaping fifteen years ago.

Motorists were suffering from major congestion in both directions, between Hanley Road and Kingshighway. In 1992, MODOT proposed a plan to add a lane to each side of I-64, taking some of Forest Park in the process. Opposition killed the plan because the construction would transform a small area within Forest Park, as well as other issues. Despite the initial failure, the determination of MODOT to address congestion problems only grew and the region retrenched and decided to start a public process and

engage its citizens. MODOT basically re-evaluated the environmental process from a public standpoint and talked to thousands of people.

The vintage 1940s roadway was showing signs of irreparable wear. Pounding from cars and trucks was turning some of the road's foundation into rubble. Each year, the bridges and overpasses fared worse in inspections. The McKnight Bridge over I-64 was falling down with one lane closed temporarily. The truth is that MODOT could not open the lane without the potential of cars falling off the overpass on to the highway (Hassinger, 2007).

MODOT presented the project to East-West Gateway. Fortunately, the I-64 project was one of East-West Gateway's top priorities and they programmed the first project. East-West Gateway's twenty-one member board of directors approved the concepts in 1997. This approval initially programmed 50 million dollars from federal funds and gave MODOT regional blessing to move forward. East-West Gateway conducted all the procedures that ISTEA required from defining corridor groups, designating an aesthetics committee and conducting meeting after meeting. The process included four citizen committees and numerous subcommittees which put together a more detailed plan for the twelve mile corridor, ranging from a design theme to the determination of which homes would be taken through eminent domain (Crouch, 2006). MODOT agreed to start work on the project in an incremental fashion because the 50 million dollars initially programmed at East-West Gateway was not enough to complete the project (Hassinger, 2007).

MODOT's plan was to begin the I-64 project with work on the Kingshighway interchange in 2008. However, it quickly became evident that the region could not rebuild I-64 one interchange at a time. This could choke off the region and cause numerous additional problems, or after completion of the first interchange MODOT would not be able complete the rest because the public outcry would be so great. MODOT's overall strategy was that the region needed to work on interstates one at a time, finish the projects rapidly, and get out of there (Hassinger, 2007).

Fortunately, the passing of Amendment 3 (a new state constitutional amendment that redirected existing highway user fees to MODOT and cut MODOT yearly fees, providing additional funds to MODOT by cutting expenses and increasing revenue) allowed the region to garner 300 million dollars for the I-64 project. Voters approved Amendment 3 in November 2004, by a margin of 79 percent to 21 percent. Most of the additional revenue is generated by the state's vehicle sales tax. Previously, half the tax went to MODOT and half was put in the state's general revenue fund. Amendment 3 requires all vehicle sales tax go to MODOT. Prior to Amendment 3, MODOT paid yearly fees to a variety of state agencies for transportation related services. The amendment eliminated those payments, except for the funds that go to the Missouri Highway Patrol, and also reduced the amount of funds going to the Department of Revenue. Amendment 3 took effect July 1 2005, and was phased in over four years. When the amendment to full effect, in 2009, it added 180-190 million

dollars a year to MODOT's budget for transportation system improvements (MODOT, 2007).

The disbursement of the Amendment 3 funds left the Kansas City and St. Louis regions to determine how best to spend their money. The state of Missouri told these two regions they would receive their money from the funding distribution and they could figure out their priorities. The St. Louis region's top priority in Missouri was the I-64 project.

The project's history

The history of the I-64 project is summarized in Figure 5.13. The highway department's intent in the 1930s was to build a freeway that would relieve the amount of traffic on the other east-west roads in St. Louis County. Residents in St. Louis were moving west to the county in droves. The first piece of the highway opened in 1936 between Kingshighway and Skinker Road and was named the Oakland Express Highway. In 1938, the highway reached Chouteau Avenue. The roadway was St. Louis' first highway with a speed limit of forty-five miles an hour, but crashes were common and resulted in regional pressure to lower the limit. During World War II, the speed limit was decreased to thirty-five miles an hour in an effort to save rubber. The following year, the St. Louis Board of Aldermen renamed the highway the Red Feather Expressway.

On the area's western fringe, construction on fourteen miles of roadway began at the Spoede Road overpass in 1936. This stretch of roadway between Lindbergh Boulevard and the Missouri River opened to traffic in 1938, rolling through cornfields and new subdivisions. It was quickly dubbed the "Daniel"

Boone Expressway." Extending the expressway east to Brentwood Boulevard proved challenging. The buildup to World War II resulted in labor shortages and slowed the pace of construction. Manpower was so short that the contractor requested permission to use German prisoners of war as general laborers, which was refused by the federal government. Steel shortages led to more delays, with work on the bridge over Clayton and Warson roads held up for four years because of the short supply. Finally, in 1946, that bridge opened to traffic, completing the stretch between Brentwood Boulevard and Lindbergh Boulevard. Finally, the connection between Brentwood Boulevard and Kingshighway was completed in 1959 (MODOT, 2007).

In 1988, Highway 40 was designated as Interstate 64 extending from downtown St. Louis through St. Louis County. In 1992, MODOT proposed widening I-64 from six to eight lanes between Hanley Road and Skinker Boulevard, taking 200 homes and part of Forest Park. Bitter opposition to taking a portion Forest Park and forever transforming the park by moving a heavily traveled bike/pedestrian path which parallels the interstate forced MODOT to back away from the proposal. The events that took place in 1992 may have saved Forest Park but it did not eliminate the need for more capacity.

In 1996, MODOT, East-West Gateway and Bi-State Transit Agency conducted a joint study examining three regional transportation concerns: improving 12 miles of I-64, extending Metrolink and extending I-170 south to

Table 5.13: Interstate 64 timeline

1950s: MODOT links the Daniel Boone Expressway to the Red Feather Expressway. The expressways, and some of their overpasses, were built in the 1930s and 1940s.

1988: Highway 40 designated as Interstate 64 extending from downtown St. Louis through St. Louis County.

1992: State proposes to add a lane in each direction to Highway 40 between Hanley Road and Skinker Blvd., taking 200 homes and part of Forest Park. Bitter opposition kills the idea.

1996: MODOT joins EWGCC and Bi-State Transit Agency in a study that examines improving 12 miles of Highway 40, extending Metrolink and extending Interstate 170 south to Interstate 55.

1997: EWGCC governing board approves the study's recommendations to rebuild 12 miles of I-64.

1999: MODOT applied three and half inches of overlay on interstate to give the roadway seven more years of service.

2000: MODOT formally begins New I-64 project and the environment studies required for federal funding and approval.

2002: Missouri State Legislature approves design-build process

2004: Missouri voters pass Amendment 3 which provides 300 million dollars for the I-64 Project.

2005: Federal Highway Administration approves the plan. Missouri Legislature approves bill allowing for three design build projects. Missouri Highway and Transportation Commission and then EWGCC approve this method for the New I-64.

2008: Half of the I-64 project corridor is closed to traffic for one year.

Source: MODOT

I-55. Overwhelmingly, the study further illustrated the need for more capacity along the thoroughfare. Upon completion of the study in 1997, the East-West Gateway governing board approved the study's recommendations to rebuild 12 miles of I-64 from Sarah Street in St. Louis City to Spoede Road in St. Louis County. Despite these recommendations, East-West Gateway and MODOT knew it might be a few years before they could acquire all the funds they had

identified and complete the design for the new I-64. With this in mind, MODOT applied three and half inches of overlay on the interstate to give the roadway seven more years of service.

In 2002, after five years of planning, and ten years after MODOT's most recent attempt to address the traffic flow problems on I-64, MODOT began the project by conducting the environment studies required for federal funding and approval. In the same year the Missouri State Legislature approved the designbuild process. In 2004, with the project design and environmental work nearly complete and a new option in design-build, Missouri voters passed Amendment 3 which provided 300 million dollars for the I-64 project. In 2004, MODOT and East-West Gateway decided to fund Highway 21, Page Avenue Extension and some other very important projects (for a complete list see Appendix D). MODOT's and East-West Gateway's collaborative process to determine priorities led to the setting aside of 300 million dollars for I-64. At the focal point of these priorities was the thought that the I-170 interchange needed to be addressed because it was the major problem. Prior to Amendment 3, MODOT was resigned to fix the I-170, Kingshighway and possibly Lindbergh interchanges and then walk away.

At the time Amendment 3 passed MODOT got a new Director and MODOT District Engineer Ed Hassinger told him "... if we are ever going to do this (I-64) project, I need a way to get it all done at once" (Hassinger, 2007). MODOT had the design-build tool at their disposal and the new Director Pete Rahn suggested that the region do some innovative things with financing, using Grant Anticipation Revenue Vehicle (GARVEE) bonds and leveraging future federal revenue. According to MODOT, the design-build concept saves time and money. Design-build is a project delivery method that combines both the design and construction phases into one contract versus the state approved design-bid-build. However, design-build is not the state approved method for providing contracts, therefore, the state legislature had to approve the process.

GARVEE bonds are a tax exempt debt instrument that allows states to finance the costs of construction right away. These bonds are backed by federal appropriations and rely on future federal-aid money to repay the debt. MODOT took these alternative funding options to East-West Gateway and presented their argument that I-64 could be completed in this fashion. MODOT convinced East-West Gateway that the use of the combination of design-build and leveraging future federal funds would enable the project to be completed all at once.

In 2005, the events of the previous eight years culminated when the FHWA approved the plan, and the Missouri Legislature approved three design-build projects, one of which was the I-64 project. Missouri Highway and Transportation Commission and then East-West Gateway further approved the

Map 5.4: I-64 project



design-build method for the project. In 2007, construction began with the clearing of right-a-way by removing homes at the intersection of I-170 and I-64.

How East-West Gateway made a difference

East-West Gateway made a difference by coordinating statewide initiatives and regional priorities. East-West Gateway also provided the initial financing, participated in the regional planning effort and provided additional funds to mitigate traffic concerns caused by closure plans due to the design-build process.

At the beginning there were doubts whether the region could ever complete an I-64 project. In these early stages, East-West Gateway and MODOT had to push back the I-64 project due to a gap in funding. Proposition B, a proposed gas tax, failed on August 6 2002, meaning the project would have to be piecemealed over twelve years. However, the region caught a break in 2005 when the Missouri State Legislature approved the project as the first design build project.

The design-build process had never been used in Missouri and was only introduced towards the end of the I-64 planning process. Several local politicians who participated in this process felt it nullified much of their work. The premise of design-build is that the contractor plans the project during the construction process, rendering useless much of the preliminary planning that was conducted by the politicians. East-West Gateway, MODOT and numerous public committees had planned the I-64 project prior to the decision to use design-build. These committees included an aesthetics committee and four

citizens committees. Upon the emergence of the design-build idea in 2005, and after five years of regional planning, MODOT brought out its design. MODOT wanted to make Big Bend full access. This would close the Bellevue Avenue exit which provides direct access to St. Mary's Hospital, requiring emergency vehicles to travel an additional mile via I-64 and Clayton Road to reach the hospital.

St. Mary's Hospital decided it did not want Bellevue closed. MODOT redesigned McCausland at least twice in response to the concerns of St. Mary's Hospital. However the hospital was adamant, and would not even look at the new plans and simply stated their objection - you cannot close Bellevue. In response, an aide to Senator Kit Bond (MO) wrote MODOT a letter stating they were not going to close Bellevue, and that it would remain an exit. MODOT did not object to this proposal. Members of the five year planning process (EWGCC, local politicians and citizens) began to become annoyed because MODOT began making unilateral decisions. Their sentiment was that design-build would have been fine if it was part of the process from the beginning and everyone knew and could choose the contractor. Senator Joan Bray, in particular, was outspoken on the issue, "... the fact that I-64, the largest project in the history of Missouri, might not be the best time to use design-build for the first time" (Bray, 2007). Senator Bray stated that the project was one of the largest in Missouri history - its social and economic importance and the prospect of lengthy closures of the thoroughfare are reason enough to pause and reconsider whether it was the appropriate project in which to test a new method of construction.

