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ENVIRONMENTAL JUSTICE: AN ANALYSIS OF EFFECTIVE
PUBLIC INVOLVEMENT METHODS AND STRATEGIES FOR
TRANSPORTATION DECISIONS IN THE HOUSTON AREA

THESIS

BY

JERMAINE R. HANNON

2004



ENVIRONMENTAL IMPACT ANALYSIS OF EFFECTIVE PUBLIC
INVOLVEMENT METHODS AND STRATEGIES FOR TRANSPORTATION

DECISIONS IN THE HOUSTON AREA

1994

Presented to Partial Fulfillment of the Requirements for

the Degree: Master of Science in the Department of

of Texas Southern University

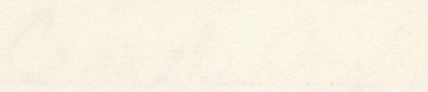
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INVOLVEMENT METHODS AND STRATEGIES FOR TRANSPORTATION

DECISIONS IN THE HOUSTON AREA

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ACKNOWLEDGEMENTS

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Carol A. Lewis. Being under Dr. Lewis' tutor ledge has been a blessing since the first time that I met her in the summer of 2002. Dr. Lewis' constant support, advice, direction, and motivation has served as my guiding light through the at times murky rigors of completing this thesis. Dr. Lewis has been instrumental in the development of this project by evaluating and providing critical assessments of my research. I also would like to thank other committee members, Dr. Lei Yu and Dr. Afonso, for their time, patience, and cooperation.

I want to thank Mr. Ron Goodwin, Mr. Sharon Boxell, Mr. Braden Hilland, Mr. Robert Hill, and Mr. Harry Fulwood, Mrs. Tammye Davis from the Center for Transportation Training and Research, at Texas Southern University and Mr. Edward Owens for their support and suggestions.

I must also thank Dr. Clarence W. Hill of the Center for Excellence in Transportation at South Carolina State University and Mr. Khonso Godwin of Center for Transportation Training and Research at Texas Southern University. They are the reason that I am here at Texas Southern University. They recruited not only I but numerous others here and have given us everlasting support and praise.

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Last, but certainly not least, I thank my expected newborn daughter, Abigail Madison Hannon. The very thought of aiding in bringing a new life into this world, has motivated me to be all I can be. All the hard work conducted to complete this thesis was done for her. The completion of this thesis is only the start of my journey to provide my daughter with a father figure that she can look up too and respect without any reservations. Thank you Abigail!!!!

CHAPTER 1

INTRODUCTION

Environmental justice is a term used most frequently in the United States that focuses on environmental problems, in terms of programs, policies, and/or activities forced on communities with the least amount of power (Fritz, 1999). There are laws that are designed to prevent this type of environmental discrimination.

Land-use practices and transportation design are among a long list of the agents that contribute to environmental injustices. When DOTs, MPOs, and local agencies examine the social and environmental impacts of specific projects, they sometimes do not look at the risks in their siting decisions.

In other cases, DOTs, MPOs, and local agencies sometimes do not properly locate transportation facilities that are equally accessible to low-income minority communities. To assure that citizens are not being subjected to any environmental injustices, the Federal government has passed many federal laws and legislation such as:

- The Intermodal Surface Transportation Efficiency Act OF 1991 (ISTEA)
- Executive Order 12898 of 1994
- The U.S. Clean Air Act of 1963
- The National Environmental Policy Act of 1969 (NEPA)
- Title VI of the Civil Rights Act of 1964 (TITLE-VI)
- Executive Order 11514 of 1977
- The Transportation Equity Act for the 21st Century (TEA-21)

The most influential law, ISTEA, was passed in 1991. ISTEA mandates that all citizens receive the opportunity to provide input regarding local transportation decisions that affect their communities through a process called public involvement. The public involvement process integrates different methods and strategies to incorporate public opinion into a potential plan or policy and provides the public with information concerning the environmental, economic, and social effects of a potential plan or policy.

Public involvement is vital to transportation decision making. The federal government has recognized that transportation decisions have far-reaching effects, thus requiring that metropolitan and statewide transportation decision makers consider a wide array of factors including land use impacts and the overall social, economic, energy, and environmental effects of transportation decisions. Many of these factors reflect community values and are not easily quantifiable. Public input is essential to adequately considering them.

The main agency in the Houston area that makes key transportation decisions is the Texas Department of Transportation (TxDOT). This agency develops transportation plans and policies affecting the opportunity that Houstonians have to access employment, educational, healthcare, and social activities as well as government services. Additionally, this transportation agency has developed its own public involvement process and has established different public involvement programs that are used to aid the making of efficient transportation decisions in Houston. However, are these public involvement programs effective? Are Houstonians being represented properly by TxDOT? What type of public involvement methods and strategies is TxDOT using? The primary objective of the thesis is to evaluate TxDOT's public involvement process and

the effectiveness of the public involvement process, when used to make transportation decisions in the Houston area.

A survey will be conducted to evaluate the TxDOT's US 59/Spur 527 project public involvement process. To measure effectiveness, performance measures developed by the Transportation Research Board (TRB) will also be used within the survey to evaluate each program. These performance measures consist of 14 public involvement effectiveness indicators that measure the issues of public acceptability, accessibility, good decision making, education and learning, time commitments, trust, and indirect costs of public involvement. Of the fourteen indicators, the first nine deal with the "values and outcomes" produced by the process and the last five focus on the "costs" associated with the process.

Public Involvement Indicators

<u>Values and Outcomes</u>	<u>Cost</u>
I. Accessibility to the Decision Making Process	X. Cost Avoidance
II. Diversity of Views Represented	XI. Indirect Cost of Time
III. Opportunities for Participation	XII. Indirect Opportunity Costs
IV. Integration of Concerns	XIII. Indirect Costs Associated with Authority and Influence
V. Information Exchange	XIV. Indirect Costs Associated with Emotional Issues
VI. Project Efficiency	
VII. Project/Decision Acceptability	
VIII. Mutual Learning	
IX. Mutual Respect	

Each indicator is evaluated by metrics through the observation of specific behaviors or characteristics. Each metric is scored on the scale of 1 to 5, where 1 represents the least level of public involvement performance and 5 represents the highest level. The score of each metric and indicator will be applied to the following Score Card.

The summary scores are simply the average score for each of the two categories. These average scores will be evaluated qualitatively and graphed. Conclusions and recommendation made will be based upon the results of the survey.

	Public Involvement Effectiveness Indicators	Metric	Average Metric Score	Average Indicator Score	Acceptability of Score ("YES" or "NO")
VALUES AND OUTCOMES	I. Accessibility to the Decision-making Process	1			
		2			
	II. Diversity of Views Represented	3			
		4			
	III. Opportunities for Participation	5			
		6			
	IV. Integration of Concerns	7			
		8			
	V. Information Exchange	9			
		10			
	VI. Project Efficiency	11			
		12			
	VII. Project Decision Acceptability	13			
		14			
		15			
		16			
		17			
	VIII. Mutual Learning	18			
		19			
	IX. Mutual Respect	20			
		21			
		22			
COST	X. Cost Avoidance	23			
		24			
	XI. Indirect Cost of Time	25			
		26			
	XII. Indirect Opportunity Cost	27			
		28			
	XIII. Indirect Cost Associated with Authority and Influence	29			
		30			
	XIV. Indirect Cost Associated with Emotional Issues	31			
		32			

Figure 1. Public Involvement Effectiveness Survey Score Card

The summary scores are simply the average score for each of the two categories. These average scores will be evaluated quantitatively and graphed. Conclusions and recommendation made will be based upon the results of the survey.

Public involvement is a key component of transportation planning and decision making. The basis for public involvement can be found in several legislative and regulatory documents such as:

- Intermodal Surface Transportation Efficiency Act (ISTEA)
- Executive Order 12898 of 1994
- The U.S. Clean Air Act of 1963
- National Environmental Policy Act of 1969 (NEPA)
- Title VI of the Civil Rights Act of 1964 (TITLE-VI)
- Executive Order 11514 of 1977
- The Transportation Equity Act for the 21st Century (TEA-21)
- Executive Order 13274 of 2002

Each document contains language that specifically pertains to environmental justice and public involvement. These documents are the pillars of the environmental justice movement, forcing public involvement into transportation decision making. This chapter will give a background of environmental justice and the evolution of public involvement, also describing the current public involvement issues in the Houston, TX area.

Overview of Environmental Justice

Communities are not all created equal (Hartford, 1983). Environmental Justice is defined by the United States Environmental Protection Agency (EPA), in its "Final

CHAPTER 2

LITERATURE REVIEW

Public involvement is a key component of transportation planning and decision making. The basis for public involvement can be found in several legislative and regulatory documents such as:

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Overview of Environmental Justice

Communities are not all created equal (Bullard, 1993). Environmental Justice is defined by the United States Environmental Protection Agency (EPA), in its "Final

Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses" document, as follows:

"Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies." (7-6)

Environmental Justice is a movement promoting the fair treatment of people of all races, income, and culture with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In 1994, President Clinton took a firm stand on environmental justice issues when he signed into action Executive Order 12898. The purpose of the environmental justice movement is to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations (ODOT, 1998). "In theory, environmental justice emphasizes the fair treatment and meaningful involvement of all people regardless of race, ethnicity, culture, income or educational status, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies" (Steinberg, 2000). The environmental justice movement was triggered in 1982, by demonstrations to protest the decision to locate a PCB disposal site

in predominantly African American and Native American communities in Warren County, North Carolina. Since then many local, regional, and national groups have organized to combat environmental racism and injustices.

Land-use practices and transportation design are among the worst agents of these injustices. When DOTs, MPOs, and local agencies examine the social and environmental impacts of specific projects, they seldom look at the total risks in their siting decisions. This land-use practice and transportation design brings about urban sprawl. Urban sprawl creates mass amounts of traffic congestion, pollution, and disturbs the overall environmental harmony of the community and/or neighborhood; thus bringing about segregation through increased migration, of financially secure individuals, to the suburbs. In this case the citizens that move out usually are still employed in the city that they left. Suburbanites of the local businesses commuting by car to the inner city by day and home at night, intensify the problems of air pollution and traffic congestion.

In other cases, DOTs, MPOs, and local agencies do not properly place transportation facilities in places that are equally accessible to low-income minority communities. Without access to transportation and to the process through which transportation policies and plans are made, many citizens are excluded from opportunities for education, employment, healthcare, and social activities as well as governmental services; as a result social-class discrimination is promoted, creating a system that does not provide proper transit to tax paying citizens who live in these low-income communities. Transportation policies have a direct effect on low-income, minority communities by making it difficult to access transportation to various places. Federal, state, and local transportation and land use policies emphasizing highway

construction have led to dependency on automobiles. At the federal level, 80 cents of every dollar spent on federal surface transportation programs is earmarked for highways, while only 20 cents is earmarked for public transportation (which includes both bus and rail transit). Although 20 percent of federal transportation funding is generally allocated to public transit, for various reasons, states are unlikely to devote 20 percent of their overall transportation expenditures to public transportation (Puentes, 2003).