In light of the possibility of the entire I-64 corridor being closed during construction many of the local politicians who were already annoyed by MODOT became even more concerned, prompting Senator Bray to present a bill in the state legislature. The bill stated that MODOT could not close the entire corridor at one time. In response, MODOT stated it could not guarantee anything because of the design-build approach. The contractor would have to answer that question because they (MODOT) do not know what the project is going to look like or how the closures were going to work (Bray, 2007). The main point was the region had spent five years designing the project and planning for closures, but due to the design-build process much of the planning was now thought to be irrelevant. Interviewees involved in the process suggested that every time they asked a question in regard to the design of the project, no one had an immediate answer and they had to wait for the contractor. The one issue the region stood firm on - that the contractor could not close the entire corridor - led to an agreement that the closures would be half and half. On January 2, 2008 all lanes on I-64 between I-170 and Ballas Road would be closed. Upon the reopening of this stretch of interstate on December 15, 2008, all lanes of I-64 between I-70 and Kingshighway would then be closed for a year.

The prospect of these closures led East-West Gateway to take a measure it had never taken before. On Wednesday, April 25, 2007, in a unanimous

decision East-West Gateway gave 12 million dollars in federal money to St. Louis, St. Louis County and Metro to help relieve the burden of the increased congestion with rebuilding I-64. This relief money would normally be the responsibility of MODOT (Sterman, 2007) and was to increase the ability of other roadways to handle the increase in traffic due to closures on I- 64. New temporary lanes were created on other interstates to handle overflow traffic. During the construction of I-64, I-70 and I-44 would not have any construction work, plus MODOT would restripe the highways to add an extra lane in each direction. I-70 would have an extra lane between I-270 and I-170, and I-44 would have an extra lane striped from I-270 to Grand Avenue. Any needed maintenance work on these roads would be completed at night. MODOT also upgraded the traffic signals on Page Avenue (MO 364), Olive Street Road (MO 340), Manchester Road (MO 100) and Lindbergh Boulevard (US 61/67) to make these alternate routes move traffic as efficiently as possible. Other spot improvements will be made by MODOT and its contractor to improve traffic flow during construction (MODOT, 2007).

The design-build process allowed Gateway Constructors much flexibility in overcoming design and construction challenges as they emerged, and aimed to help them to stay within the 420 million dollar budget for actual construction. Due to the design as they build process, the actual cost for various segments and the different types of work conducted (e.g. right-of-way, construction) would not be known, therefore, it is impossible to provide a detailed breakdown of funding at this point of the study. Design-build is

estimated to reduce actual construction costs on the project by about 20 percent (EWGCC, 2007).

The process the region put in place has provided the opportunity for the region to receive the improvements needed in a shorter time span than under conventional terms. Under conventional terms the length of the project would be seven to ten years and cost 750 million dollars. MODOT reduced the right-of-way requirements by a drastic amount even though they were taking a number of houses for the I-170 interchange. The contract for the proposed work is 420 million dollars. Incorporating the right-of-way and other bits and pieces that MODOT needs to complete the total cost is about 535 million dollars and will be completed in three years (2010) (MODOT, 2007).

Summary

The I-64 project offers evidence of East-West Gateway leading the regional transportation process. As shown in Figure 5.14, the case illustrates East-West Gateway making a difference by increasing public saliency (P1) and consideration of quality of life factors (P2: P2a). There is little evidence to support East-West Gateway's consideration other region wide factors (P2b, P2c). The evidence to support an increase in elected official involvement is insufficient (P3).

Table 5.14: Propositions supported by Interstate 64 project

P1	P2	P2a	P2b	P2c	P3
X	X	X			

The evidence from interviewees does little to support the premise that East-West Gateway increased the public saliency of the I-64 project. On the other hand, the information available on their website and news articles suggests that they did increase public saliency. The East-West Gateway website offered newsletters, press releases and links to MODOT websites concerning the project. Most of this information was used and cited in this study. These documents were readily available to the public and often cited in news articles. A LexisNexis search (2005-2008) returned 154 hits for articles discussing the I-64 project and citing East-West Gateway. The search returned 256 articles during this time period discussing the I-64 project.

The evidence points toward the difference East-West Gateway made in consideration of quality of life factors. The prospect of closures on a major thoroughfare which carries 170,000 commuters a day prompted East-West Gateway to fund projects to mitigate congestion on alternate roadways. The MPO provided 12 million dollars in federal money to St. Louis, St. Louis County and Metro to increase the capacity of alternate roadways. Their aim was to ease the stress of commuters due to closures on I-64. The MPO offered little evidence and the interviewees provided little substantive information when confronted about the consideration of employment factors and equity issues. Most interviewees pointed toward the fact that it was going to be easier for transit to move throughout the county and it would be a smoother commute to work for employees once the project is completed. At this point, there is no way to evaluate these statements and little evidence to suggest that the new roadway will provide more jobs in Clayton or downtown St. Louis.

At the beginning of the process, public participation was high due to the committees and subcommittees created by East-West Gateway to plan the project. The process demonstrated evidence of all interested parties, such as elected officials, public officials and the general public participating in the process carried out by the MPO in coordination with state DOTs and transit operators. It appeared as if these groups were making a difference, until design-build was adopted by MODOT. Due to the adoption of design-build and its nature of limited disclosure and the fact the planning takes place during the building process, public participation made little difference. The design-build process limits public input and places limitations on the planning process. The issue of design-build suggests that MPO's can facilitate regional agreement internally, but these regional governance institutions lack the authority to implement them because Departments of Transportation still wield a great deal of authority (Sanchez, 2006; Weir et al., 2009).

Conclusion

The case of St. Louis and the role of East-West Gateway in the region's transportation policy points toward the different levels of participation an MPO can have with any given project and offers insight into the promise, success and problems of these regional governance institutions. A summary of the data as it relates to the main propositions of this study is shown in Table 5.15. The MPO is typically seen as the forum to plan regional transportation projects, but the way they make a difference is as unique as the project itself. For example, the new Mississippi River Bridge was a project that the MPO was heavily

involved in, whereas the Page Extension the MPO played a more supporting role to the region. In the case of I-64 the process began as one that the MPO was heavily involved in, but resulted in a project that became consumed by the design-build process. The process limited the MPO's role, however, East-West Gateway was still able to make a difference.

Table 5.15: Propositions supported by St. Louis case studies

	P1	P2	P2a	P2b	P2c	P3
MRB	X					X
Page Extension		X	X			
I-64	X	X	X			

The evidence supporting East-West Gateway's ability to create public saliency (P1) was quantified by LexisNexis research. The qualitative evidence illustrates particular actions taken by the MPO which heightened the public's awareness. In St. Louis, the most significant piece of evidence is the creation of an expert panel, and the calling of a regional vote to determine the direction the region should go with the new Mississippi River Bridge. A LexisNexis research quantifies the significance of the expert panel. The panel was created in December 2006 and the vote was held February 2007. In this time span there were forty-two articles on either the panel or the vote (22 in January and 8 the week of the vote). These articles, written as a direct result of an action by East-West Gateway, made the public aware of the partisan nature of the debate, which was highlighted by comments from local and state officials.

In contrast, the public saliency of the Page Extension was the result of actions taken by groups or individuals not associated with the MPO. The project

was salient due to a public vote, opposition from environmental groups and citizen concerns with urban sprawl. The environmental groups included two powerful and notable interest groups; the Sierra Club and the Missouri Coalition for the Environment. Their resources (money and media connections) allowed them to create public saliency. The quantitative evidence further supports this premise, illustrating that 72 percent of the articles in regard to the Page Extension were about the sprawl or environmental issues, and only one in thirteen of these articles referenced East-West Gateway.

The case of I-64 contrasts strongly with the high saliency created by East-West Gateway in the new Mississippi River case. The qualitative evidence discussed in the case offers little evidence to support this proposition.

However, it maybe that in cases where saliency is generated by other means, in this case a highly publicized environmental concern, that the efforts of the MPO are redundant. In fact, the information used to gather the information in this study was available on their website and the frequent references and citations of the MPO in news articles suggests they made considerable efforts to increase public saliency. The East-West Gateway website offered newsletters, press releases and links to MODOT websites concerning the project. The quantitative evidence supports this proposition; according to LexisNexis, for a time period between 2005 and 2008, 154 of the 256 articles that discussed the I-64 project cited or referenced East-West Gateway.

The Page Extension and I-64 cases provide evidence of East-West Gateway contributing to the quality of life (P2: P2a) in the St. Louis region.

However, there is no evidence in any case supporting the premise that East-West Gateway considered employment factors (P2b) or equity issues (P2c). Quality of life was improved for the St. Louis region through the 57 million dollar contribution of East-West Gateway during phase one of the project. This financed the connection of Creve Coeur Park in St. Louis County and the Katy Trail in St. Charles County via bicycle and pedestrian traffic, allowing residents on either side of the river to enjoy the recreational benefits. The completion of this phase of the project was made possible by East-West Gateway's monetary contribution.

In a similar fashion East-West Gateway contributed to the region's quality of life with their contribution of 12 million dollars during the I-64 project. The funds were used to mitigate traffic on alternate roadways due to the displacement of 170,000 commuters a day. Their action eased the stress on commuters by providing improved capacity and better traffic flow on alternate routes.

The new Mississippi River Bridge project is still in its infancy with respect to planning making it impossible to speculate as to whether the MPO will make a difference in relation to the region wide factors proposition. Public meetings were held on April 16th, July 7th, and July 8th 2009. At these meetings the region discussed topics ranging from road closures to minority employment. It is certain, however, that the region will have some level of minority representation on the construction crews through the "New I-64 Work Force Utilization Plan Partnering Agreement." The fact that many of these issues that

relate to the region wide factors proposition are unanswered makes it difficult to support or refute this proposition. The consideration of employment factors to date consists of arguments made by Illinois and the RCGA.

The new Mississippi River Bridge does point toward how the MPO increases the number of quality elected officials. The vote called by East-West Gateway which included 22 elected state and local officials coalesced these regional leaders and highlighted the evidence to support this proposition. Once the vote was final numerous local elected officials began to comment. These officials included: Illinois Governor Blagojevich; Missouri Governor Blunt; St. Louis County Executive, Charlie Dooley; Alan Dunstan, Madison County Board chairman; Mark Kern, St. Clair County Board chairman; and East-West Gateway Executive Director Les Sterman. In total, thirteen different state and local officials are quoted in the Post-Dispatch and seven in the Belleville News Democrat. This evidence points toward an increased level of involvement in the process.

The Page Extension differs greatly from the new Mississippi River Bridge regarding this proposition. The case offers no evidence that East-West Gateway increased the participation of elected officials. In the I-64 case there is evidence of East-West Gateway increasing elected official involvement early in the process and the impact of regional leaders eventually being limited due to the design-build process.

The evidence suggests that East-West Gateway makes a difference in certain aspects of regional transportation policy. This difference is dependent

on the particular nature of the project, and is influenced by many factors. The evidence obtained was substantial enough to support several propositions, it also offers some insight into the promise, success and problems of an MPO. East-West Gateway's contribution to quality of life factors illustrates the promise of these regional governing bodies to align regional interests and regional transportation policy. Their ability to garner coordination and cooperation between Illinois and Missouri offers evidence of the success of these regional institutions. They were able to bring together two government entities and accept their role in shared policymaking. The adoption of designbuild and its nature of limited disclosure points toward an often sighted criticism of MPOs, which is their lack of authority (Katz and Puentes, 2005; Gerber & Gibson, 2009; Weir et al., 2009). East-West Gateway was able to garner regional agreement on road closure and project planning internally, only to see MODOT's adoption of design build thwart these efforts.

Chapter 6 - Analysis

This chapter discusses the results of the study and further examines the propositions presented in Chapter 3. It highlights the way MARC and East-West Gateway make a difference as the evidence relates to the propositions, and discusses what this evidence tells us about the promise, success and problems of MPOs and the regional transportation process. An MPO makes a difference through advisory groups, their committees, provision of funds, proctoring public meetings, and solicitation of outside advisement to solve regional transportation problems. The six projects evaluated in the study support different but overlapping propositions. There is not a project that supported all the propositions and neither is there a project that did not support at least one proposition, with those related to public saliency rated most highly. At MARC, the evidence in the Triangle project supported the most propositions and the Red Bridge project supported the least. At East-West Gateway, the I-64 project supported the most propositions and the new Mississippi River Bridge supported the least. Analysis of the evidence and the propositions suggests that MPOs do make a difference and serve a dynamic and important role in the regional transportation policy process.