Many laws and legislations have been passed to assure citizens are not being subjected to any environmental injustices. The most significant, ISTEA, was passed in 1991. Prior to the passing of ISTEA, minorities in low-income communities were disproportionately represented in transportation projects receiving federal funding. ISTEA mandates that all citizens receive the opportunity to provide input regarding local transportation decisions that affect their communities.

Intermodal Surface Transportation Efficiency Act (ISTEA)

Signed into law by President Bush in 1991, ISTEA was intended to fundamentally change the way transportation projects were funded and how decision-making took place. The goal of ISTEA was to develop a National Intermodal Transportation System that is economically efficient and environmentally sound, which provides the foundation for the nation to compete in the global economy, by moving people and goods in a seamless and energy efficient manner.

ISTEA broadened the state and metropolitan transportation decision-making process by encouraging cooperation among local transportation officials and state agencies in development of alternative transportation solutions. Local transportation officials were given more authority over issues in their realm of governing, inspiring

officials to explore a variety of transportation projects. ISTEA states that, prior to adopting plans or programs, the MPO or State DOT "shall provide citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, other affected employee representatives, and other interested parties with a reasonable opportunity to comment" (23U.S.C. 134 and 135).

The Federal DOT policy and FHWA and FTA regulations build on ISTEA by requiring MPOs and State DOTs to establish their own continuing public involvement processes which actively seeks involvement throughout transportation decision making, from the earliest planning stages throughout the project's life cycle. These regulations provide a basic set of performance standards indicating what the FHWA and FTA expect public involvement for plans, programs, major transportation investments, and transportation projects to achieve. An effective public involvement process provides for an open exchange of information and ideas between the public and transportation decision makers. ISTEA encourages the consideration of alternatives in the project development process, and mandates that congestion and pollution problems associated with growth be addressed. ISTEA also protects environmental justice laws by ensuring that the public participates in the planning process throughout the project life cycle.

ISTEA states that the overall objective of an area's public involvement process is that it be proactive, provide complete information timely public notice, provide full public access to key decisions, and provide opportunities for early and continuing involvement.

Executive Order 12898 of 1994

This order provides minority and low-income populations an opportunity to comment on the development and design of reclamation activities. It states that federal agencies shall make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The order also mandates that every federal agency ensure that public documents, notices, and hearings are concise, understandable and readily accessible to the public. Executive Order 12898 works side by side with other federal legislation's, such as: U.S. Clean Air Act, NEPA, Executive Order 11514, and Title-VI of the Civil Rights Act.

The U.S. Clean Air Act of 1963

The fouling of air due to the burning of fuels has long plagued the inhabitants of populated areas. After the industrial revolution, the emissions from factories smokestacks and automobiles have been the main contributors to air pollution. This type of pollution has been directly related to the rise in asthma, cancers, and other diseases. The first federal legislation passed to combat the air pollution problem is the US Clean Air Act of 1963. This legislative act was the beginning of many environmental laws that place standards and regulations on industries, companies, and automobiles to prevent air pollution. The U.S. Clean Air Act was later revised in 1990, adding more provisions to aid in controlling emissions from automobiles and factories. The U.S. Clean Air Act of 1963 was just a preview of the federal legislation that was to come.

National Environmental Policy Act of 1969 (NEPA)

In 1969 NEPA was established, by congress, to declare a national policy, which will:

- encourage productive and enjoyable harmony between man and his environment
- to promote efforts which will prevent or eliminate damage to the environment and biosphere
- stimulate the health and welfare of man
- to enrich the understanding of the ecological systems and natural resources important to the Nation; and
- establish a Council on Environmental Quality (NEPA Section 2)

The idea behind NEPA is to spearhead Environmental Justice by setting regulations that aid MPOs and DOTs in recognizing disproportionate environmental impacts and to try and avoid them whenever possible. In the past, low-income populations and minority populations were more likely to be exposed to physical displacement and adverse impacts on their cultural institutions, traditional forms of land use, community cultural character, religious practices, and financial well being (GSA Government Fact-sheet, 1998). To combat this type of discrimination, NEPA demands direct consideration of TITLE-VI legislation.

Title VI of the Civil Rights Act of 1964 (TITLE-VI)

Title VI of the Civil Rights Act of 1964 is a national law that clearly states that, “No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to

discrimination under any program or activity receiving Federal financial assistance.” (Title VI of the 1964 Civil Rights Act, 42 U.S.C. 2000d-1) This sets a rationale that the government, local or federal, must “set a good deal” for taxpayers, meaning that equality for all citizens is a must. In terms of transportation, TITLE-VI helped provide accessibility to public transportation and weigh economical and environmental effects of proposed actions in communities. Assuming that minority communities have received inadequate transportation funding in pervious years, TITLE-VI helps sets the stage for the dramatic changes in the way MPOs and DOT’s formulate their planned actions.

Executive Order 11514 of 1977

In January of 1970, President Richard Nixon signed into action Executive Order 11514. This order directs Federal agencies to initiate measures needed to direct their policies, plans, and programs to meet national environmental goals of the National Environmental Policy Act of 1969. Federal agencies are responsible for developing procedures (e.g., public hearings, information on alternative courses of action) to ensure the public can review, understand, and comment on Federal plans and programs with environmental impacts in a timely manner (Executive Order 11514, Sec. 2).

The Transportation Equity Act for the 21st Century (TEA-21)

With the end of ISTEA’s six-year authorization period in 1997, congress passed the Transportation Equity Act for the 21st Century, which sets the national policy regarding transportation planning for the next six years (1998-2003). TEA-21 is a six-year, \$217 billion authorization of federal highways, bridges, and transit programs, which essentially continue the work of programs, originated under ISTEA. TEA-21 provided technical corrections and maintained ISTEA’s emphasis on local involvement in

transportation decision-making. TEA-21 is the largest federal transportation measure ever passed by Congress and was signed into law on June 9, 1998 by then President Bill Clinton. Similarly to ISTEA, TEA-21 also reinforces compliance to TITLE-VI and NEPA.

Executive Order 13274 of 2002

Before TEA-21 was signed into law, various stakeholders reported to Congress that the numerous federal environmental approvals and permits needed to build a highway were inefficient and overly time consuming. Congress attempted to address these concerns by including "Environmental Streamlining" provisions in TEA-21 that required DOT to develop and implement a "coordinated environmental review process" for projects that do or may have a significant impact on the environment. Section 1309 of the TEA-21 mandated Environmental Streamlining as the timely delivery of transportation projects while protecting and enhancing the environment. Environmental Streamlining requires transportation and natural, cultural, and historic resource agencies to establish realistic timeframes for transportation and environmental resource agencies to develop projects, and then to work cooperatively to adhere to those timeframes. On September 18, 2002, President Bush signed Executive Order 13274, titled Environmental Stewardship and Transportation Infrastructure Project Reviews, which emphasizes the importance of expedited transportation project delivery while being good stewards of the environment. As required by the order, an Interagency Transportation Infrastructure Streamlining Task Force, chaired by the Secretary of Transportation, monitors work on expedited projects, reviews the list of suggested projects, and identifies and promotes

policies that aid in streamlining this process. The Task Force also includes members from federal agencies likely involved in environmental project reviews.

Environmental Justice's Transition to Public Involvement

We, the United States of America, have laws and legislation that offer recourse, to address the environmental justice issue specifically, through public involvement. In spite of all the laws and legislation, low-income people and people of color are still being left out of the planning process for the development of transportation facilities, and have little or no control over the environmental and economic impacts they suffer as a result of placement of those facilities in their communities. True environmental justice can only occur through public involvement.

Overview of Public Involvement

Public involvement is the integration of different methods and strategies to incorporate public opinion into a potential plan or policy and provides the public with information concerning the environmental, economic, and social effects of a potential plan or policy. In the past decade there has been a sweeping transformation in the way transportation decisions are made. Several factors have contributed to this change. Since the passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), there has been a federally mandated emphasis on early, proactive, and sustained citizen input into transportation decision making—with special outreach efforts targeted at traditionally underserved populations. ISTEA's decree was later reinforced by its reauthorization, the Transportation Equity Act for the 21st Century (TEA-21). ISTEA and TEA-21 evolved from growing trends that began in American government 30 years ago: the general devolution of power away from the federal government and toward state

and local government, and the empowerment of groups and individual citizens to have a voice in policy decisions that affect them and their communities. The demand for public involvement results from a rapid rate of social change and the complexity of modern life.

There are three main objectives of public involvement:

- Incorporate citizen input into the decision process;
- Inform citizens about transportation issues, projections, the planning process, and budgetary and engineering constraints; and
- Build a consensus decision.

Public Involvement Requirements

The Federal Highway Administration (FHWA) developed a five step approach to systematically set up and implement a public involvement program for a specific plan, program, or project. The first and most important step is setting goals and objectives for the public involvement program. These goals and objectives should be derived from the specific circumstances of the transportation plan, program, or project. Second, once goals and objectives are derived, the people that need to be reached must be identified. The general public and those directly affected, such as abutting property owners, are some of those who should be reached. An assessment must be made of who is directly affected by a proposed course of action. Third, a variety of public involvement techniques must be used to target different groups or individuals in different ways or target the same groups or individuals in different ways. A single, one-size-fits-all approach usually results in missing many people. Conducting public meetings alone, only establishes small communication lines with the public. Other methods and strategies must be used in

conjunction with public meetings to establish a strong line of communication with the public. These methods and strategies may include the following:

- mailing lists
- public information materials
- key person interviews
- briefings
- video techniques
- telephone techniques
- media strategies
- speakers' bureaus and public involvement volunteers.

Develop a general approach or set of general strategies that focus on the goals and objectives of the involvement program and the characteristics of the target audiences. Fourth, flesh out the approach with specific techniques, and research past experiences to determine what techniques work and does not work. Fifth, test your approach by answering the following questions: "Are many people participating with good ideas?", "Are key groups participating?", and "Is the public getting enough information as a basis for meaningful input?" This will assure that your proposed methods and strategies aid in decision-making.