Introduction

The enhanced role of Metropolitan Planning Organizations (MPOs) since the passage of ISTEA is evident in the cases of Kansas City and St. Louis, which offer important examples of an MPOs role in regional transportation policy. Since the passage of ISTEA, MPOs are making a difference by increasing public saliency, contributing to their region's quality of life, considering employment factors and promoting elected official involvement. The data from these studies related to individual propositions is shown in Table 6.1. In five of the six cases the evidence points toward the MPO increasing public saliency (P1). In four cases MPOs are considering region wide factors (P2), three cases support MPOs contributing to the quality of life (P2a) and one case provides evidence of the consideration of employment factors (P2b). There is no evidence to suggest MPOs are considering equity issues (P2c). In half of the cases there is evidence supporting the premise that MPOs promote elected official involvement (P3).

The evidence supporting these conclusions is both quantitative and qualitative. Some of the qualitative information from particular cases is weak due to the nature of the proposition, therefore, the use of quantitative data was necessary to substantiate some findings. For example, an MPO's impact on public saliency (P1) is difficult to support without quantifiable numbers to illustrate their saliency in local and regional news (LexisNexis). The participation of elected official involvement (P3) is another proposition that is difficult to qualitatively support. Therefore it was necessary to rely on quantitative data to substantiate this proposition. In addition, P3 offered the opportunity to evaluate the attendance records from MPO meeting minutes. Table 6.2 and Table 6.3 illustrate the trend in elected official participation pre- and post-ISTEA. The consideration of whether to support, refute or suggest that more evidence is needed in regard to region wide factors is equally based on quantitative and qualitative data.

Study Results

Table 6.1: Propositions supported by the cases of Kansas City and St. Louis

	P1	P2	P2a	P2b	P2c	P3
Triangle	X	X		X		X
Paseo Bridge	X	X	X			X
Red Bridge	X					
MRB	X					X
Page Extension		X	X			
1-64	X	X	X			

Proposition 1: ISTEA and its successors, empowered MPOs, resulting in an increase in public saliency of regional problems

In the Kansas City and St. Louis regions there is evidence that the regional MPO is increasing public saliency. In Kansas City each case offered evidence to support this proposition and in St. Louis two of the three cases provided evidence of increased public saliency. The evidence in Kansas City includes the formation of an advisory committee, a river crossing committee for bike and pedestrian traffic, and a high level of news coverage citing the MPO and project. In St. Louis, the evidence includes an expert panel, a vote of MPO members and a high level of news coverage citing the MPO.

In Kansas City, MARC performed two actions which increased public saliency by including a wide range of interests and increasing news coverage of the project. These actions are: (1) creation of an advisory committee, and (2) creation of a river crossing committee. MARC responded to community dissatisfaction during the Triangle project by forming a 25-person advisory committee. Members included city council members, state legislative representatives, officials from Kansas City, Missouri, and Jackson and Cass Counties. Public works, police, and fire department staff from the City of

Kansas City and public works staff from the City of Grandview were members of the committee, as were local residents from the numerous neighborhoods surrounding the Triangle. The advisory committee increased public involvement and provided a level of transparency making the project more salient within the region. The MPO led the group which visited the project site on a regular basis, meeting with MODOT officials identifying concerns. According to several interviewees and Kansas City Missouri, Assistant City Engineer Sherri McIntyre, "The Citizens Advisory Committee definitely raised the level of involvement from the community" (APWA, 2009).

MARC's formation of a river crossing committee on the Paseo Bridge is another example of a cooperative effort which increased public saliency. MARC formed the River Crossing Task Force (RCTF), consisting of representatives from local governments, MARC committees, local interest groups and bridge owners. The RCTF includes: MetroGreen Civic Leadership Board; Kansas City River Trails; MARC Bicycle/Pedestrian Committee; MARC Transit Committee; MARC Highway Committee; Kansas Department of Transportation; Missouri Department of Transportation; Federal Highway Administration; Kansas City Port Authority; Clay, Jackson, Johnson, Leavenworth, Platte and Wyandotte counties; Kansas City, MO, Shawnee, Leavenworth, Bonner Springs and North Kansas City; Greater Kansas City Bicycle Federation; Missouri Bicycle Federation; Johnson County Bicycle Club; Patti Banks Associates; Downtown Neighborhood Association; Regional Transit Alliance (MARC, 2005). The RCTF increased public saliency by involving a wide range of individuals in the

consideration of solutions for bike and pedestrian access between North Kansas City and downtown Kansas City. Evidence of these two actions increasing public saliency is further supported by the amount of news coverage the MPO's actions generated.

News coverage citing the MPO (MARC) and the project suggests that the efforts of an MPO increase the saliency of an issue. These efforts can vary as much as a story about a committee they formed or citation of an MPO press release or publication. The LexisNexis searches identifying the MPO (MARC) and the project (Triangle) provided 784 articles citing the MPO and discussing the Triangle project over a ten year period (1997-2007). The creation of the RCTF to resolve the dispute over bike/pedestrian access on the Paseo Bridge offers more evidence. In 2006, the height of the debate over access, there were twenty-two articles dealing solely with the bike/pedestrian crossing over the Missouri River. This is a significant amount compared to other projects. For example, a search of the MPO (MARC) and Triangle averaged seventy-eight articles a year and a search of the MPO and Red Bridge provided thirty-eight articles. To further substantiate the significance of this, I conducted the same search for the year 2004 (MARC + bike/pedestrian access) and acquired six articles discussing MARC and bike/pedestrian access, which is nearly onequarter as many articles. The evidence suggests that MARC's actions resulted in more news coverage, increasing public saliency.

In contrast to an MPO's actions creating saliency, the actions of an outside group coming to the MPO increased the saliency of the Red Bridge

project. The Friends of Red Bridge (FORB) turned to the MPO in an effort to change certain aspects of the Red Bridge project. FORB approached MARC on two separate occasions resulting in thirty-eight news articles documenting their conversations. FORB's efforts included their attendance at a Total Transportation Policy Committee (TTPC) meeting and a board meeting. FORB's inclusion of the MPO in their fight against the Red Bridge project points toward the role the MPO plays in the region, and further suggests that they are seen as the focal point for regional transportation policy. The unusual actions of the interest group resulted in an increase in news coverage and increased awareness among the public. This illustrating that sometimes, efforts of other groups increase public awareness of these projects. However, it should be noted that the MPO served as an outlet for the views of the FORB group. It is the role the MPO plays in their community that contributes to the saliency of an issue. The saliency of issues differs not only from project to project but MPO to MPO as is illustrated in the case of St. Louis.

In St. Louis, East-West Gateway is increasing public saliency through their actions and increasing availability of information. The MPO's creation of an expert panel (December 2006) and calling a regional vote (February 2007) increased the public saliency of the new Mississippi River Bridge project. The seriousness of the issue was highlighted by the outside consultants gathered to serve as a neutral party to advise Illinois and Missouri. The vote further illustrated the seriousness of the political rift, by placing more attention on the issue and politicians involved. These actions were intended to send a message

and prompted local news sources to increase their coverage of the issue. For example, the vote prompted a public exchange between Missouri Governor Matt Blunt and Illinois Governor Rod Blagojevich which was published in the St. Louis Post-Dispatch. Governor Blunt claimed the MPO did not give Missouri enough time to review the proposal, meanwhile, Governor Blagojevich suggested it was a step in the right direction (Shields, 2007). The articles, with quotes from numerous state and local leaders increased the saliency of the project. There were forty-two articles over a two month time span (December 2006 to February 2007) covering the new river bridge progress. Of these forty-two articles, twenty-two articles were in January and eight were during the week of the vote (Feb. 20-27). East-West Gateway's efforts and stance on taking a vote brought attention to the state of the project and provided an additional level of scrutiny by constituents observing the process through local news sources.

An MPO can increase the saliency of an issue by means other than actions that create news coverage. The I-64 project offers the best example of how an MPO can increase saliency by providing information directly to a region via their website, press releases and publications. The MPO was highly involved in updating closure information and providing links to additional websites in an effort to keep the public informed. The majority of the information cited in the I-64 case came directly from the MPO's website and is cited throughout the case. This information was readily available to the public and news sources.

The LexisNexis search (2005-2008) further supports this assumption. The search

returned 256 articles during this time period on the I-64 project, 154 articles discussing the I-64 project and citing East-West Gateway. This evidence suggests that sixty percent of the news articles in local papers and business journals made use of this information. It further suggests that MPOs actions can include such things as a simple press release to increase saliency.

The Page extension offers another example of how an issue can become salient. The MPO is not responsible for the saliency of an issue in all cases. An issue can become salient due to outside interest groups, a public vote or regional concerns. In the case of Page Avenue, the saliency of the project was due to a vote to approve the right-of-way through Creve Coeur Park, opposition from environmental groups including the Sierra Club and the Missouri Coalition for the Environment and concern of how the project would contribute to urban sprawl. The evidence to support this premise is based on news coverage. The majority of news articles on the Page Extension, collected through LexisNexis, focused on the three issues. The search determined that 72 percent of the articles in regard to the Page Extension were about one or several of the issues: the vote, environmental concerns or urban sprawl. Only 12 percent of the articles mentioned East-West Gateway, this discussion was limited to the additional funding that the MPO gave St. Charles County to cover cost overruns.

In the cases of St. Louis and Kansas City it is apparent that all the cases were publicly salient. In two instances the saliency was due to outside interests, with an interest group approaching the MPO in the case of FORB and the Red Bridge Project and with interest groups waging their own public

campaign in the case of Page Extension. The saliency of issues was also increased by votes, with an MPO vote on a project's direction and a public vote to determine right-a-way for a project. The creation of committees by MPOs also created saliency. In most cases (5 of 6), an MPO's involvement raised the level of news coverage resulting in increased public saliency.

Proposition 2: ISTEA and its successors empowered MPOs, resulting in more consideration of area-wide factors in regional-level policy making.

P2a: ISTEA and its successors resulted in more consideration of quality of life factors in regional-level policy making.

In the Kansas City and St. Louis regions there is evidence that the regional MPO is considering and contributing to quality of life. In Kansas City one case offered evidence to support this proposition and in St. Louis two of the three cases provided evidence of the consideration of quality of life factors. The evidence in Kansas City includes bike/pedestrian access. In St. Louis, the evidence includes bike/pedestrian access, and a decrease in traffic volume on other major arteries. The two examples in St. Louis are a result of additional funding provided by the MPO.

In Kansas City, the MPO created the RCTF to make decisions about bike/pedestrian access. The creation of this committee is not only a tribute to regional cooperation but it is also illustrative of how MARC made a lasting difference in the region's quality of life. MARC's efforts to coalesce regional support for pedestrian access connecting North Kansas City stores and restaurants to downtown Kansas City residential lofts and businesses will improve the quality of life for many who live and work in the Kansas City

region. The bike/pedestrian access allows the region to transcend the previous geographic barrier between the two areas, providing access to amenities on both sides of the river without the use of an automobile. In addition, it creates a more desirable location for companies and citizens in downtown Kansas City and a more lucrative shopping district in North Kansas City.

In St. Louis, the creation of a better quality of life is due to MPO monetary contributions. On two separate occasions the MPO contributed money to a project: (1) Page Extension for completion of phase one which includes bike/pedestrian access between St. Charles and St. Louis counties and the Veteran Memorial Bridge resulting in decreased traffic flow on other major arteries; and (2) I-64 to increase the capacity of alternative routes during the closure of the highway.