In October 1993, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly issued regulations found in 23 Code of Federal Regulations (CFR), Part 450, Section 212 to guide the development of statewide, local and metropolitan plans and programs. These regulations include the following:

- Early and continuous public involvement opportunities throughout the planning and programming process
- Timely information to citizens, affected public agencies, representatives of transportation agencies, private sector transportation entities and other interested parties, including segments of the community affected by transportation plans, programs, and projects
- Reasonable public access to information
- Adequate public notice of public involvement activities and ample time for public review and comment at key decision points
- Explicit consideration and response to public comment
- Consideration of the needs of the traditionally underserved, including low-income and minority citizens
- Periodic review of public involvement efforts by the Metropolitan Planning Organization (MPO) to ensure full and open access to all
- Review of public involvement procedures by the FHWA and FTA when necessary
- Coordination of MPO public involvement processes with statewide efforts whenever possible.

Benefits of Public Involvement

Public involvement provides a mechanism for bringing a broad range of diverse viewpoints and values into the decision making processes at the earliest possible stages and to help make more informed decisions. By involving citizens in the assessment of needs and solutions and identifying troublesome issues early, public involvement can

promote citizen “ownership” of policies (Committee on Public Involvement in Transportation, 2002). A more appropriate, responsive, and effective plan or project can be developed if the views of public are taken into account. Because the public involvement process involves consultation with many segments of the community, decisions inevitably are more reflective of community values (Committee on Public Involvement in Transportation, 2002). The credibility of transportation agencies can be enhanced through public involvement. Through interaction with the public, transportation stakeholders develop a better understanding of agency operations, and agency officials have a better understanding of public thinking (Committee on Public Involvement in Transportation, 2002). As a result the transportation agencies’ relationship with the public is improved.

Public Involvement Challenges

Public involvement is not an easy feat to accomplish. It takes a lot of commitment, time, patience, and diligence. Public involvement definitely has its challenges. Sometimes it is hard to design methods and strategies to involve the public in transportation decisions. Many different questions must be asked when it comes to public involvement. What people need to be involved? Who are the major stakeholders of this project? How can an agency make sure that citizens with low-incomes are actively involved? What times should I hold public meetings? How does an agency get the word out about the public meetings? How much money should be spent to make sure the public involvement process is a success? There is no one answer to any of these questions. Public involvement is project specific. Every given situation is different, and each approach to a specific public involvement challenge will be unique (USDOT, 1996).

Designing a Public Involvement Program

Developing an effective public involvement program is a strategic effort that requires assembling a selection of techniques to meet the needs of a given transportation plan, program, or project (USDOT, 1996). According to the USDOT there are five fundamental guidelines for designing a public involvement program:

1. Act in accordance with basic democratic principles
2. Sustained contact between agency and non-agency people throughout transportation decision-making
3. Use of a variety of public involvement techniques
4. Sustain active outreach to the public
5. Focusing participation on decisions

It is sometimes challenging to reach the public. Public involvement programs should be inclusive, involving decision makers and all interested stakeholders. Public involvement programs should include as many groups and individuals in the community as practicable. Many of these groups and individuals will surface easily because they are interested in the decision outcome. Some groups and individuals are more difficult to reach because of cultural or economic isolation or because they are users of the facility who do not reside in the immediate project area. That is why it is important that transportation agencies use different public involvement techniques that target different groups or individuals in different ways.

Once contact is made with the public it must be sustained throughout the public involvement process. Two-way communication, which promotes public feedback and uses that feedback to transform the decision process and outcome, is essential to the

public involvement process. The attitude of transportation agency officials and members of the public should be one of mutual respect. To promote two-way communication and mutual respect, between the transportation agency and the public, democratic principles should be stressed and adhered to. In a democratic society, people have opportunities to debate issues, frame alternative solutions, and affect final decisions in ways that respect the roles of decision-makers (USDOT, 1996).

Involving citizens without informing them is dangerous. Transportation agency officials should provide the public with the details of the proposed plan or project (transportation issues, projections, the planning process, and budgetary and engineering constraints), so that they can evaluate its importance or anticipated costs and benefits. The public's ideas and concerns about the proposed plan or project should then be responded to in a timely manner by transportation agency officials. Furthermore the integration of ideas from the public into decisions shows the public that participation is worthwhile.

History and Overview of US 59/Spur 527

US-59 was first constructed inside Loop 610 in 1961. It was the largest and most modern freeway in Houston at that time. The first segment opened from downtown to Kirby and contained elevated, at grade, and below grade freeway sections. It serves the major Houston activity centers of Downtown, Midtown, the Museum District, and the Medical Center. Since then, daily traffic on US-59 inside the Loop has grown to over 240,000 vehicles per day making it the busiest radial freeway in Texas (TxDOT, 2004).

Between 1989 and 2002, the Texas Department of Transportation reconstructed much of the Southwest Freeway; from Beltway 8 to Mandell inside Loop 610.

Reconstruction of US-59 began in 1989 with four projects to widen and rebuild the freeway from Shepherd to Beltway 8. The reconstruction of the freeway segment from Shepherd to Mandell included the construction of four arched bridges over US-59 at Hazard, Woodhead, Dunlavy, and Mandell. This section with distinctive bridges, aesthetic design features, and landscaping has been called the Gateway to Houston (TxDOT, 2004). The reconstruction of the section between Shepherd and Mandell was completed before Christmas 2002, including the construction of four arch bridges at Hazard, Woodhead, Dunlavy, and Mandell.

In September 2002, TX DOT began the reconstruction of the last segment of US-59 into Downtown. This segment includes the reconstruction of US-59 from Mandell to east of Spur 527 as well as the reconstruction of Spur 527 into Midtown. This project will convert the elevated section of freeway to a below grade section with additional arched bridges at Graustark and Montrose. East of Montrose, the freeway will regain elevation to connect with the present Spur 527 and US-59. The current 10-lane facility (five lanes each direction) will be expanded to a 12-lane facility to include five lanes in each direction as well as a two-lane barrier separated HOV facility that will divert from US-59 onto Spur 527.

To minimize the impacts to downtown traffic normally using Spur 527, TxDOT accelerated construction of exit ramps for Main Street and Polk Street to provide alternatives to the existing West Gray/Pierce Street exit ramp. For southbound Spur 527 traffic, TxDOT reworked construction plans to allow two southbound Spur 527 lanes to remain open during all phases of construction. As a result, many resident business

owners and commuters have voiced many issues with the closing and reconstruction of Spur 527.

Issues with the Closing of Spur 527

Approximately 40,000 vehicles per day use Spur 527. Spur 527 connects to Brazos, Louisiana, and Milam Streets northbound and Bagby, Smith, and Milam streets southbound. Since construction has begun lanes and a substantial portion of exit ramps have been closed; and four to five main lanes have been maintained. This loss of mobility and accessibility to center-city destinations and beyond during the construction of US 59/Spur 527 will impact almost everyone in the Houston Region. Particularly affected will be commuters from the southwest portion of the region, central city neighborhoods and their residents and central city employers. The areas that will be affected include West University, Upper Kirby, Neartown, The Museum District, Midtown, Downtown and all the neighborhoods inside those areas.

Houstonians throughout the southwest corridor are concerned about the impact this project will have on neighboring communities. Recently, many local nonprofit activist organizations have filed lawsuits aimed at halting the US 59/Spur 527 highway construction project; they claim that that the US 59/Spur 527 project will destroy local neighborhoods and adversely affect area businesses and merchants. By doing this, the public forced its public agencies to being more responsive to their needs and listen to their concerns. Ideally, the issues and concerns of Houstonians should have been voiced and responded to during the public involvement process.

US 59/Spur 527 and Public Involvement

The public involvement process for the US 59/ Spur 527 project was conducted during the early 1990's. On February 25, 1998, FHWA approved a finding of No Significant Impact (FONSI) document for the US 59/Spur 527 project from east of Shepherd Drive to east of Mandell Street; and from east of Mandell Street to Smith Street. A FONSI is issued when environmental analysis and interagency review during the Environmental Assessment (EA) process finds a project to have no significant impacts on the quality of the environment.

FHWA reevaluated the project in June 2002. They determined that there were no significant changes in the design or the previously approved environmental clearance for the project and on July 11, 2002 FHWA concurred with the re-evaluation document. By that action, the FHWA concluded that no further environmental documentation or public involvement was required. The second portion of the project, therefore, was cleared to proceed.

On July 12, 2002, FHWA authorized TxDOT to proceed with bids for the project from east of Mandell Street to Smith Street. This section includes the HOV lanes connecting to downtown streets via Spur 527.

In August of 2002, the Southwest Corridor Facilitation Team, which consists of 46 public agencies, management districts, community organizations, private companies and individuals organized; was organized to assist the public agencies and the community with preparation for the closures of Spur 527 by facilitating dialog with the community about the changes as they were designed and implemented. To inform the public, they sent out area-wide e-mails to community organizations using of the City of Houston's

contact database for Super Neighborhood Councils, Chambers of Commerce's and community associations.

During the summer and fall of 2002 many organizations and companies distributed updates about the highway and street projects and the need for commuters to consider alternatives. Once the 2002 holiday season had past, the effort intensified although it continued to operate using establish distribution channels of member organizations and their contact databases. A widespread effort was undertaken using three detailed e-mails over a three-week period beginning on January 7, 2004 to 461 addresses with flyers for the recipient's use and distribution. Team member organizations made an intense effort to inform their group and/or customers. Notable was the newspaper articles in two Fort Bend County newspapers. Those articles ran eight times in the weeks before the closure. Also notable was the intense effort by Houston Community College whose main campus is at the foot of Spur 527 to inform their students and staff, which is over 5000, about alternatives to reach the area.

Successful public involvement is the key to successfully implementing a transportation plan or project. Federal legislation mandates that the public involvement process must be conducted and approved before a plan or project can receive federal funds. In this project's case it seems that the project was approved and now everyone is trying to inform and involve the public. Why are Houston citizens reacting in a fashion that denotes a lack of public involvement? Do they have a right to be disgruntled? Was the US 59/ Spur 527 public involvement process a fair and/or effective process? Being that the US 59/ Spur 527 project was approved in the late 1990's, one could simply guess that several variables could lead the conclusion of why this project has met so much

public controversy over the past two years. Yet, as a researcher one must develop an instrument that can be used to evaluate the US 59/ Spur527 project public involvement process and not just rely on the opinions of the media

Rationale for the Study

Public involvement is the integration of different methods and strategies to incorporate public opinion into a potential plan or policy and provides the public with information concerning the environmental, economic, and social effects of a potential plan or policy. Public involvement provides a mechanism for bringing a broad range of diverse viewpoints and values into the decision making processes at the earliest possible stages and leads to more informed decisions. The credibility of transportation agencies can be enhanced through public involvement. Through interaction with the public transportation stakeholders develop a better understanding of agency operations, and agency officials have a better understanding of public thinking (Committee on Public Involvement in Transportation, 2002).

Public involvement is not an easy feat to accomplish. It takes commitment, time, patience, and diligence. Public involvement definitely has its challenges. Many different questions must be asked when it comes to public involvement. Who should be involved? Who are the major stakeholders of this project? How can an agency make sure that citizens with low-incomes are actively involved? What times should I hold public meetings? How does an agency get the word out about the public meetings? How much money should be spent to make sure the public involvement process is a success? There is no one answer to any of these questions. Public involvement is project specific. Every given situation is different, and each approach to a specific public involvement challenge will be unique (USDOT, 1996).

CHAPTER 3

DESIGN OF THE STUDY

Rationale for the Study

Public involvement is the integration of different methods and strategies to incorporate public opinion into a potential plan or policy and provides the public with information concerning the environmental, economic, and social effects of a potential plan or policy. Public involvement provides a mechanism for bringing a broad range of diverse viewpoints and values into the decision making processes at the earliest possible stages and leads to more informed decisions. The credibility of transportation agencies' can be enhanced through public involvement. Through interaction with the public transportation stakeholders develop a better understanding of agency operations, and agency officials have a better understanding of public thinking (Committee on Public Involvement in Transportation, 2002).

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In the past two years the US 59/Spur 527 project has become a major transportation issue within the Houston area. The major and most publicized concern with this project is the closing of Spur 527 and related neighborhood traffic. Approximately 40,000 vehicles per day use Spur 527. Spur 527 connects to Brazos, Louisiana, and Milam Streets northbound and Bagby, Smith, and Milam streets southbound. This loss of mobility and accessibility to center-city destinations and beyond during the construction of US 59 and Spur 527 will impact almost everyone in the Houston Region. The areas most affected include West University, Upper Kirby, Neartown, The Museum District, Midtown, Downtown and all the neighborhoods inside those areas. Houstonians throughout the southwest corridor are concerned about the impact this project will have on neighboring communities. Ideally, the issues and concerns of Houstonians would have been voiced and responded to during the US 59/Spur 527 project public involvement process.

Instruments and Data Collection

A survey will be conducted to evaluate the TxDOT's US 59 and Spur 527 project public involvement process. This survey was developed by the Transportation Research Board (TRB) in 1999 to serve as a possible instrument to be used to evaluate the effectiveness of public involvement plans and programs. To measure effectiveness, performance measures will be used within the survey to evaluate each program. These performance measures consist of 14 public involvement effectiveness indicators that evaluate issues such as: public acceptability, accessibility, good decision making, education and learning, time commitments, trust, and indirect costs of public involvement. Of the fourteen indicators, the first nine deal with the "values and

outcomes” produced by the process and the last five focus on the “costs” associated with the process.

Public Involvement Indicators

Values and Outcomes

- I. Accessibility to the Decision Making Process
- II. Diversity of Views Represented
- III. Opportunities for Participation
- IV. Integration of Concerns
- V. Information Exchange
- VI. Project Efficiency
- VII. Project/Decision Acceptability
- VIII. Mutual Learning
- IX. Mutual Respect

Cost

- X. Cost Avoidance
- XI. Indirect Cost of Time
- XII. Indirect Opportunity Costs
- XIII. Indirect Costs Associated with Authority and Influence
- XIV. Indirect Costs Associated with Emotional Issues

Each indicator is evaluated by metrics that measure it through the observation of specific behaviors or characteristics. Each metric is scored on the scale of 1 to 5, where 1 represents the least level of public involvement performance and 5 represents the highest level. The score of each metric is applied to the following Score Card, which is formatted in such a way that average scores for each individual “values/outcomes” and “cost” indicator is created.

Figure 2. Public Involvement Effectiveness Score Card

To compute the results of the survey the average score of each metric must be calculated. To do this, the sum of the corresponding metrics of each survey will be divided by the total number of surveys. This will create an average score for each metric.

	Public Involvement Effectiveness Indicators	Metric	Average Metric Score	Average Indicator Score	Acceptability of Score ("YES" or "NO")
VALUES AND OUTCOMES	I. Accessibility to the Decision-making Process	1			
		2			
	II. Diversity of Views Represented	3			
		4			
	III. Opportunities for Participation	5			
		6			
	IV. Integration of Concerns	7			
		8			
	V. Information Exchange	9			
		10			
	VI. Project Efficiency	11			
		12			
	VII. Project Decision Acceptability	13			
		14			
		15			
		16			
		17			
	VIII. Mutual Learning	18			
		19			
	IX. Mutual Respect	20			
		21			
		22			
COST	X. Cost Avoidance	23			
		24			
	XI. Indirect Cost of Time	25			
		26			
	XII. Indirect Opportunity Cost	27			
		28			
	XIII. Indirect Cost Associated with Authority and Influence	29			
		30			
	XIV. Indirect Cost Associated with Emotional Issues	31			
		32			

Figure 2. Public Involvement Effectiveness Score Card

To compute the results of the survey the average score of each metric must be calculated. To do this, the sum of the corresponding metrics of each survey will be divided by the total number of surveys. This will create an average score fore each metric.

To find the average score of each indicator, the sum of the average scores of each metric that represents each indicator will be divided by the sum of metrics that represent each indicator. To measure the effectiveness of each aspect of each indicator, the average score of 3.0 – 5.0 as an acceptable average score for each Indicator. The average score of 0 - 2.9 will be set as an unacceptable score for each indicator. Conclusions and recommendations made on how to possibly improve the public involvement process will be based upon the results of the graph and the indicators that have an unacceptable score.

Subject Population

The primary subject population of this study represents the many community leaders and civic officials from organizations that were involved in the US 59/ Spur 527 project public involvement process. These organizations are as follows:

- (4) City of Houston
- (2) Houston-Galveston Area Council (H-GAC)
- (1) Metropolitan Transit Authority of Harris County, Texas (METRO)
- (1) Texas Department of Transportation, Houston Division (TxDOT)
- (1) Downtown and Midtown Residents Association
- (1) Greater Southeast Management District
- (1) Midtown Civic Association
- (1) Midtown Management District
- (1) Midtown Redevelopment Authority
- (1) Museum District Business Alliance
- (1) Neartown/Montrose Super Neighborhood Council
- (1) OST/Almeda TIRZ

Data Collection

The data collection process occurred over the course of 6 weeks, between the dates of February 27, 2004 to April 9, 2004. The data collection process continued until enough subjects were evaluated to provide a solid subject population for the study based on response-based criteria. A total of 16 subjects were attained to provide a substantial evidence for the assertion and to increase the applicability of the findings. The findings will be analyzed quantitatively to draw the appropriate conclusions and recommendations.

During the first process TxDOT did everything by federal government regulations. They posted notices of public meetings, held community workshops to explain to the public what they were planning, and gained acceptance by the majority of stakeholders involved. The project was approved by FHWA on January 9th of 1996, resulting in the issuing of a FONSI (Finding of No Significant Impact).

This gave TxDOT the authority to proceed with their plans to widen US 59 to 12 lanes leaving room in the median to construct a HOV lane that would be above grade (elevated). Also included in TxDOT's US 59/Spur 527 project was the addition of several lanes to Spur 527. This was to be done with Spur 527 remaining intact. Spur 527's lane expansion would potentially eliminate the merge problems between US 59 westbound and Spur 527 southbound.

Also during late 1995 and early 1996, TxDOT efforts with this project were being challenged by the local residents of Montrose and West Alabama areas of Houston, TX. Montrose and West Alabama residents claimed that they did not have any access to the US 59/Spur 527 project public involvement process. Over several months, Montrose and West Alabama residents contacted community leaders and civic officials with their

CHAPTER 4

RESULTS AND DISCUSSION

During field research at the Environmental Division of TxDOT's Houston Office, several interesting facts were discovered that might explain the controversy surrounding that the US 59/Spur 527 project has lately engrossed. There were essentially two public involvement processes that were initiated by TxDOT. The first process started in 1991 and ended in 1995 and the second started in 1996 and ended in 1998.

During the first process TxDOT did everything by federal government regulations. They posted notices of public meetings, held community workshops to explain to the public what they were planning, and gained acceptance by the majority of stakeholders involved. The project was approved by FHWA on January 9th of 1996, resulting in the issuing of a FONSI (Finding of No Significant Impact).

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Also during late 1995 and early 1996, TxDOT efforts with this project were being challenged by the local residents of Montrose and West Alabama areas of Houston, TX. Montrose and West Alabama residents claimed that they did not have any access to the US 59/Spur 527 project public involvement process. Over several months, Montrose and West Alabama residents contacted community leaders and civic officials with their

concerns of the US 59/Spur 527 project's potential effects on their respective communities. Even though TxDOT had the legal right to move forward with the US 59/Spur 527 project, after public and media backlash including the pressures from congressmen and state representatives, TxDOT decided to reopen the public involvement process for the US 59/Spur 527 project in the spring of 1996.

The main issue discussed during the second public involvement process was the HOV lane that TxDOT planned to construct above grade. Interestingly at this time there few concerns about Spur 527 construction. This was because TxDOT did not plan to tear down and reconstruct Spur 527. All interest and concerns of stakeholders dealt with the issue of the HOV lane being constructed at grade (level with the ground) instead of above grade. On May 21st of 1996 TxDOT found the current structural condition of Spur 527 to be unacceptable for simple lane expansion. Spur 527 needed to be torn down and reconstructed completely. TxDOT planned to make changes to their design and hold a public meeting at Poe Elementary School.

On October 3rd of 1996 TxDOT held the public meeting, discussing the numerous improvements to the originally proposed plan. This was the public's chance to address their issues and concerns with TxDOT's plan. Careful review of the minutes of that meeting show only one attendee remarked about Spur 527. No one indicated concern about the potential effects of the closing, tearing down, and reconstruction of Spur 527. All concerns were about the HOV lane. On May 8th of 1997, after careful negotiations and pressures from the public, the media, and civic officials; TxDOT decided to construct the HOV lane at grade. On February 25th of 1998, FHWA issued another FONSI for the US 59/Spur 527 project.

With the recent media coverage it is easy to assume that the public involvement process for the US 59/Spur 527 project was a failure and not effective. Was the public involvement process non-effective? Is the recent coverage just media rhetoric? In order to determine if the US 59/Spur 527 project public involvement process is effective, it must be evaluated. There are two typical methods for evaluating the effectiveness of public involvement tools: surveys and quantitative statistical analysis (FDOT, 2003).