The Page Extension improved the quality of life for the St. Louis region by connecting recreational resources in St. Louis and St. Charles counties and decreasing traffic flow. East-West Gateway covered cost overruns of 57 million dollars allowing the first phase of the project to be completed, and providing an additional connection for auto traffic and a connection for bike/pedestrian traffic. Phase one of the project and the opening of Veteran Memorial Bridge increased the number of lanes crossing the Missouri River between St. Louis County and St. Charles County from 23 to 33. It provided an alternate route to the Daniel Boone Bridge (I-64), Blanchette Memorial Bridge (I-70), and Discovery Bridge (MO-370) crossings. Traffic volumes on these river crossings decreased significantly in the first year: I-70 carried 186,773 motorists a day in

2003 which fell to 165,079 motorists a day in 2004 (a 12 percent decrease); I-64 carried 85,183 motorists a day in 2003 which fell to 77,523 motorists a day in 2004 (a 9 percent decrease); and MO 370 carried 59,907 motorists a day in 2003 which fell to 56,762 motorists a day in 2004 (a 5 percent decrease) (MODOT, 2004). The creation of a bike/pedestrian path on Veterans Memorial Bridge improved quality of life by connecting recreational resources. The extension connects Creve Coeur Park in St. Louis County and the Katy Trail in St. Charles County. The completion of the first phase allowed residents on either side of the river to enjoy the recreational benefits without the use of an automobile.

The I-64 case offers a similar example of how an MPO can improve a region's quality of life. East-West Gateway viewed the prospect of closures on a major thoroughfare which carries 170,000 commuters a day as a potential strain on the region. This prompted East-West Gateway to provide 12 million dollars in federal money to St. Louis, St. Louis County and Metro to increase the capacity of alternate roadways. This was an action that the MPO had never previously taken. Their intention was to improve traffic flow on alternate routes by adding lanes and increasing synchronization of traffic signals. The MPO funds were used to create temporary lanes on other interstates to handle overflow traffic. An additional lane, in each direction, was striped on I-70 and I-44. Traffic signals were upgraded on Page Avenue (MO 364), Olive Street Road (MO 340), Manchester Road (MO 100) and Lindbergh Boulevard (US 61/67) to make these alternate routes move traffic as efficiently as possible. (MODOT, 2007).

In St. Louis and Kansas City it is apparent that only three cases actually addressed any quality of life issues. In two instances the improved quality of life was a direct result of funds provided by the MPO: (1) 57 million dollars for the completion of Page Extension and (2) 12 million for traffic mitigation during the I-64 project. The quality of life was also improved by the provision of bike/pedestrian access on two occasions: (1) Connecting downtown residents and businesses to North Kansas City shops and restaurants, and (2) connecting recreational resources in St. Louis and St. Charles counties. It is difficult to quantify quality of life as it relates to bike/pedestrian access, particularly since the project in Kansas City is not complete. Once the project is complete, it will be possible to measure the number of businesses relocating to downtown Kansas City or an increase in people moving downtown. This evidence could be used to further support or possibly refute the bike/pedestrian access contribution to each region's quality of life. In a similar fashion, no data is available to illustrate whether the shops in North Kansas City have seen an increase in revenue. Bike/Pedestrian access does offer more options for residents and provides opportunities that were not available prior to these projects.

P2b: ISTEA and its successors resulted in more consideration of land use and employment factors in regional level policy making.

In the Kansas City region there is evidence that the regional MPO (MARC) considered employment factors in one case. In St. Louis, there is no evidence that the MPO (EWGCOG) considered employment factors. The consideration of employment factors in Kansas City is due to the design of an interchange. The

purpose of this project was to improve the economic activity of the area, Grandview.

The Triangle project improved accessibility and traffic flow through the Grandview area resulting in increased employment. The completion of the project decreased the number of accidents by 360 a year and the average speed through the interchange during rush hour increased from 22.7 miles per hour (mph) to 51.9 mph (MODOT, 2008). The benefits of this increased accessibility are highlighted in the Kansas City Business Journal. The journal suggests that the 8400 jobs have been created since work began on the 3-Trails Crossing Memorial Highway (formerly called the Grandview Triangle) (Hubbard, 2009). Since the completion of the project in 2007, 44 million dollars in non-residential construction has been invested in Grandview and more than 700 jobs have been created within the new and expanding companies (Grandview Economic Development Council, 2009). The project improved rush hour traffic flow by nearly thirty miles mph and reduced the accident rate.

P2c: ISTEA and its successors resulted in more consideration of equity factors in regional-level policy making.

In the cases of Kansas City and St. Louis, there is no evidence in any case to support the premise that MPOs are considering equity factors in regional-level policy making. Equity factors ensure that transportation policies and investments are representative of the region's needs and demographics in the allocation of resources.

The discussion of equity factors met some conflicting opinions among interviewees. When the questioned was posed to Missouri State Senator Joan

Bray she suggested that equity is relevant to, "...policy wonks, the bureaucrats they are a factor but when it gets into the political arena it is not a priority, power and money talks. So where is the next Metrolink line going to be? North where a larger portion of the population doesn't have cars or is it going to be in the direction where the power and money is? It is a huge issue" (Bray, 2007). Essentially, Senator Bray is suggesting that the more influential areas have more resources and their policy concerns garner greater public concern.

Equity issues are not only about resources, they are also about whose quality of life they consider more when designing a project. For example, in this study, five of the six cases deal with major thoroughfares for commuters. These projects are created to help citizens in suburban communities without consideration of the direct effect on the urban community that the project is going to be built in or through. In many instances the expansion or creation of a new freeway is being built to connect a suburban community to the urban core intended solely to benefit commuters. The planning may not consider how the new or expanded roadway is going to affect the urban dwellers along the route. Is it going to increase traffic in their neighborhoods? Increase noise? Increase pollution in an area where people cannot afford to move? Often a project goes through a central city community with a relatively higher proportion of minority or low income residents than outlying suburbs. A project in a central city community may have some direct time saving benefits for the suburban community but the impacts are typically felt in these lower income urban areas.

Proposition 3: ISTEA and its successors increased the number and quality of elected official participation in regional transportation planning.

Only three of the six cases offer any evidence to support the premise that MPOs increase the number and quality of elected official participation. In a similar fashion, as illustrated later in the chapter, the longitudinal data suggests that each MPO is increasing elected official participation. The MPO meeting minute attendance records pre- and post-ISTEA offer insight into the trends in elected official participation. According to the data both MPOs are increasing elected official participation.

The elected official involvement in the Kansas City region was a direct result of the MPO creating two committees: (1) Advisory Committee and (2) River Crossing Task Force. In St. Louis the elected official involvement was due to a highly political project and the MPO hiring an expert panel and calling a vote.

In Kansas City, the Triangle project involved many elected officials from local governments in the MARC region. These officials participated in the advisory committee pointing toward the difference MARC makes regarding the number and quality of elected officials participating in the regional transportation process. Members included city council members, state legislative representatives, officials from the City of Kansas City, Missouri, and Jackson and Cass Counties. In the case of the Triangle, the formation of the committee, their role in advising and the general satisfaction throughout the MARC community supports this proposition. MARC made a difference through

the inclusion of a high number of quality elected officials on the Paseo project. The project included 56 local elected officials in the regional transportation process. These officials participated through various committees and at different stages in the development of a bike/pedestrian policy. They were members of the River Crossing Task Force, the Bicycle Pedestrian Advisory Committee, the Total Transportation Committee and MARC Board of Directors (6 - Bicycle Pedestrian Advisory Committee, 19 - Total Transportation Policy Committee, 31 - Board of Directors).

In St. Louis, East-West Gateway made a difference through the inclusion of a high number of notable elected officials. The region witnessed a high degree of involvement due to the creation of an expert panel and an MPO vote. News articles highlighted the amount of participation. The articles included comments by: Illinois Governor Blagojevich; Missouri Governor Blunt; St. Louis County Executive, Charlie Dooley; Alan Dunstan, Madison County Board chairman; Mark Kern, St. Clair County Board chairman; and East-West Gateway Executive Director Les Sterman. Stories about the new Mississippi River Bridge included thirteen different state and local officials quoted in the Post-Dispatch and seven quoted in the Belleville News Democrat. This evidence alone does not illustrate the complete story in regard to elected official involvement in Kansas City and St. Louis. Each MPO consists of a committee structure intended to be politically inclusive through elected official involvement.

MPOs are inherently political organizations with elected and appointed officials from various regional governments serving in varying capacities on

numerous committees throughout the hierarchal structure of the institution. For example, MARC's Total Transportation Policy Committee (TTPC) consists of an entire committee structure dealing with a wide range of issues: STP and Bridge Committee, Highway Committee, Bike and Pedestrian Committee, Transit Committee, and Air Quality Committee. At MARC, the board consists of 33 locally elected leaders from the nine member counties and the six largest cities in the region. At East-West Gateway, the board consists of 21 voting members, seven are the chief elected officials from local governments in Illinois, seven are the chief elected officials from local governments in Missouri, six are citizens representing both states, and one is the Chair of the Bi-State Development Agency. Representatives of a number of other state and federal agencies sit on the Board as non-voting members.

The following table (Table 6.2) illustrates the rate of change in elected official involvement pre- and post-ISTEA. The data was compiled from meeting minutes (1978-2006) and suggests that elected official involvement at the regional MPO has increased. The mean number of members at each MPO meeting was calculated for the two times periods and used to calculate the rate of change.

Table 6.2: Member participation at their regional MPO

MPO	Members present pre-ISTEA (1978-1991)	Members present post-ISTEA (1992-2006)	%Change
MARC	13.70	15.31	11.8
EW Gateway	12.18	15.96	31.0

Table 6.2 measures the number of East-West Gateway and MARC members present at their meetings, excluding the MPO staff. The table illustrates an increase in member participation at each MPO. Pre-ISTEA MARC averaged 13.7 elected officials per meeting which increased to 15.31 per meeting resulting post-ISTEA. The data suggests that since the passage of ISTEA the MPO has witnessed an 11.8 percent increase in elected official participation. At East-West Gateway their elected official participation increased from 12.18 per meeting pre-ISTEA to 15.96 per meeting post-ISTEA resulting 31.0 percent increase in elected official participation.

The increase in elected official participation is evidence of the evolution of the MPO in regional transportation policy. An MPOs role as the facilitator of funds for regional projects is a large reason why this change occurred.

According to interviewees, elected officials still view MPOs as the bank for transportation money. Les Sterman, further illustrates this point, when asked about elected official participation, he stated, "The reason they show up is because the transportation money goes out the door here, I mean that is why they (elected officials) are here" (Sterman, 2006).

Table 6.3: Member participation at East-West Gateway and MARC combined

МРО	Members present pre-ISTEA (1978-1991)	Members present post-ISTEA (1992-2006)	%Change
EW Gateway & MARC	12.96	15.62	20.5

The combination of the two MPOs (Table 6.3) further illustrates a significant change in the number of elected officials participating. The data suggests, since the passage of ISTEA there has been a 20.5 percent increase in elected official involvement. These two MPOs are not anomalies, it is apparent

that other regional MPOs have seen significant increases in participation. According to J. William Van Dyke, Chairman of North Jersey Transportation Planning Authority (NJTPA), upon the passage of ISTEA the local elected officials on the NJTPA board responded with enthusiasm to the new role and authority granted them by ISTEA, "At our monthly meetings, these representatives of the people now show up in person rather than sending surrogates, despite their busy schedules" (senate.gov, 1997).

The data collected on elected official participation at East-West Gateway and MARC illustrates a significant increase. The numbers point toward a trend that was not identifiable in every case in this study. In this study only three of the six cases provided evidence of significant elected official involvement.

The promise, success and problems of MPOs in Kansas City and St. Louis

The cases of Kansas City and St. Louis offer some insight into the promise, success and problems related MPOs. The promise of MPOs is highlighted by the evidence of emergent networks/interests in the regional transportation process and contribution to quality of life factors. Evidence of this promise is the River Crossing Task Force (RCTF) on the Paseo Bridge. This task force consisted of over twenty local networks and interests. This suggests that groups are taking advantage of the new role offered by their regional MPO and embracing the new possibilities in regional transportation, "connections across diverse groups and promoted new ways of thinking about transportation's role in the metropolitan area" (Weir et al., 2009).