Surveys were filled out by numerous community leaders and civic officials that represented stakeholder organizations that were involved in the US 59/Spur 527 project public involvement process. These organizations are as follows:

- (4) City of Houston
- (2) Houston-Galveston Area Council (H-GAC)
- (1) Metropolitan Transit Authority of Harris County, Texas (METRO)
- (1) Texas Department of Transportation, Houston Division (TxDOT)
- (1) Downtown and Midtown Residents Association
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- (1) Midtown Redevelopment Authority
- (1) Museum District Business Alliance
- (1) Neartown/Montrose Super Neighborhood Council
- (1) OST/Almeda TIRZ

This survey was developed by the Transportation Research Board (TRB) in 1999 to serve as a possible instrument to evaluate the effectiveness of public involvement plans

and programs. 14 public involvement effectiveness indicators that were used within the survey to evaluate the US 59/ Spur 527 project public involvement process. Each of 14 public involvement effectiveness indicators will be discussed in the following section, to gain a better understanding of their significance.

Values and Outcomes Indicators

Accessibility to the Decision Making Process. Having a public involvement initiative that is accessible to the public is fundamental (TRB, 1999). The “traditional” target of and participant in public involvement activities is an English speaking, middle to upper class, educated person; that works the hours of 8am to 5 pm (FDOT, 2003). Traditional public involvement techniques include:

- Holding meetings on week nights from 7:00 – 9:00 pm
- Holding meetings at locations that are inconvenient to those not owning a car
- Utilizing newsletters as the primary means to periodically communicate
- Creating a Web site and putting notices in newspapers.

These methods and techniques are generally ineffective since they disassociate the many communities that consist of elderly, minority, disabled, and low-income residents. These historically under-represented populations find it difficult to participate in public involvement activities that are targeted to solicit participation from the “traditional” public involvement participant (FDOT, 2003). These citizens not only have greater difficulty getting to jobs, schools, recreation, and shopping than the population at large, but often they are also unaware of transportation proposals that could dramatically change their lives (USDOT, 1996). There are several barriers that can account for this, as shown in Table 1.

<ul style="list-style-type: none"> • Linguistic Barriers 	<ol style="list-style-type: none"> 1. They may speak a language other than English. 2. Some older people are unable to read.
<ul style="list-style-type: none"> • Economic Barriers 	<ol style="list-style-type: none"> 1. Some people may not have sufficient income to spend on computers or even newspapers. 2. Some people may be reliant on transit schedules to determine their daily schedules. 3. Some populations may not be able to attend meetings during the week or at night because they have a second job or a second/third shift job. 4. Often the cost of child care is too expensive, and a single parent may not be able or willing to leave children alone to attend a traditional public outreach event.
<ul style="list-style-type: none"> • Safety Barriers 	<ol style="list-style-type: none"> 1. The elderly may not feel safe after dark, preferring meetings held during the daylight hours.

Table 1. Public Involvement Barriers

For these reasons many of elderly, minority, disabled, and low-income residents lack experience with public involvement, even though they have important, unspoken issues that should be heard. Transportation agencies must assume responsibility for reaching out and including diverse populations in the decision-making process (USDOT, 1996).

It is important for transportation agencies to think strategically and tailor their public involvement efforts to the needs of the affected community, by using creative and innovative methods to provide access to citizens that represent every spectrum of the community. Transportation agencies must keep in mind that the illiterate and minorities are not always in the low-income populations, and individuals with low incomes are not always minorities (FDOT, 2003). These underrepresented groups are a rich source of

ideas that can improve transportation not only for themselves but also for the entire community. Their input is critical to successful transportation decision making. All transportation agencies must consider new ways to reach out to diverse populations that go beyond the often-used public meeting.

Diversity of Views Represented. A major component of a successful process is clearly identifying all of the stakeholders affected by and interested in a project and then getting representatives of those groups to participate (TRB, 1999). Public involvement activities are much more effective if efforts are targeted toward people who will actively contribute to the development and decision-making processes surrounding transportation improvement projects (FDOT, 2003). The more specific a public involvement plan, the greater its chances of producing input an agency can actually use in decision-making (USDOT, 1996). Every effort must be made to encourage the participation of those citizens and/or groups that accurately represent the full range of issues and opinions (FDOT, 2003). When it comes to evaluating stakeholders a series of questions must be asked and answered, which solicit information about financial impacts and interested parties (Table 2).

Opportunities for Participation An overriding reason that people take part in public involvement efforts is the desire to contribute in a meaningful way (TRB, 1999). In order to participate effectively in transportation project development and planning, people need ways to both get information from an agency and give information back to it (USDOT, 1996). In other words public involvement is a two way street that should provide opportunities for information exchange and input between transportation officials and stakeholders.

<ul style="list-style-type: none"> Who can help advance the project or stand in the way of completing the project? 	<ol style="list-style-type: none"> Interest groups Neighborhood Associations Business Owners Key Opinion Leaders Policy Makers
<ul style="list-style-type: none"> Who will suffer a direct financial impact? 	<ol style="list-style-type: none"> Elected officials Transportation Groups Private Landowners Others
<ul style="list-style-type: none"> Who has critical expertise for each phase of the project? 	<ol style="list-style-type: none"> Administrative support Budget support Other
<ul style="list-style-type: none"> Who will suffer an indirect financial impact? 	<ol style="list-style-type: none"> Elected officials Attentives Other projects or initiatives that might be affected by this project of implementation.
<ul style="list-style-type: none"> Who can help advance the project or stand in the way of completing the project? 	<ol style="list-style-type: none"> Individuals responsible for overall regional and/or project management Individuals responsible for projects in the same geographic area Project managers of related projects Other state agency project managers Whoever gets the project for the next phase of implementation Others

Table 2. Identifying Stakeholders

By identifying people with an interest in the project and enlisting their participation, better projects can be designed to meet community needs (FDOT, 2003).

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Integration of Concerns. This indicator serves to emphasize the importance of integrating stakeholder concerns into decision processes (TRB, 1999). The public's ideas and concerns about the proposed plan or project should then be responded to in a timely manner by transportation agency officials (USDOT, 1996). Furthermore the integration of ideas from the public into decisions shows the public that participation is worthwhile.

Information Exchange. Public involvement processes are based on creating an educated constituency to aid in decision making and increasing the acceptability of projects (TRB, 1999). The public needs to know details about a plan or project to evaluate its importance or anticipated costs and benefits (USDOT, 1996). Therefore it is very important that complete and clear information is exchanged during public involvement that gives the public a clear view of the proposed project. This information should change throughout the process, showing the incorporation of public's opinions and/or concerns.

Project Efficiency. Public involvement should reduce the amount of time required to take a project to completion; although it results in more "up front" time, the potential for delays or work stoppages due to public controversy (e.g., disputed study results, lawsuits, etc.) are reduced (TRB, 1999). Specific public involvement action steps and techniques should be coordinated with the project schedule (FDOT, 2003). Calculate the timing (who will do what, within what timeline, with what response in compliance with federal, state and local requirements) required to achieve the desired results. The public involvement process must have goals and objectives that are met on or ahead of schedule. If this is not so, the public involvement process must have had deficiencies in indicators one through five.

Project/Decision Acceptability. The desire to improve chances that decisions will be acceptable to the widest range of stakeholders is a guiding force in public involvement processes (TRB, 1999). Transportation agencies must ensure that the stakeholders understand and support, as much as possible, the final plan (ODOT, 1997). Consensus does not mean that everyone agrees enthusiastically but that all influential groups and individuals can live with a proposal (USDOT, 1996).

Mutual Learning. This indicator suggests that all stakeholders see themselves as responsible for finding a solution, rather than defending a particular cause or agency position (TRB, 1999). Mutual learning happens when participants learn from their role in a public involvement initiative. There must be some type of positive negotiation that results in a compromise that is beneficial to both stakeholders and transportation agencies.

Mutual Respect. Public involvement promotes an integration of stakeholders with viewpoints that traditionally oppose each other (TRB, 1999). To promote two-way communication and mutual respect, between the transportation agency and the public, democratic principles should be stressed and adhered to throughout the public involvement process. In a democratic society, people have opportunities to debate issues, frame alternative solutions, and affect final decisions in ways that respect the roles of decision-makers (USDOT, 1996).

4.1.2 Cost

Cost Avoidance. Public involvement is said to lower the cost of a project because many costs associated with controversial projects will be avoided (TRB, 1999). Most of these costs are associated with work stoppages due to disputed study results,

lawsuits, protest, and lawsuits due to a gridlock in negotiations. If the final decision incorporates the needs of a wide range of stakeholders there will be minimal levels of controversy surrounding it (TRB, 1999). Compromise promotes low cost and controversy promotes high cost. It is important that some type of compromise is reached to promote low cost on both transportation agencies and stakeholders sides.

Indirect Cost of Time. A major detractor to participating in public involvement is the time commitment necessary on the part of participants (TRB, 1999). Most people consider the public involvement process to be a waste of time. Citizens feel that transportation agencies will not listen to their concerns and incorporate their ideas into the final plan. People feel that the public involvement process is just a prerequisite or a precondition that transportation agencies have to carry out before they can execute the transportation plan that they sought to do in the first place. The public involvement process must be looked upon by its participants as meaningful cause that is beneficial to all that are involved.

Indirect Opportunity Costs. When someone commits to participating in public involvement, they expend time and energy that could have devoted to something else (TRB, 1999). Stakeholders feel that there may be too little or too much time spent on specific task; thus resulting in a feeling that they are wasting their time. Especially when their experience hasn't been a positive one, lost time and energy are viewed as lost opportunities (and generally lead to feelings of dissatisfaction) (TRB, 1999). As all know time is our most valuable commodity; once it is used it cannot be recycled for further use.

Indirect Costs Associated with Authority and Influence. In the process of compromising and making concessions, individual stakeholders may feel that they are

giving up some of their own power (TRB, 1999). In some cases stakeholders feel they gave up too much during negotiations, and later decide never to participate in any public involvement processes. Also, there are some cases where public involvement processes are high profile; thus resulting in number of stakeholders and public officials participating. The overpowering influence of these officials and stakeholders negotiate an outcome that is overwhelmingly in their favor; thus giving transportation officials feeling giving up too much in negotiations. There must be balance in the decision making process where everyone can voice their respective opinions and fairly negotiate.

Indirect Costs Associated with Emotional Issues. The emotional costs associated with public involvement are a widespread deterrent. Transportation officials and individual stakeholders all complain of verbal attacks, lack of institutional support, unrealistic demands, and general frustration (TRB, 1999). Again, to promote two-way communication and mutual respect, between the transportation agency and the public, democratic principles should be stressed and adhered to during the process. Often at times stakeholders and transportation officials get emotionally involved during negotiations. Such high levels of emotion usually promote debate, rather than negotiation, thus leading to dissension. As a result, the quality of the final transportation plan suffers tremendously. Transportation officials and stakeholders must control emotions and remain civil with one another, so some type of compromise can be reached that benefit both parties.

Survey Results

The data collection process occurred over the course of six weeks, between the dates of February 27, 2004 to April 9, 2004. The data collection process continued until

enough subjects were evaluated to provide a solid subject population for the study based on response-based criteria. A total of 14 subjects were obtained to provide a base of assessing public involvement for the project. The surveys were quantitatively analyzed to draw the appropriate conclusions and recommendations. The results of the survey are shown in Table 3 and Figures 2, 3, and 4. The results show that several of the "Values and Outcomes" indicators do not score well indicating poor communication.

Table 3. Public Involvement Survey Score Card

The following figures show the average score of the public involvement indicators. The x-axis crossing at 3.0 is the boundary that separates acceptable scores from unacceptable scores.

Public Involvement Values and

	Public Involvement Effectiveness Indicators	Metric	Average Metric Score	Average Indicator Score	Acceptability of Score ("YES" or "NO")
VALUES AND OUTCOMES	I. Accessibility to the Decision-making Process	1	2.43	2.32	NO
		2	2.21		
	II. Diversity of Views Represented	3	2.36	2.61	NO
		4	2.86		
	III. Opportunities for Participation	5	3.57	3.29	YES
		6	3.00		
	IV. Integration of Concerns	7	3.29	3.22	YES
		8	3.14		
	V. Information Exchange	9	3.00	2.90	NO
		10	2.79		
	VI. Project Efficiency	11	2.57	2.61	NO
		12	2.64		
	VII. Project Decision Acceptability	13	2.50	3.00	YES
		14	2.86		
		15	2.86		
		16	3.14		
		17	3.64		
	VIII. Mutual Learning	18	2.86	2.86	NO
		19	2.86		
	IX. Mutual Respect	20	3.79	3.22	YES
		21	3.00		
		22	2.86		
COST	X. Cost Avoidance	23	3.00	2.90	NO
		24	2.79		
	XI. Indirect Cost of Time	25	2.71	3.04	YES
		26	3.36		
	XII. Indirect Opportunity Cost	27	4.21	3.93	YES
		28	3.64		
	XIII. Indirect Cost Associated with Authority and Influence	29	4.00	4.04	YES
		30	4.07		
	XIV. Indirect Cost Associated with Emotional Issues	31	3.00	3.15	YES
		32	3.29		

Table 3. Public Involvement Survey Score Card

The following figures show the average score of the public involvement indicators. The x-axis crossing at 3.0 is the boundary that separates acceptable scores from unacceptable

scores.

Figure 3. (Shows the low "Cost" associated with the US 59 Spur 527 project public involvement process.)

Public Involvement Values and Outcomes Indicators

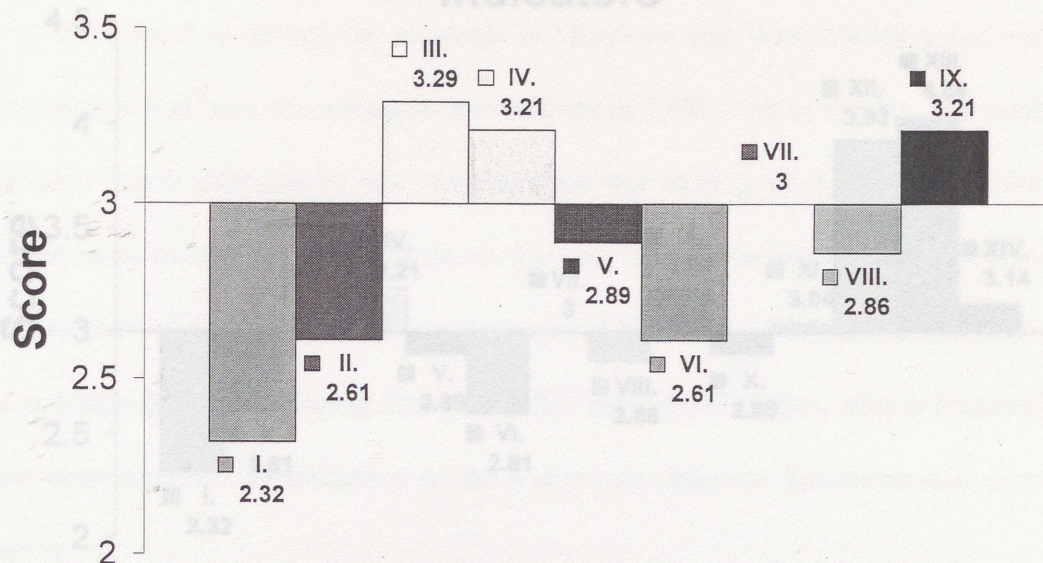


Figure 2.(Shows the “Values and Outcomes” associated with the US 59/Spur 527 project public involvement process.)

Public Involvement Cost Indicators

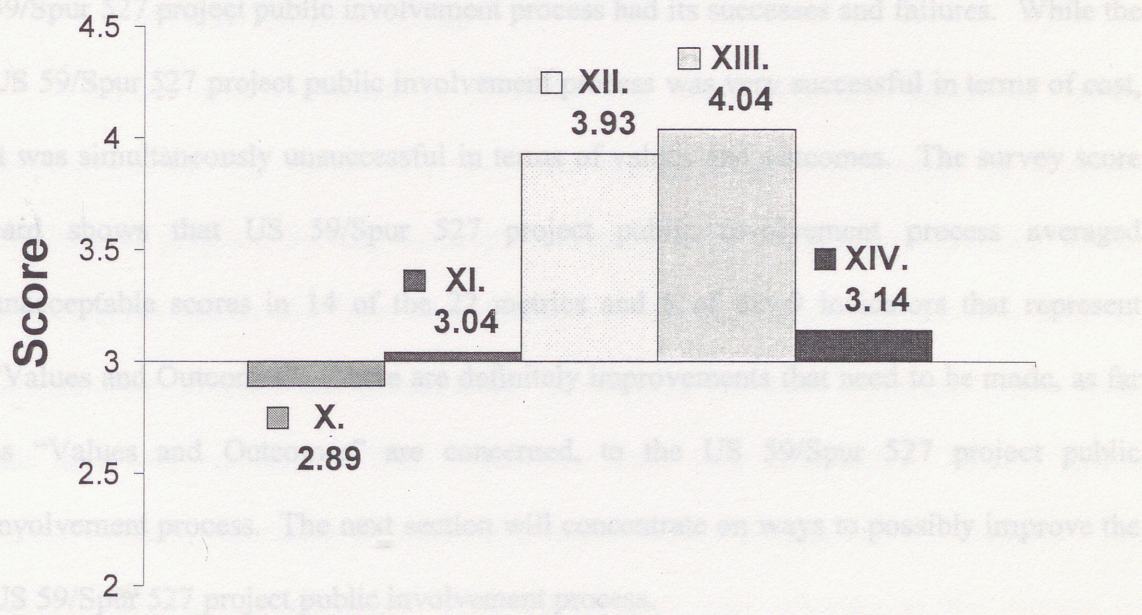


Figure 3. (Shows the low “Cost” associated with the US 59/Spur 527 project public involvement process.)

Public Involvement Effectiveness Indicators

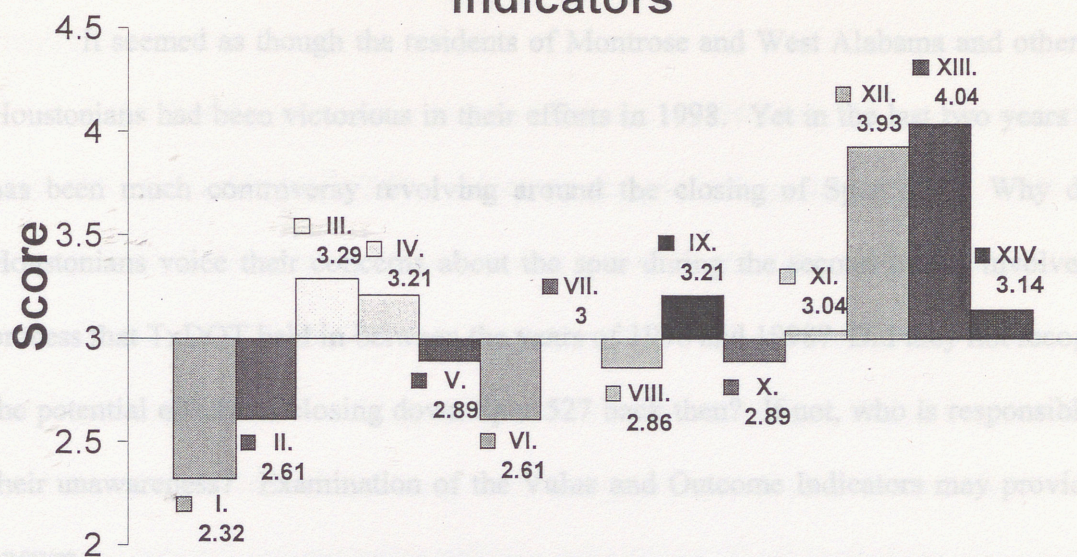


Figure 4. (When Graphs 1 and 2 are combined these are the results, thus showing that the US 59/Spur 527 project public involvement process had its successes and failures.)

After quantitatively evaluating the results of the survey, it is obvious the US 59/Spur 527 project public involvement process had its successes and failures. While the US 59/Spur 527 project public involvement process was very successful in terms of cost, it was simultaneously unsuccessful in terms of values and outcomes. The survey score card shows that US 59/Spur 527 project public involvement process averaged unacceptable scores in 14 of the 22 metrics and 5 of the 9 indicators that represent “Values and Outcomes”. There are definitely improvements that need to be made, as far as “Values and Outcomes” are concerned, to the US 59/Spur 527 project public involvement process. The next section will concentrate on ways to possibly improve the US 59/Spur 527 project public involvement process.

Discussion of Results

It seemed as though the residents of Montrose and West Alabama and other area Houstonians had been victorious in their efforts in 1998. Yet in the last two years there has been much controversy revolving around the closing of Spur 527. Why didn't Houstonians voice their concerns about the spur during the second public involvement process that TxDOT held in between the years of 1996 and 1998? Did they not recognize the potential effects of closing down Spur 527 back then? If not, who is responsible for their unawareness? Examination of the Value and Outcome Indicators may provide an answer.

Value and Outcome Indicators that Have Unacceptable Scores

- I. Accessibility to the Decision Making Process
- II. Diversity of Views Represented
- V. Information Exchange
- VI. Project Efficiency
- VIII. Mutual Learning

Values and Outcomes is probably the most important aspect of public involvement survey. Values and Outcomes represent the very essence of a public involvement program. Scoring unacceptable scores in the "Values and Outcomes" aspect of the survey shows that there was definitely a communication gap between both the transportation officials and stakeholders. How could this have happened? How could this have been corrected? What could have been done differently? TxDOT held a second public involvement process, when legally such a process was not required. The agency came to a compromise with stakeholders; thus adhering to the request of Houstonians, by agreeing to construct the US 59 HOV lane at grade. TxDOT posted and

held public meeting, and gained acceptance by the majority of stakeholders involved. Yet TxDOT did not hold additional community workshops during the second public involvement process.