The success of these regional governance institutions (MPOs) is illustrated by their ability to bring together a wide range of stakeholders and garner cooperation. MPOs have significant policymaking responsibility and their success is based upon their ability to coordinate the efforts of several governments in the planning and provision of transportation policy (Gerber & Gibson, 2009). East-West Gateway's ability to coordinate the effort of Illinois and Missouri offers evidence of the success of MPOs. They were able to bring together two government entities and accept their role in shared policymaking.

A problem with MPOs and the regional transportation process is single jurisdiction projects and credit-claiming. The best example of how this can disrupt the regional decision making process is the Red Bridge project. Kansas City Councilman Charles Eddy acquired an earmark for bridge and road improvements in his district. During this time, Eddy and many of his counterparts were running for mayor of Kansas City, throwing the entire regional process off track. Eddy's earmark imposed costs on other jurisdictions to fund the remaining portion of the construction which the earmark did not cover. This is an area the MPOs need to address, "A project to repair a specific road within a single jurisdiction, allows an official to point to a road on a map and residents can witness the repairs; the benefits come as soon as the construction equipment is removed; and the project targets a specific constituency. Such projects provide greater credit-claiming opportunities. Elected officials who are members of an MPO are rewarded for the resources they can bring home from MPOs" (Gerber & Gibson, 2009).

Conclusion

The cases of Kansas City and St. Louis illustrate that MPOs make some difference. According to this study, there are four ways an MPO makes a difference: (1) increase public saliency; (2) contribute to quality of life; (3) consideration of employment factors; and (4) promote elected official involvement. This study further suggests that there are numerous means in which these differences can occur. First, an increase in public saliency is a direct result of an increase in news coverage. In this study the evidence suggests that MPOs creating committees separate from the traditional committees housed in the MPO garner a higher level of news coverage. Second, quality of life can be influenced by the MPO supporting bike and pedestrian access. The study illustrates that certain MPO actions (formation of committees and public pressure) can result in this type of access which transcends geographic boundaries connecting recreational amenities, residents, businesses, retail stores and restaurants. Quality of life is also influenced when the MPO provides funds to improve traffic flow. This can happen as a direct result of the project or on alternate routes to mitigate traffic during construction. Third, traffic flow can also have a great effect on employment factors. This study illustrates that designing a project with the sole purpose of improving traffic flow can create prosperity within a region. Finally, an MPO can and does increase elected official involvement by creating forums for participation beyond the traditional MPO committee. The evidence also

suggests that the trend in elected official involvement is towards increased engagement in the process post-ISTEA.

This study illustrates that MPOs make some difference in metropolitan areas and offer stories of success and highlight the problems of MPOs. The manner in which they make a difference varies and is reliant upon several factors. These factors include: how the project appeared on the agenda, the nature of the project, the funding reality for the project and the regional MPOs' leadership capabilities. The evidence further suggests that MPOs hold promise and offer stories of success in regard to coordinating local government efforts, and moving regional transportation process and discussions beyond the traditional limited coalition and out of the DOTs board room. The problems that still plague the regional transportation process are cause to suggest that the difference they make may only be marginal at best.

Chapter 7 - Conclusion

This chapter summarizes the study in seven parts: (1) the importance of MPOs, (2) the need for the study, (3) the selection of the cases, (4) the steps involved in determining whether MPOs make a difference, (5) what the study determined, (6) the implications of these results, and (7) future research. The passage of ISTEA offered MPOs a greater role in regional transportation. The significance and effectiveness of these increased functions has not been determined. The work of other scholars is insufficient to determine whether MPOs are making a difference and called for further research. There was a need for an in-depth examination of MPOs through a comparative case study. The cases were chosen based upon similar characteristics (e.g. bi-state region, MPO housed in COG). In an effort to substantiate the findings based upon logic and the scientific model the study included a review of regional planning literature, research design, two cases studies discussing and examining the regional transportation process in St. Louis and Kansas City, and an analysis of the cases. The evidence suggests MPO make a difference through several means. They make a difference in public saliency, quality of life, employment factors, and elected official involvement. The means range from hiring expert consultants to managing funds. The study and results provide an opportunity for future research which needs to include more cases, more interviews, increased data collection and additional propositions.

The Importance of MPOs

The passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) ushered in a new era in transportation policy at the federal, state and local levels. After years of MPOs playing a limited role in transportation policy dictated by the states, metropolitan areas were offered a greater role in transportation decisions through their regional MPO. ISTEA and subsequent legislation intended "to move transportation decision making out of the back rooms and board rooms of the highway establishment" (Katz, Puentes and Bernstein, 2005). The legislation empowered MPOs to facilitate regional cooperation and create a transportation policy that addresses more than traffic flow within a region. In theory, ISTEA would allow MPOs to create transportation policies which increase public saliency, improve elected official involvement, address economic development, consider social equity and contribute to quality of life.

The empowerment of MPOs is based upon a comprehensive and inclusive state and local partnership to garner greater regional cooperation. The legislation requires transportation plans to be developed, at the regional MPO, with input from local governments, area transit providers and state Departments of Transportation. ISTEA made MPOs the central tool for improving transportation planning and for broadening its scope.

The Need for a Study of MPOs

Regional review agencies (e.g. Councils of Government) experienced a moderate amount of success. These regional review agency successes include

constructing airports, highways and transportation facilities. Despite these achievements Councils of Government (COGs) and their role as MPOs was limited by low participation, little revenue, and minimal public saliency. Recent federal legislation (ISTEA, TEA_21 & SAFETEA_LU) gave these MPOs new responsibilities and the ability to address large transportation policy issues. An exponential increase in funding accompanied their expanding role in regional transportation. This offered regions the ability to move away from a one size fits all transportation policy and state control, to a more comprehensive approach tailored to meet each region's needs. Despite their existence since the mid 1960s and empowering legislation in 1991, there is a lack of sufficient data to answer the question of whether MPOs made a difference in the regional transportation process.

For forty years MPOs have played a role in regional transportation.

During this time period, MPOs have witnessed an increase in funding, power and responsibilities. Until recently, regional transportation decisions were made by state Departments of Transportation with little input from MPOs which basically served as a rubber stamp for state decisions. Currently, MPOs develop regional plans, provide planning and technical assistance, assist local governments in planning, offer a forum for regional cooperation, disburse federal transportation funds, and develop and manage the major regional transportation documents. The significance and effectiveness of these increased functions has not been determined. The early evaluations suggest that MPOs, metropolitan areas and states have struggled to change and balance

the transportation policy process. These evaluations called for further research to determine if MPOs are actually improving regional transportation policy.

There was a need for a direct observation of specific cases study.

The Cases

The selection of the cases of Kansas City and St. Louis is based on the grounds they offer similar systems and contain a well established COG, housing a regional MPO in a bi-state region. The East-West Gateway (St. Louis) board consists of twenty-one voting members, roughly one vote per 100,000 residents The MARC board consists of twenty-nine voting members, roughly two votes per 100,000 residents (Sanchez, 2006).

These cities represent average American cities and are not either enormous or small metropolitan areas. Kansas City and St. Louis contain an urban core with the majority of the population living in suburban areas. These two metropolitan areas have a population range between 1.5 and 2.5 million, with the largest portion of their populations located within the state of Missouri. Kansas City and St. Louis represent two metropolitan areas based in a single, representative state and provided a good opportunity to examine the strengths and weaknesses of MPOs.

These two regions have similarities and differences that make them ideal for studying regional transportation planning. Missouri is the seventeenth largest state; has seventh largest state-owned highway system; and the eighth largest total of state and local lane miles in the country (Liu, 2004). Missouri is eighth largest state in terms of fragmentation with 3,416 local governments,

114 counties, 962 local governments, 1400 plus rural "special districts," and 308 road districts (largest in nation). The Missouri portion of the St. Louis metropolitan area has 312 local governments and the Missouri portion of the Kansas City metropolitan area has 182 local governments (Katz, 2004).

During the 1990s, the St. Louis region grew at a rate of 4.5 percent (111,000 new residents), whereas, the Kansas City region grew at a rate 12.2 percent (193,187 new residents). The St. Louis downtown population grew by 4.2 percent, whereas, the Kansas City downtown population decreased by 13.2 percent. In Kansas City forty-five percent and St. Louis fifty-eight percent of the jobs are located ten miles from the central city. St. Louis County, the economic core of the region, contains nearly half the region's jobs and only thirty-nine percent of the population (Brookings, 2002). Kansas City is somewhat different. Population and job growth have taken place in Johnson County, KS. Jackson County, Missouri, once viewed as the economic core for the Kansas City region achieved a job growth of 2.3 percent from 1990 to 2008, meanwhile, Johnson County's job growth was 70.7 percent. Jackson County now holds 304,209 private sector jobs and Johnson County offers 268,991 private sector jobs (Stafford, 2009). St. Louis has forty-two and Kansas City hosts eighteen large corporation headquarters. St. Louis boasts 520 and Kansas City is home to 409 mid-sized corporation headquarters. (Katz, 2004).

Each of these six projects studied offers a different perspective to evaluate an MPO's role in regional transportation policy. The Triangle project is a regional project which involved the redesign of a major interchange. The

purpose of the project was to alleviate congestion and open the area up for economic prosperity. This case offered an opportunity to evaluate the work of MARC as they attempted to garner regional consensus, cooperation between multiple municipalities, access funds for its completion, community involvement and public input.

The Paseo Bridge project is a regional project intended to alleviate congestion on a major trade route through the Kansas City area. The acquisition of additional funding resulted in regional groups insisting upon bike/pedestrian access across the Missouri River. The case offers the opportunity to assess MARC's contribution in the regional transportation process through regional consensus, cooperation between two counties, and acquisition of additional federal funding to create a project the region desires.

The Red Bridge project is a project in which Kansas City acquired an earmark for the modification of a bridge and roadway in a scenic portion of the city. The project provides an example of a situation were the MPO had a limited role and little authority due to a federal earmark. The case provides an opportunity to evaluate what happens to the regional transportation process when a municipality acquires a federal earmark and regional consensus is lacking.

The new Mississippi River Bridge is a federally earmarked project where regional consensus was lacking and the MPO had to step forward to coalesce regional consensus. The intent of the project is to relieve congestion on the four river crossings between southwestern Illinois and downtown St. Louis. The

case offers the opportunity to evaluate the work of East-West Gateway as they attempt to garner regional consensus, cooperation between two states, acquire federal funds, access outside and public input.

The Page Extension is a regional project that encountered several obstacles (e.g. public opposition and funding shortages). The project included the creation of bike/pedestrian access crossing the Missouri River and the construction of a fourth river crossing between St. Charles and St. Louis counties. The purpose was to alleviate congestion and improve traffic flow on the three current river crossings. The case provides the opportunity to assess East-West Gateway's contribution in the regional transportation process through regional consensus, cooperation between two counties, public input, environmental concerns and acquisition of additional funding to complete the project.

The I-64 project is a federally earmarked project and the first design-build in the state of Missouri. The purpose of the project is to improve traffic flow on the central thoroughfare in the St. Louis region. This case offers the opportunity to evaluate East-West Gateway's ability to politically brokering, gather public input, obtain regional consensus and gain federal support.

The cases of Kansas City and St. Louis offer the ability to compare across cases with common demographics. In the six cases, each project was designed to accomplish certain regional goals and offer the opportunity to evaluate the MPOs' ability to help the region attain these goals.

Investigation of the Problem

The investigation of whether MPOs are making a difference involved several steps. First, a review of the development of regional planning and the role created for MPOs by federal legislation. Second, the development of a roadmap to guide the research. Third, a discussion of regional transportation in Kansas City. Fourth, a discussion of regional transportation in St. Louis. Finally, an analysis of how each MPO is making a difference in their regions transportation process. These steps were necessary to provide clear, step by step logic for my conclusions.

The first step was to review the development of regional planning and the role created for MPOs by federal legislation. A review of the development of regional planning illustrates the significance of regional policymaking institutions in the transportation policy process. This discussion uncovers what is currently known about regional planning agencies and offers insight into what we need to know, resulting in a clearer picture of how to design the study and determine if MPOs are making a difference in regional transportation policy.