TxDOT did not consider that in 1996 the US 59/Spur 527 project was eleven years old. Even though TxDOT held community workshops previously in 1992-1994, the population in Houston had been growing at a rapid rate. The people that participated in the second public involvement held during 1996-1998 potentially were not the same people that participated in the previous community workshops, during the first public involvement process. Community workshops serve as a place where information is exchanged between transportation officials and citizens. These workshops also serve as a place where both transportation officials and citizens can develop a mutual understanding of the potential impacts of a proposed transportation plan and/or project. The low scores attained in the Value and Outcome Indicators could have been prevented if TxDOT held addition workshops during the second public involvement process.

and to help make more informed decisions.

The main agency in the Houston area that makes key highway transportation decisions is the Texas Department of Transportation (TxDOT). This agency develops transportation plans and policies that affect the opportunity that Houstonians have to access employment, educational, healthcare, and social activities as well as government services. Additionally, this transportation agency has developed their own public involvement process and established different public involvement programs that are used to aid in making transportation decisions in Houston.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Public involvement is the integration of different methods and strategies to incorporate public opinion into a potential plan or policy and provides the public with information concerning the environmental, economic, and social effects of a potential plan or policy. Public involvement is a key component of transportation planning and decision making. There are three main objectives of public involvement:

- Incorporate citizen input into the decision process;
- Inform citizens about transportation issues, projections, the planning process, and budgetary and engineering constraints; and
- Build a consensus decision.

Public involvement provides a mechanism for bringing a broad range of diverse viewpoints and values into the decision making processes at the earliest possible stages and to help make more informed decisions.

The main agency in the Houston area that makes key highway transportation decisions is the Texas Department of Transportation (TxDOT). This agency develops transportation plans and policies that affect the opportunity that Houstonians have to access employment, educational, healthcare, and social activities as well as government services. Additionally, this transportation agency has developed their own public involvement process and established different public involvement programs that are used to aid in making transportation decisions in Houston.

Most recently TxDOT has been under fire by the public and the media in Houston, TX. The reason behind this recent onslaught has been the US 59/Spur 527 project and more specifically, the closing of Spur 527. Many local nonprofit activist organizations have filed lawsuits aimed at halting the US 59/Spur 527 highway construction project; they claim that that the US 59/Spur 527 project will destroy local neighborhoods and adversely affect area businesses and merchants. Ideally, the issues and concerns of Houstonians should have been voiced and responded to during the public involvement process. Why did Houstonians react in a fashion that denotes a lack of public involvement? Do they have a right to be disgruntled? Was the US 59/Spur 527 public involvement process a fair and/or effective process? Were Houstonians represented properly by TxDOT?

In order to answer these questions a survey was conducted. The survey was developed by the Transportation Research Board (TRB) in 1999 to serve as a possible instrument to be used to evaluate the effectiveness of public involvement plans and programs. To measure effectiveness, the survey uses 14 public involvement effectiveness indicators that evaluate issues such as public acceptability, accessibility, good decision making, education and learning, time commitments, trust, and indirect costs of public involvement. Of the fourteen indicators, the first nine deal with the "Values and Outcomes" produced by the process and the last five focus on the "Costs" associated with the process.

The surveys were analyzed quantitatively to draw the appropriate conclusions and recommendations. The survey showed that while the US 59/Spur 527 project public involvement process was very successful in terms of "Cost", it was simultaneously

unsuccessful in terms of “Values and Outcomes”. This means that there was definitely a communication gap between the transportation officials and stakeholders. What could have caused this problem? To answer this question, field research was conducted at the Environmental Division of TxDOT’s Houston Office.

This research found that there were essentially two public involvement processes that initiated by TxDOT. The first process started in 1991 and ended in 1995 and the second started in 1996 and ended in 1998.

During the first process TxDOT did everything by federal government regulations. They posted notices of public meetings, held community workshops to explain to the public what they were planning, and gained acceptance by the majority of stakeholders involved. Soon the US 59/Spur 527 project was approved by FHWA on January 9th of 1996, resulting in the issuing of a FONSI (Finding of No Significant Impact). This essentially gave TxDOT the freedom to carryout the US 59/Spur527 project. Yet during late 1995 and early 1996, TxDOT efforts with this project were being challenged by the local residents of Montrose and West Alabama areas of Houston, TX.

After public and media backlash, not including the pressures from congressmen and state representatives, TxDOT decided to reopen the public involvement process for the US 59/Spur 527 project in the spring of 1996.

The main objective of the US 59/Spur 527 project was to widen US 59 to 12 lanes leaving room in the median to construct a HOV lane that would be above grade (elevated). Also included in TxDOT’s US 59/Spur 527 project, was the addition of several lanes to Spur 527. This was to be done with out Spur 527 being torn down and reconstructed. Spur 527’s lane expansion would potentially eliminate the left handed

merge problems between US 59 westbound and Spur 527 southbound. What was wrong with the plan? Why was the public peeved with the project? The main issue discussed during the second public involvement process was the HOV lane that TxDOT planed to construct to be above grade. Houstonians wanted the HOV lane to be constructed at grade.

On May 21st of 1996 TxDOT found the current structural condition of Spur 527 at that time to be unacceptable for simple lane expansion. Spur 527 needed to be torn down and reconstructed completely. On October 3rd of 1996, after making changes to their design, TxDOT held a public meeting at Poe Elementary School. This was the publics chance to address their issues and concerns with TxDOT's plan. Interestingly at this time there were little to no concerns about Spur 527 construction. All concerns were about the HOV lane. On May 8th of 1997, after careful negotiations and pressures from the public, the media, and civic officials; TxDOT decide to construct the HOV lane at Grade.

Why didn't Houstonians voice any concerns about Spur 527 being reconstructed? There is no clear answer to that question. They had the chance, but they said nothing. The only public comment focused on the HOV lane. What more could TxDOT have done? TxDOT reopened the public involvement process when they really did not have to, because they already had approval. TxDOT gave Houstonians what they wanted, a HOV lane constructed at grade. The only thing that TxDOT could have perhaps done differently was hold additional community workshops.

TxDOT held community workshops during the first public involvement process, but not during the second. Community workshops serve as a place where information is

exchanged between transportation officials and citizens. These workshops also serve as a place where both transportation officials and citizens can develop a mutual understanding of the potential impacts of a proposed transportation plan and/or project. Additional community workshops could have served as an educational tool, giving Houstonians a better understanding of the potential impacts of the reconstruction of the Spur 527. Then perhaps issues would have been more smoothly resolved.

Conclusion

Ultimately, Houstonians had the opportunity to voice all their concerns, however did not take full advantage of the opportunity. In this situation TxDOT did more than enough as far as public involvement is concerned. Nevertheless, TxDOT needs to make sure that they are properly educating the public during the public involvement process. The US 59/Spur 527 project, in 1996, was eleven years past initial planning. Even though TxDOT held community workshops previously in 1992-1994, the population in Houston had been growing at a rapid rate. Thus the people that met in 1996-1998 possibly were different than those participating in the community workshops in the early 1990's.

Recommendations

Is my public involvement process effective? To answer this question performance measures need to be developed to evaluate public involvement processes. Transportation agencies must also:

- Hold series of community workshops while federal review is pending, to keep the process from going cold.

- More research should be conducted by transportation agencies on the viability of public involvement surveys. Public involvement surveys would serve as a performance measure, evaluating the effectiveness of a public involvement process.
- If transportation agencies choose to use surveys to evaluate the effectiveness of their public involvement process they should conduct the surveys during and after the public involvement process of a specific plan or project. Only then the effectiveness of their public involvement process can successfully be evaluated.

Extra community workshops and public involvement surveys will give both the public and transportation agencies the necessary information needed to make the public involvement process a success.

US 59/SPUR 527 PUBLIC INVOLVEMENT SURVEY

Formal public involvement processes are being utilized with increasing frequency as a way to incorporate public opinion into a variety of decision making processes. In some circumstances public involvement is mandated, while at other times it is viewed as a way to enhance the acceptability or expedite a project. Regardless of the initiating reason, there is a growing need among project sponsors, decision-makers, and public involvement practitioners to assess the overall success and effectiveness of the efforts.

Legislative and regulatory mandates, such as those stemming from the National Environmental Policy Act of 1969 (NEPA) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and its successor, the Transportation Equity Act for the 21st Century (TEA21) require public involvement. Whatever the reasons, transportation agencies, decision makers, and the public are spending growing amounts of time, energy, and resources eliciting and responding to public involvement. However, are these public involvement programs

APPENDIX A:

US 59/Spur 527 Public Involvement Survey

This survey was developed by the Transportation Research Board in 1999 to serve as a possible instrument to be used to evaluate the effectiveness of public involvement plans and programs. Within this survey there are thirty-two metrics being used to measure the issues of public acceptability, accessibility, good decision making, education and learning, time commitments, trust, and indirect costs of public involvement. Of the thirty-two metrics, the first twenty-two deal with the "values and outcomes" produced by the process and the last ten focus on the "costs" associated with the process. Each metric has a brief description and evaluated by the observation of specific behaviors or characteristics. Each metric has been given evaluative scores. Each metric is scored on the scale of 1 to 5. For each metrics, please choose and circle the number that represents each description (1-5) that best describes the SPUR 527 public involvement program.