The second step was to describe the design of the study. This step involved describing the process for conducting interviews and compiling quantitative data. This allowed for the development of a roadmap to guide my research and discussion of the focal points of the study. The chapter outlines how the study will answer research questions, collect data and analyze results, allowing for a theoretical connection between the known and unknown. It

further explains why the study was designed in a particular manner, the reasons for the inclusion or omission of particular data and how the results will contribute to the existing literature on MPOs. The chapter details the development of the research questions and the reasoning behind the collection of various types of data used to answer the proposition posited in this study.

The third step involved the discussion of the regional transportation process in the Kansas City region. The chapter illustrates the difference in regional transportation planning and project selection pre- and post-ISTEA. This discussion and the evaluation of three regional projects illustrates the different roles of the regional MPO (MARC). This chapter uncovers the difference the MPO is making in the Kansas City region.

The fourth step involved the discussion of the regional transportation policy process in the St. Louis region. The chapter illustrates illustrate the difference in regional transportation planning and project selection pre- and post-ISTEA. This discussion and the evaluation of three regional projects illustrates the different roles of the regional MPO (East-West Gateway). This chapter will uncover the difference the MPO is making in the St. Louis region.

The final step involved a discussion of the difference each MPO is making as it relates to the propositions. The chapter offered an analysis of how each MPO is making a difference in regional transportation policy. The culmination of these steps helped to determine the different roles MPOs play, how they increase public saliency, improve elected official involvement and what regional area factors they consider.

What the Study Determined

The cases of Kansas City and St. Louis illustrate that in each case the regional MPO is making a marginal difference and that despite East-West Gateway's and MARC's limitations each MPO offers a glimpse of the promise and their success in regional transportation policy. These differences varied from project to project, proposition to proposition, and region to region. The evidence suggests that there are four ways an MPO makes a difference: (1) increase public saliency; (2) contribute to quality of life; (3) consideration of employment factors; and (4) promote elected official involvement. There are several means in which an MPO can make a difference: (1) hire expert consultants; (2) call a vote on a regional project; (3) provide public information; (4) create committees outside their traditional committee structure; (5) acquire additional funds; and (6) manage fund disbursement and priorities. Each of these MPO actions provided benefits to their region. These include: (1) alleviation of traffic congestion; (2) improved traffic flow on alternate routes during construction; (3) bike/pedestrian access; (4) regional consensus; (5) economic prosperity; and (6) projects the community could embrace. Each of these conclusions follow a chain of evidence. For example, the Triangle project alleviated congestion (better traffic flow) making the area more accessible to commuters and shoppers, resulting in an increase in nonresidential construction, leading to increased employment. The study suggests an MPO's actions influence the regional transportation process and the

outcome of the project which has a direct effect on public saliency, region wide factors and elected official participation.

The study further shows that these MPOs offer the promise of new groups and new ways of thinking about transportation, the success of regional coordination and the problem of single jurisdiction projects and creditclaiming. The MPOs' ability to include outside points of view provides promise for their future as regional governance institutions (e.g. Paseo Bridge, Page Extension). The inclusion of new groups provides a fresh view on a once siloed policy process (Weir et al., 2009). The MPOs ability to bring together a wide range of stakeholders and garner cooperation is a success for a regional governance institution (e.g. Triangle, new Mississippi River Bridge). A regional governance institution's success is based upon their ability to coordinate the efforts of several governments in the planning and provision of public policy (Gerber & Gibson, 2009). East-West Gateway's ability to coordinate the effort of Illinois and Missouri offers evidence of the success of MPOs. They were able to bring together two government entities and accept their role in shared policymaking.

A problem facing MPOs is single jurisdiction projects and credit-claiming. These projects impose costs on other jurisdictions with minimal regional benefits. These types of projects are often the result of an elected official looking for some credit or political capital within his jurisdiction. These elected officials, who are also members of their regional MPO, are rewarded by their

constituents for the funds they can bring home from MPOs (Gerber & Gibson, 2009).

The Implications of the Results

The cases of Kansas City and St. Louis represent only two of the fortynine large metropolitan areas in the United States, yet they offer optimism for
the potential of MPOs. The regional transportation process at Mid-America
Regional Council (MARC) and East-West Gateway Council of Governments
(EWGCOG) is required to be collaborative and all-encompassing. Through this
process MPOs make a marginal difference through their actions. These actions
have an influence on the direction of regional transportation policy. The results
in this study point toward the need for more focus and resources to be
provided to MPOs. The cases of the new Mississippi River Bridge (EWGCOG) and
Paseo Bridge (MARC) offer a glimpse of what MPOs are capable of
accomplishing. These cases illustrate that even though much of an MPO's
powers to coalesce regional cooperation are informal, MPOs still make an
impact.

The creation of an expert panel, on the new Mississippi River Bridge project, to take hold of an issue spiraling out of control illustrates an MPO using informal powers to have a significant impact. The MPO formed the expert panel to provide all the possible alternatives for the region in regard to building a new Mississippi River crossing. The panel made several recommendations to the community, in an effort to coalesce regional

cooperation the MPO called a vote on these recommendations. This vote was non-binding, however, the region embraced the decision of the MPO.

In a similar fashion, MARC created an outside committee (RCTF) to address bike/pedestrian crossings on the Kansas and Missouri rivers. This further illustrates the influence of MPO informal powers. The recommendations from the bike/pedestrian committee were adopted by the MARC Bridge and Pedestrian Access Committee, Total Transportation Policy Committee, Board of Directors and MODOT.

The ability of the region to facilitate cooperation without reservation is a strong suit for each MPO. The implications of MPOs wielding such great influence, with only informal powers offers the prospect of great potential for the policymaking institutions. These institutions garnering even more responsibility and formal powers, in theory, could move regional transportation to new levels.

The difference MPOs make in regard to equity issues is very limited. In each of the projects there was no evidence of the MPO addressing equity issues and five of the six dealt with major thoroughfares for commuters. It is important to note that none of these projects went through a low income area. The projects went through primarily middle income areas, industrial areas, business districts and suburban communities. The implications of this lack of consideration of equity are significant for the future of regional transportation planning and the effectiveness of MPOs. MPOs should take into account how a project is going to affect low income residents and focus less on the direct

time saving benefits for suburban commuters. In many instances, during the expansion or creation of a new freeway, the regional transportation process focuses on connecting suburban commuters to the urban core without consideration of how the new or expanded roadway is going to affect the urban dwellers along the route in regard to air quality, noise and pedestrian access for people without autos.

In short, MPOs make a marginal difference by coordinating local government efforts, garnering cooperation, and including diverse points of view. These regional governance institutions are limited by their lack of authority to implement and the authority that states wield over transportation.

Future Research

The role of MPOs in the regional transportation process warrants further discussion and research. Future research needs to include more cases, more interviews, increased data collection and additional propositions. A study incorporating the research listed above would offer a greater generalizability, a higher degree of reliability and more evidence of whether MPOs are making a difference.

The study points toward the need for further research to include more cases and more varied cases, in terms of the region and the type of project being carried out. The ability to compare and contrast several MPOs versus two would greatly improve the researcher's ability to draw inferences that are generalizable to all MPOs. For instance, the addition of the cities of Oklahoma City, Denver, Pittsburgh and Louisville, in addition to Kansas City and St. Louis,

would greatly enhance the study's findings. The selection of these cities is based on geographic location, size of area and demographics. Each city ranks in the lower half of mean populations for new Metropolitan Statistical Areas (MSA). The mean population for MSAs is 3.6 million people, these cities range from 2.6 million to 1.1 million people (US Census, 2000). The largest MSA is St. Louis with 2.6 million versus the smallest Oklahoma City at 1.1 million people. In addition to size, demographics are important criteria for the selection cities. For example, Pittsburgh offers a highly fragmented metropolitan area similar to the St. Louis metropolitan area. Louisville and St. Louis are both bi-state, lower Midwestern cities with rivers serving as geographical boundary between states. Denver and Kansas City are both metropolitan areas in the Great Plains. The selection of additional cities such as the ones previously mentioned would allow the identification of more varied cases. These cases may involve the traditional bridge or highway project examined in this study or, perhaps, will allow for the examination of a transit project or community project (e.g. MAPS in Oklahoma City). The examination of varied cases would further enhance the results by highlighting a greater number of MPO roles.

In addition to more cases, future research needs to consider the means to collect more data. The researcher needs to plan two face-to-face interviews over a year's time with interviewees, a research might consider following a few projects from inception to completion.

The need for two face-to-face interviews was made apparent during this study. I often found myself asking different questions: Why did the MPO do

this? Why didn't the MPO do that? Why the sudden change of course on the direction of the policy? The meeting minutes provided little information in this study, they often presented topics of discussion containing only a paragraph of information. In several instances the MPO addressed the same topic two or three times in a year and the discussions revolved around differing criteria. This nuance leaves a researcher to wonder what had changed and why. The inclusion of a planned second interview would allow the researcher to develop well articulated questions in effort to highlight the reasoning and circumstances behind these changes. In a similar fashion, following a project from inception to completion would allow for the same questions to be answered. The problem with this method is the study would offer less variety, be time consuming and uncover less information relating to MPOs in general. The expansion of the collection of data and increased number of cases would greatly improve the generalizability and reliability of the study. In an effort to increase the amount of information future research should offer answers to additional propositions.

Future research needs to address the significance of the type of MPO, size of MPO and amount of trust within varying MPO structures. The questions that need to be answered are: (1) Does the MPO create a level of trust among all constituents (2) Is this level of trust between state DOTs and local governments greater in a free standing MPO, housed in a COG, or an MPO controlled by the DOT? (3) Do free standing MPOs have fewer political tensions and a higher degree of trust among participants in the regional transportation

process? (4) Do large MPOs have a higher level of elected official participation and a greater influence in the process?

The combination of more cases, varied cases, more propositions and expanded data collection need to be considered in future research. A study of this nature would offer more information, more reliability, greater generalizability and have a substantial impact on the current literature on MPOs and the regional transportation process.

Appendix A List of Interviews

Senator Joan Bray Missouri State Senator - District 24

Doug Brown Overland Park, KS Public Works Director

Linda Clark MODOT Assistant District Engineer - District 4

Thomas Dow KDOT Urban Planning Manager

Charles Eddy Kansas City Councilman

Ed Hassinger MODOT District Engineer - District 6

Mell Henderson MARC Director of Transportation

Richard "Dick" Jarrold KCATA Sr. Director System Development

Joe Ortwerth Former St. Charles County Executive

Jim Stack IDOT Chief, Transit and Metro Program Planning

Les Sterman EWGCOG Executive Director

David Warm MARC Executive Director

Appendix B MARC Total Transportation Policy Committee Voting Membership

Agency Member Alternate Cass County Cliff Fain, Dir. Public Works, Belton Gary Mallory, Presiding Commissioner	
Cass County Municipalities Gary Lathrop, Alderman, Belton Richard Scharfen, Mayor, Lake Winnebago	
Clay County Craig Porter, Eastern Commissioner James McQuerrey, Highway Administration	
Clay County Duane Jackson, Asst. Dir. Of Operations, Clay County Ed Quick, Presiding Commissioner	
Clay County Municipalities Robert Steinkamp, Mayor, Liberty Bill Biggerstaff, Councilman, N. Kansas City	
Jackson County Larry Creek, Dir. of Public Works, Grandview Larry Finley, City Engineer, Grandview	
Jackson County Earl Newill, County Engineer, Jackson County Mark Trosen, Jackson Co., Develop. Admin.	
Jackson County Oliver DeGrate, Director of Public Works, Blue Springs Vacant	
Jackson County Stan Salva, Mayor, Sugar Creek Stan Sagehorn, Alderman, Sugar Creek	
Jackson County Jerry Page, Director of Public Works, Jackson County Mark Trosen, JaCO Development	
Jackson County Municipalities Karen Messerli, Mayor, Lee's Summit Chuck Owsley, Dir. of Public Works, Lee's Summi	it
Jackson County Municipalities Ron Martinovich, Director of Public Works, Sugar Creek Vacant	
Johnson County Jim Allen, Commissioner Mac Andrew, Dir. Infrastructure/Public Works	
Johnson County Douglas Wood, Commissioner Brian Pieteg, Assistant County Engineer	
Johnson County Alice Amrein, Director of Transportation Chuck Ferguson, Deputy Transit Director	
Johnson County Municipalities Ron Norris, Director of Public Works, Lenexa Vacant	
Johnson County Municipalities Vacant Peggy Dunn, Mayor, Leawood	
Leavenworth County Mike Spickelmeir, County Engineer Mickey Schwartzkopf, Deputy County Engineer	
Leavenworth County Municipalities Charles Campbell Michael McDonald. Dir. Public Works, Leavenwort	.h
Platte County Jim Plunkett, Commissioner Kathy Dusenbery, Commissioner	
Platte County Municipalities John Smedley, Mayor, Platte Woods Kathy Rose, Mayor, Riverside	
Wyandotte County/KCK John Mendez, Commissioner Vacant	
Wyandotte County/KCK Marcia Bernard, Director of Transit Mike Tobin, Assistant Director of Public Works	
Wyandotte County/KCK Bob Roddy, Assistant County Administrator Fred Backus, City Engineer	
Wyandotte County Municipalities Chuck Adams, Councilmember, Edwardsville Dan Byers, Bonner Springs	
Independence Jim Schultz, Councilman Larry Kaufman, Assistant City Manager	
Kansas City, Missouri Charles Eddy, Councilman Patty Hilderbrand, Prog. Mngmt & Development	
Kansas City, Missouri Ed Ford, Councilman Bob Langenkamp, Asst. Dir. Planning & Developm	nent
Kansas City, Missouri John Sharp, Councilman Mike Herron, Manager North Parks Region	
Kansas City, Missouri Stan Harris, Director of Public Works Vacant	
Kansas City, Missouri Thomas Coyle, Dir. Planning and Development Vacant	
Kansas City, Missouri Mark McHenry, Dir. of Parks and Recreation Vacant	
Olathe, Kansas Marge Vogt, Councilwoman Rick Biery, Public Works Director	
Overland Park, Kansas Doug Brown, Director of Public Works Dan Miller, City Engineer	
Overland Park, Kansas Mark Stuecheli, Transportation Planner Brian Shields, City Traffic Engineer	
MODOT Linda Clark, Assistant District Engineer Lee Ann Keli, Planning Manager	
KDOT Davonna Moore, Urban Planning Unit Manager Thomas Dow, State Transportation Planner	
KCATA Mark Huffer, General Manager Dick Jarrold, Senior Director	

Appendix C MARC Bicycle/Pedestrian Resolution

Policy on Bicycle and Pedestrian Accommodations on Missouri and Kansas River Bridges is intended to address major barriers for bicyclists and pedestrians, connect the communities of our region, and implement the policies identified in the LRTP in a cost-effective manner. This policy also reflects the LRTP's goals to support a visionary multi-modal transportation system that will provide value and utility to all citizens of the region. The principal objective of this policy is to ensure that safe, practical and appropriate bicycle and pedestrian accommodations will be considered in the planning and design of all surface transportation projects that cross the Kansas and Missouri Rivers in the Kansas City metropolitan area and that such accommodations will be made wherever warranted and feasible.

This policy applies to projects in MARC's LRTP and Transportation Improvement Program (TIP). The policy is also provided as a recommended good practice for projects not identified in the LRTP or TIP.

Implementation of this policy will require that the lead agency develop and foster a partnership with KDOT, MoDOT, appropriate local governments, advocacy groups and other appropriate groups which MARC will facilitate. The intent of the partnership should be to work together to identify issues, review progress, establish priorities, and identify funding sources.

1. Warrants for Planning and Design:

The investigation and evaluation of bicycle and pedestrian accommodations in all projects for bridges crossing the Missouri and Kansas Rivers during planning and design activities is necessary when both of the following conditions exist:

- a) Existing or Anticipated Demand Warrant accommodations exist when sufficient existing or planned future bicycle or pedestrian traffic generators are located within one mile of the project. Such generators may include residential neighborhoods, employment centers, shopping centers, schools, parks, trails, etc. Local governments should assist project sponsors in defining when current and future bicycle and pedestrian traffic generators will result in sufficient need to warrant accommodation. For projects where no existing or planned bicycle or pedestrian generators are located within one mile of the project, the project sponsor should also consider including provisions for future bicycle and pedestrian accommodations if the anticipated life of the project exceeds the planning horizon of the LRTP. However, each bridge shall be evaluated on its own merits with a decision based on a technical evaluation, not a set distance from traffic generators.
- b) Legal Access Bicyclists and pedestrians are legally allowed to use roadways except where prohibited by law or local traffic ordinance. If bicyclists and pedestrians are not legal users but other safe, practical, and appropriate accommodations for bicyclists and pedestrians can be established elsewhere within the right-of-way or within the same transportation corridor, the project sponsor should investigate and evaluate such accommodations. MARC and the appropriate local government should assist in providing relevant planning information.

2. Feasibility for Construction:

- a) If the warrants listed above exist for a proposed major river crossing project, and if the cost of establishing safe, practical and appropriate bicycle and pedestrian accommodations on a bridge does not exceed 15% of the cost of the entire bridge structure, MARC will consider bicycle or pedestrian accommodations to be feasible and should be provided in the design and construction of the project.
- b) Documentation will be developed by the project sponsor on all projects to support the decision to provide or not provide bicycle and/or pedestrian accommodations.

3. Other Design Considerations:

- a) Bicycle and/or pedestrian connections should be made to streets, roadways, sidewalks or trails found in proximity to river crossing accommodations so that the system is seamless and useful to the traveling, walking, and bicycling public. For portions of the system outside of the corridor right-of-way, the local governments should plan for making needed extensions to the local or regional facilities to make these connections possible.
- b) Bicycle and pedestrian accommodations to, on and from major river bridges should be designed, constructed, operated and maintained to meet federal ADA requirements so that all bicyclists and pedestrians, including people with disabilities, can travel safely and independently.
- c) Projects should be planned to address needs for the long-term. Bridge crossings are long-term investments that remain in place for many years. The design of the bridge should anticipate both current and future demand for bicycling and walking facilities.
- d) Bridge design should be done in a manner that gives strong consideration to the safety of all modes. The design should be done in a manner to minimize detrimental effects for any mode.
- e) Major river bridges should be designed to allow bicyclists and pedestrians to travel along the rivers and under the bridges.
- f) Facilities should be designed to appropriate standards and guidelines. The design of Kansas and Missouri River crossing facilities for bicyclists and pedestrians should follow design guidelines and

Expected future generators are defined as being documented on an agency's plan (i.e. MetroGreen, future land use plans of local jurisdictions).

The policy's intent is not to mandate that 15% of a bridge structure budget should be dedicated to bicycle and pedestrian facilities. Rather any percentage below 15% that will establish the facilities or structural accommodations is satisfactory. If the accommodations exceed 15%, they can still be included in the project.

Standards that are commonly used, such as the AASHTO's Guide for the Development of Bicycle Facilities, AASHTO's Guide For The Planning, Design and Operation of Pedestrian Facilities, FHWA's A-RD-92-073 Selecting Roadway Design Treatments to Accommodate

[&]quot;All" is not intended to include routine maintenance.

It is not the intention of the policy to refer to interstate travel ways.

Bicycles, AASHTO's A Policy on Geometric Design of Highways and Streets, ITE's Recommended Practice "Design and Safety of Pedestrian Facilities", the Kansas City American Public Works Association's (KCAPWA) Incidental Construction and Local Bicycle Facility Design Guidance, and the ADA Accessibility Guidelines (ADAAG).

- g) The project sponsor, and local government and/or local agencies will work together to ensure that the bicycle and pedestrian accommodation is ground to ground, allowing for connections to other bicycle and/or pedestrian facilities.
- h) The bridge and its approaches should be designed to avoid obstructions for current or future connections to bicycle or pedestrian facilities on either end of or under the bridge.

4. Funding:

Funding of bicycle and pedestrian accommodations for major river crossing projects must be determined on a case-by-case basis for each project. Potential funding sources for these improvements may include federal, state, and local funds as appropriate, including, but not limited to, federal funds administered by MARC in the TIP.

The project sponsor, local governments and/or local agencies will work together to develop project financial plans, fund applications, and project funding agreements between participating state or local governments; however, nothing in this policy should be construed as requiring or preventing any project sponsor from bearing all or part of the cost of providing safe, practical and appropriate bicycle/pedestrian accommodations. MARC will assist in the development of financial plans for all major river crossing projects to be included in the regional LRTP and TIP, as requested by project sponsors, member local governments or other metropolitan planning stakeholders.

Because this policy elevates the priority of bicycle and pedestrian accommodations on major river crossings, MARC shall review the evaluation criteria for relevant federal funds under its control, including suballocated Bridge, CMAQ, STP, and STP-TE to ensure that appropriate consideration is given for applications for these types of improvements in regional competitive programming processes.

5. Replacement of Existing Accommodations:

Major river bridge projects that replace existing bridges with bicycle and pedestrian accommodation should provide for at least the same level if not safer levels of accommodation.

6. Maintenance:

Maintenance of bicycle and pedestrian facilities is an important element of assuring safe and convenient crossings of the Kansas and Missouri Rivers for all travelers. Once again, the arrangements for maintaining these facilities should be made on a case-by-case basis and may require participation between multiple state and/or local agencies. However, the owner of the bridge is ultimately responsible for maintenance either by maintaining the bicycle/pedestrian facilities themselves or by securing maintenance agreements from other agencies.

7. Policy Updates:

This policy will be reviewed periodically as the state of the practice for such matters as forecasting bicycle and pedestrian demand evolve.

Source: Mid-America Regional Council

Appendix D

St. Louis Region - Amendment 3 Projects (Dollars in thousands)

Franklin County

1-44

Fog seal shoulders from Route 30 to Crawford County. \$155

Route 47

Coldmilling and resurfacing from south of I-44 to Route 47/30 split. Accelerated from 2006 to 2005

\$2,056

Route 47

Pavement repair and resurfacing from Route 50 to I-44. Accelerated from 2006 to 2005 \$1,961

Jefferson County

Route 21

Diamond grind pavement and fog seal shoulders from Old Route 21 to Schenk Road. Approved December 2004 $\,$

\$1,122

Route 30

Diamond grind pavement and fog seal shoulders, resurface pavement and shoulders with 1 3/4 inches and 3

3/4 inches of asphalt from I-270 to south of Routes B/NN (end of 4-lane divided). Approved December

2004

\$7,609

Route 61

Chip seal shoulders from Route Z to Route A.

\$319

Route 67

Mill and resurface pavement and shoulders with 1 3/4 inches of asphalt from I-55 to 2.0 miles south of I-55. Resurface pavement and shoulders with 1 $\frac{3}{4}$ inches of asphalt from 2.0 miles south of I-55 to Route 110, resurface pavement & shoulders with 3 3/4 inches of asphalt from Route 110 to the St. François

County line. Approved December 2004

\$4,891

Route 141

Resurface pavement and shoulders with 3 3/4 inches of asphalt from north of Route 30 to north of I-55.

\$3,419

Route 30

Rehabilitate westbound lanes of bridges over Big River and Skullbones Creek from 0.2 mile east of Route B to 0.8 mile east of Route B. **Accelerated from 2007 to 2006** \$1,775

St. Charles County

Route N

Resurface pavement and shoulders with 1 3/4 inches of asphalt from Route 364 to west of Route K and from Spring Orchard Road to Motherhead Road. Approved December 2004 \$735

Route 40

Resurface eastbound pavement and shoulders with 3 $\frac{3}{4}$ inches of asphalt and resurface westbound pavement and shoulders with 1 $\frac{3}{4}$ inches of asphalt from I-70 to east of Lake St. Louis.

\$855

Route 61

Resurface pavement and shoulders with 3 3/4 inches of asphalt from the Lincoln County line to I-70.

\$6,753

I-70

Resurface pavement and shoulders with an ultra-thin bonded overlay from Route 94 to the Missouri River. Approved December 2004 \$1,073

I-70

Diamond grind pavement from Lake St. Louis Boulevard to Route 94. \$843

Route 94

Mill and resurface pavement and shoulders with 1 3/4 inches of asphalt and resurface pavement and shoulders with 3 $\frac{3}{4}$ inches of asphalt from south of I-70 to Lindenwood and Route N to Route 364 (2 disconnected sections). \$2,709

Route 370

Mill and resurface bridge approaches from I-70 to I-270. \$750

Route 370

Diamond grind pavement and fog seal shoulders from east of Elm Industrial to I-270. \$1,165

I-70

Rehabilitate bridge decks, bridge painting and guardrail at Route 40/61 interchange in Wentzville. Accelerated from 2007 to 2006 \$1,872

Route 79

Resurface pavement, shoulder work and pavement repair from 0.80 mile south of Lincoln County to I-70. Accelerated from 2007 to 2005 \$6,863

St. Louis County

Route N

Mill and resurface pavement and shoulders with 1 3/4 inches of asphalt from I-270 to Darst, Paul Avenue to Emerling and Walker Lane to Route 115 (3 disconnected sections). - \$961

Route P

Resurface pavement with 1 3/4 inches of asphalt from Route 366 to Route 30. \$383

Route 21

Mill and resurface pavement with 1 3/4 inches of asphalt and resurface pavement with 3 3/4 inches of asphalt from Route 30 to north of Lindbergh and south of Lindbergh to Butler Spur.

\$1,509

Route 40

Diamond grind pavement and fog seal shoulders from Route 340 (Olive Blvd.) to east of Route JJ (Ballas).

\$1,366

I-44

Diamond grind and mill and resurface pavement with 1 3/4 inches of asphalt and fog seal shoulders from Six Flags Road to I-270. \$4,089

Route 61

Mill and resurface pavement and shoulders with 1 3/4 inches of asphalt from north of Butler Hill Road to Route M and pavement repair from north of Butler Hill to Route M. \$3,257

I-64

Mill and resurface pavement with 1 3/4 inches of asphalt and fog seal shoulders from east of Chesterfield Parkway to west of Timberlake Manor and east of Mason to west of I-270. \$323

Route 67

Resurface pavement and shoulders with 3 3/4 inches of asphalt and mill and resurface pavement and shoulders with 1 3/4 inches of asphalt from Route 367 to Route AC, from north of I-270 to Missouri Bottom Rd. and from Long Rd. to Old St. Charles Rd. \$3,588

Route 67

Diamond grind pavement and fog seal shoulders from the Missouri River to Route 367 (NB only) and Elm Grove to I-270.

\$156

1-70

Resurface pavement and shoulders with 3 3/4 inches of asphalt from the Missouri River to west of I-270. Approved December 2004 \$2,971

1-70

Diamond grind pavement from west of I-270 to Fee Fee Road. \$137

I-70

Resurface pavement and shoulders with 3 3/4 inches of asphalt from west of I-170 to east of I-170.

\$570

Route AC

Resurface pavement with 1 3/4 inches of asphalt from south of Route 67 to Parker Road. \$278

Route 100

Diamond grind eastbound pavement and fog seal shoulders from Route T to Strecker Road. \$292

Route 100

Mill and resurface pavement with 1 3/4 inches of asphalt from Route 61/67 to east of Big Bend. \$1,640

Route 100

Resurface pavement with an ultra thin bonded overlay and fog seal shoulders from west of Route 141 to east of Mason.

\$527

Route 100

Resurface pavement with an ultra thin bonded overlay from Route JJ (Ballas Road) to Route 61/67 (Lindbergh).

\$481

Route 100

Resurface pavement and shoulders with 3 3/4 inches of asphalt from west of Route T (begin 4 lane) to West Glen Farms Drive (WB lanes only). \$1,113

Route 141

Diamond grind pavement and fog seal shoulders from south of Ladue Road to south of Clayton Road.

\$360

Route 141

Resurface pavement and shoulders with 1 3/4 inches of asphalt from Route 340 (Olive Blvd.) to south of Route AB (Ladue Road).

\$430

Route 141

Diamond grind pavement from Vance Road to south of I-44.

\$123

I-170

Diamond grind pavement and resurface shoulders with 1 3/4 inches of asphalt and fog seal shoulders from I-270 to south of Route D (Page Avenue). \$1,391

I-170

Resurface pavement and shoulders with an ultra thin bonded overlay from south of Route D (Page Ave.) to I-64 (exception from north of Route 340 to north of Delmar Blvd.). \$1,347

Route 180

Mill and resurface pavement from west of Route 61/67 to east of San Carlos. \$336

Route 180

Resurface pavement with an ultra thin bonded overlay from east of San Carlos to Ferguson Road.

\$1,325

I-270

Various treatments from Mississippi River at Chain of Rocks Bridge to Mississippi River at Jefferson Barracks Bridge. Approved December 2004 \$7,152

Route 340

Resurface pavement with an ultra thin bonded overlay and scrub seal shoulders from River Valley Drive to Woodcrest Executive Drive. Approved December 2004 \$719

Route 340

Resurface pavement with 1 3/4 inches of asphalt from Ballas to Route 61/67 (Lindbergh). \$483

Route 340

Mill and resurface pavement with 1 3/4 inches of asphalt from west of I-64 to west of Appalachian Trial. \$451

Route 340

Resurface pavement with an ultra thin bonded overlay and scrub seal shoulders from Route 100 (Manchester) to west of I-64. \$1,224

Route 364

Diamond grind pavement on Creve Coeur Lake bridge east of Maryland Heights Expressway. \$146

Route 366

Mill and resurface pavement and shoulders with 1 3/4 inches of asphalt from Grant Road to St. Louis city limits.

\$970

Route 30

Coldmill, resurface, pavement repair including the outer road adjacent to the railroad viaduct from the St. Louis city limits to east of I-270. **Accelerated from 2006 to 2005** \$7,862

I-55

Pavement repair, coldmill, resurface, rehabilitate 7 bridges, upgrade guardrail and diamond grind PCCP lanes from Route 61/67 (Lindbergh Blvd.) to 4500 Broadway. Accelerated from 2007 to 2005 \$14,796

Route 61

Coldmill, pavement repair, resurface, replace signal loops and upgrade guardrail from north of Big Bend Boulevard to Route 21. Accelerated from 2007 to 2005 \$4,780

Route 67

Rehabilitation of the Missouri River bridge at the St Charles St. Louis/St. Charles County line. Accelerated from 2008 to 2006

\$8,712

Route 67

Coldmill, resurface, pavement repair, signals, signing and lighting from Old St. Charles Road to Swan. Accelerated from 2007 to 2005 \$13,966

Route AC

Coldmill and resurface with superpave from I-270 south to end of state maintenance at Cozens. Accelerated from 2007 to 2006

\$4,459

Route 115

Coldmill and resurface with superpave from I-70 (Airflight) to I-170. Accelerated from 2006 to 2005

\$2,712

I-170

Bridge rehabilitation at CRIP Railroad, Woodson Road, Ladue Road and Forest Park Parkway. Accelerated from 2007 to 2006 \$3,870

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I-270

Coldmill and resurface mainline asphalt lanes and shoulders with superpave plus ramps at Route 67 from I-70 to Coldwater Creek. **Accelerated from 2007 to 2006** \$8,240

Route 340

Coldmill and resurface from I-170 to Ferguson Road. Accelerated from 2006 to 2005 \$1,648

St. Louis City

Route H

Resurface pavement with 3 3/4 inches and 1 3/4 inches of asphalt from I-270 to 1/4 mile south of I-270 & Hall Street to Adelaide Street (2 disconnected sections). \$1,258

I-64

Resurface with an ultra-thin bonded overlay, resurface pavement and shoulders with 3 3/4 inches of asphalt and fog seal shoulders from east of Ballas to 20th Street. Approved December 2004

\$5,584

1-64

Seal coat and resurface with 1 3/4 inches of asphalt 3 ramps at end of Poplar Street Bridge. \$302

I-70

Mill and resurface pavement and shoulders with 1 3/4 inches of asphalt and fog seal shoulders from Union Blvd. to Broadway Street (I-70 reversible lanes). \$700

I-70

Resurface pavement with an ultra thin bonded overlay from Broadway to I-64. \$262

I-70

Mill and resurface pavement with 3 3/4 inches of asphalt and fog seal shoulders from St. Louis Avenue to Broadway.

\$510

I-70

Fog seal shoulders from Bermuda to St. Louis Avenue.

\$81

Route 100

Mill and resurface pavement with 1 3/4 inches of asphalt from 39th Street to Tucker and Broadway to I-55.

\$1,038

Route 30

Coldmill, pavement repair and resurfacing from St. Louis city limits to Grand. Accelerated from 2006 to 2005

\$5,047

St. Louis Region Total: \$172,750

Source: MODOT

Appendix E Mississippi River Bridge Expert Panel

Cynthia J. Burbank is a retired Associate Administrator for Planning, Environment, and Realty for the Federal Highway Administration. Prior to joining FHWA in 1991, she held positions in the Federal Aviation Administration, FTA, the Office of the Secretary of Transportation, and the U.S. Navy.

Dr. Ronald F. Kirby is director of transportation planning for the National Capital Region Transportation Planning Board (TPB) at the Metropolitan Washington Council of Governments.

Karen Hedlund is a partner at the firm of Nossaman, Guthner, Knox & Elliott, LLC specializing in the structuring of public-private partnerships and the creative financing of infrastructure projects.

Stephen Lockwood is a Principal Consultant with the firm PB Consult. He is a nationally recognized expert on transport policy, finance and institutions, with extensive experience in policy and program development and technical applications.

John Barna is executive director of the California Transportation Commission, an independent state commission that is responsible for programming and funding several billion dollars annually for transportation projects in California in partnership with regional transportation agencies and the California Department of Transportation.

Don Camph is President of Aldaron Inc., a consulting firm that has provided political, policy, financing, and strategy advice on transportation related issues to a variety of private and public sector clients since 1982. Mr. Camph is an internationally recognized expert in the areas of transportation policy, funding, and strategy.

Charles J. Nemmers is the Director of the Transportation Infrastructure Center at the University of Missouri-Columbia, a position he has held since 1999.

Linda Wheeler currently works as a transportation consultant, providing analysis of transportation issues, particularly funding issues, for a variety of clients. Ms. Wheeler retired from the Illinois Department of Transportation in 2003 after a 28 year career at the agency.

Wally Kreutzen is currently CEO of the Orange County Great Park Conservancy, the organization charged with turning the former El Toro Marine Corps Air Station into one of America's largest metropolitan parks. Prior to his current job Mr. Kreutzen served as Chief Executive Officer for the Transportation Corridor Agencies, joint powers agencies charged with building new urban toll roads in Orange County, CA.

David B. Miller is the President of Metro Transportation Group, Inc., a transportation consulting firm that specializes in traffic engineering, transportation planning and signal system design. He has over 36 years experience in traffic engineering and transportation planning.

Source: East-West Gateway Coordinating Council Mississippi River Bridge Expert Panel Report

Appendix F Questions for Interviewees

- 1) How did you get involved with EW Gateway / MARC?
- 2) What is the process for determining a regional problem?
 - 2a) Air Quality
 - 2b) Transportation
- 3) What is the process for establishing regional projects?
 - 3a) Page Extension, Mississippi River Bridge, 64/40 project (STL)
 - 3b) Triangle project, Paseo Bridge, Red Bridge (KC)
- 4) What is the process for determining regional policies?
 - 4a) Unified Planning Work Program
 - 4b) Transportation Improvement Plan
 - 4c) Long Range Transportation Plan
- 5) How has ISTEA improved local officials' awareness of regional issues? The general public's awareness of regional issues?
- 6) How has ISTEA increased the consideration of different kinds of issues in the policy making process? If so, specifically how?
 - 6a) Quality of life issues? Which ones?
 - 6b) Land use and air quality issues?
 - 6c) Equity?
- 7) How has ISTEA promoted cooperation between regional governments?
- 8) How has ISTEA promoted cooperation between MPOs and state Department(s) of Transportation?

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