PLEASE NOTE:

EACH METRIC SHOULD BE VIEWED AS A SCALE. IN SOME CASES, COMPLETE DESCRIPTIONS ACCOMPANY EACH NUMBER; IN OTHER CASES, A FEW DESCRIBED PHRASES FRAME THE SCALE. THIS SURVEY IS ANONYMOUS. PLEASE ANSWER EVERY METRIC HONESTLY AND TO THE BEST OF YOUR PERSONAL KNOWLEDGE. PLEASE DO NOT LEAVE ANY METRIC UNANSWERED. THANKS FOR YOUR TIME, PATIENCE, AND COOPERATION

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- 2
- 3 50-75%
- 4
- 5 75-100%

Metric 1: Timing and Focus of Involvement

The effectiveness of public involvement is frequently tied to how well public consultation is focused on the real issues an agency is considering early and throughout plan or project development. If the public sees that input is sought and heeded on real issues from the start, it is assumed that participation will continue. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 No consultation - decision is imposed without public involvement;
- 2 Consultation after proposal is finalized, prior to submission to decision making body;
- 3 Involvement focused on issues during definition of problem and development of alternatives;
- 4 Public is involved in designing the involvement process;
- 5 Responsibility for designing and implementing process is delegated to stakeholder group

Metric 2: Influence on Decisions/Process

Allowing the participants to adjust the process increases the degree of influence and gives the participants a feeling of sponsor accountability and flexibility. This generally increases the acceptability of the end decision. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Process is pre-defined and rigid;
- 2 Frequent and regular opportunities through multiple avenues
- 3
- 4
- 5 Process is fully dynamic and all aspects subject to adjustment or redefinition

Metric 3: Proportion of Stakeholders

One way to measure the diversity of views that are present in a process is to calculate the proportion of stakeholders that are involved in the process. This can be done by calculating the percentage of stakeholder groups that are represented in the process from an assessment or inventory of all potentially-affected stakeholder groups (including those who may not reside adjacent to the project). *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 < 50%
- 2
- 3 50>75%
- 4
- 5 75>100%

Metric 4: Meeting Convenience

There is a correlation between level of participation and the convenience of participation. Specific factors include: time and date of meeting, accessibility (transportation), availability of day care, etcetera. *(Which choice describes this aspect of the US59/SPUR 527 public involvement program?)*

Choices

- 1 Inaccessible, meetings during the workday, no day care;
- 2
- 3 Evening or weekend meetings available, locations accessible by public transit;
- 4
- 5 Easily accessible by car or public transportation, evening/weekend meetings, day care provided

Metric 5: Opportunities for Input

One way to encourage participation is by incorporating multiple instances for stakeholders to comment on the process. More opportunities translate into a more interactive process. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 No opportunity for input;
- 2
- 3 Some opportunities, generally through no more than one or two means;
- 4
- 5 Frequent and regular opportunities through multiple avenues

Metric 6: Information Exchange

Along with the opportunity to comment on the process, it is vital that participants' concerns and views are heard and considered by other stakeholders and the decision makers. Input from the public is useless if there is no communication or feedback to the public from the agency/decision makers. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Limited exchange of information;
- 2
- 3 Ample opportunities for public input throughout the process;
- 4
- 5 Effective two-way communication among stakeholders and with decision makers

Metric 7: Shared Decision Making

The degree to which decision making is shared by all stakeholders (from the public participants to the managers and decision makers) drastically influences a project's chance for approval. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Public input essentially ignored;
- 2
- 3 The results/decision integrates the concerns of some, but not all parties;
- 4
- 5 The results/decision integrates the concerns of all parties

Metric 8: Reprioritization

Having a reprioritization of processes and goals, at regular intervals, serves to reaffirm participants that their input has been heard and acted on. Not only does this help improve the efficiency of the process but it reaffirms that participant's views are worthwhile. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Process and goals are never reprioritized or adjusted;
- 2
- 3 Process is adjusted at few or established points in time;
- 4
- 5 Process is continually assessed and Reprioritization and adjustment occur as needed

Metric 9: Documentation

Documentation is used to refer to how information is conveyed to participants and whether or not it is effective. Relevant measures are the completeness of the information, its clarity, and the appropriateness of the format (i.e. paper copies, computer format, lecture, translated as needed, etc...), and availability. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Format is incomplete, vague, or available for use by a minority of those involved;
- 2
- 3 Partial and/or filtered information is provided only at key points in the process;
- 4
- 5 Complete, clear, flexible format based on needs and available to all participants

Metric 10: Frequency of Events

For the exchange of information to be effective it needs to occur on a regular basis and there needs to be a format for these exchanges. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Little or no dissemination of information other than at the beginning or end of the decision making process;
- 2
- 3 Information is provided at regular, but infrequent intervals;
- 4
- 5 Multiple opportunities for information exchange and in many formats, (i.e. meetings, public presentations, workshops, etc...)

Metric 11: Decision to Implementation

This metric encompasses the duration of the time between the decision and when the project is actually implemented. If public involvement has increased the acceptability of a project, the time before implementation should be minimal. *(Which choice describes this aspect of the e US 59/SPUR 527 public involvement program?)*

Choices

- 1 More time than anticipated to implement due to public controversy;
- 2
- 3 Implementation is on-schedule;
- 4
- 5 Less time than anticipated due to widespread public support

Metric 12: Duration of Decision Process

Public involvement tends to increase time requirements at the beginning of a project, but the duration of the entire decision making process should be shorter. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 More time than anticipated for a decision due to public controversy;
- 2
- 3 Decision is on-schedule;
- 4
- 5 Less time than anticipated due to widespread public support

Metric 13: Stakeholder Response

One way to measure the effectiveness of involvement is to observe how stakeholders respond to the decision. A successful process will be marked by an overall acceptance of the decision as being the best choice. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Negative response by community members, agency officials, government officials, and the media;
- 2 Media provides information but takes a singular perspective;
- 3 Responses are evenly mixed;
- 4 Media makes concerted effort to present issues and events in a balanced, factual manner;
- 5 Positive response by all stakeholders and the media

Metric 14: Media Participation - Coverage

The role of the media can be crucial to a successful public involvement process. One measure of media participation to be considered is the extent of coverage. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Media provides minimal coverage (e.g., final recommendations only);
- 2 Media provides coverage of only major decision points and events;
- 3 Decision reported by governing body due to public controversy;
- 5 Media engages their audience through continuing coverage throughout the process.

Metric 15: Media Coverage - Mix

Not only is the extent of media coverage important to a successful process, but having an appropriate mixture is also important. This recognizes that not all persons read newspapers, watch television, listen to the radio or use the internet. However, it is important that an appropriate blend of mediums be employed to provide adequate coverage to those outside of the process. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Single medium coverage;
- 2 Participants identify real interests, but do not fully embrace the involvement;
- 3 Coverage by multiple media;
- 4 Coverage by appropriately targeted multiple media

Metric 16: Media Coverage - Balance and Neutrality

The media can greatly affect the outcome of a public involvement process through the “positions” it presents. Ideally, the media will present a balanced and fact-based accounting of the process. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Media does a poor job of presenting balanced or factual information;
- 2 One-sided compromise is evident;
- 3 Media provides information but takes a singular perspective;
- 4 High levels of compromise and consensus by multiple stakeholders;
- 5 Media makes a concerted effort to present issues and events in a balanced, factual and neutral manner; does not attempt to overly influence public opinion

Metric 17: Decision Implementation

A public involvement process may affect degree of acceptance and support displayed by decision makers. For example, a project marked by public controversy may be outright canceled while a project with broad public support may be fast-tracked to implementation. Common criteria for measuring the degree of implementation are if the decision is accepted and if the decision is supported with the necessary funding. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Decision rejected by governing body due to public controversy;
- 2 Plan or project is given low priority due to weak public support;
- 3 Plan or project is given low priority due to weak public support;
- 4 Plan or project approved due to public support
- 5 Plan or project approved due to public support

Metric 18: Stakeholder Perspective

A successful initiative is one in which stakeholders feel ownership of the process and decision that comes from it. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Participants defend individual positions without compromise;
- 2 Positive and constructive exchanges
- 3 Participants identify real interests, but do not fully embrace the involvement process;
- 4 Feel responsible for finding and supporting a solution that is best suited to all stakeholders
- 5 Feel responsible for finding and supporting a solution that is best suited to all stakeholders

Metric 19: Degree of Compromise

When participants relinquish their ties to individual interests and concerns they will be more likely to compromise in order to maintain the momentum of the process. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Process experienced deadlock, minimal compromise;
- 2
- 3 One-sided compromise is evident;
- 4
- 5 High levels of compromise and consensus by multiple stakeholders

Metric 20: Level of Contact

When participants understand and accept viewpoints of stakeholders that may be different than their own, they are willing to discuss the issues involved with people of different opinions. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Participants refuse to talk to one another;
- 2
- 3 Stakeholders talk among themselves but avoid conversing with decision makers;
- 4
- 5 Communication flows freely between all participants

Metric 21: Verbal Exchanges

Even when individuals with opposing viewpoints communicate, it is important that the exchanges are positive and respectful and don't distract from the tasks at hand or cause participants to feel uncomfortable. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Negative, derogatory, and distracting comments;
- 2
- 3 Exchanges are marked by occasional flare-ups or passive-aggressive comments;
- 4
- 5 Positive and constructive exchanges

Choices

- 1 Highly controversial decision that is not accepted by key stakeholders;
- 2
- 3 One or two parties reject decision and may threaten further action;
- 4
- 5 Decision viewed as being "routine", with minimal controversy

Metric 22: Transformation

Ideally the participants in an effective public involvement process should gain a new understanding and respect for those persons who have contrary opinions or interests. Ultimately, this new-found understanding should manifest itself through improved relationships and reductions in the level of conflict in this and other environments. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Participants seem unaffected by the process and personal relationships remain adversarial and based on polarized positions;
- 2
- 3 Participants are formal and civil, but no natural rapport seems evident;
- 4
- 5 There are dramatic improvements in the effectiveness of this and other public processes due to enhanced understanding and acceptance of the opinions and interests of others among participants

Metric 23: Process Costs

Traditional accounting procedures may be used to determine the actual costs associated with a public involvement process. Costs include time for preparation, participation and follow-up to public involvement, facilities and services, materials, travel expenses, and consultation fees for specialists or mediators. Dividing the sum of the actual costs by the anticipated costs gives a quantifiable metric. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Ratio of direct costs to anticipated costs > 10 ; **(the actual cost was much larger than anticipated)**
- 2
- 3 Ratio = $1 > 2$; **(the actual cost was even with what was anticipated)**
- 4
- 5 Ratio = .1 **(the actual cost was much smaller than anticipated)**

Metric 24: Controversial Nature of Decision

If a decision incorporates the needs of a wide range of stakeholders there will be minimal levels of controversy surrounding it. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Highly controversial decision that is not accepted by key stakeholders;
- 2
- 3 One or two parties refute decision and may threaten further action;
- 4
- 5 Decision viewed as being "routine", with minimal controversy

Metric 25: Required Commitment

The process will be viewed negatively if personal time commitments exceed those anticipated by participants when they agreed to take part in the process (i.e., the process does not adhere to a communicated schedule). *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 More time required than anticipated;
- 2
- 3 Time requirement were as expected;
- 4
- 5 Less time required

Metric 26: Appropriateness

If participants feel that specific tasks or elements take too long or do not receive sufficient time they will feel the process is flawed. This metric considers the appropriate level of time committed to most effectively accomplish each part of the decision making process. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 (a) Not enough time spent on the process **or** (b) Too much time was spent on the process; **(PLEASE SPECIFY (a) or (b))**
- 2
- 3 Some portions of the process had an inappropriate amount of time attributed to them;
- 4
- 5 Time requirements were appropriate to the tasks throughout the process

Metric 27: Other Activities

A participant's view of the personal costs of lost opportunities is directly related to their impression of the value of the public involvement activities/process. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Participants regret participating, values other activities instead;
- 2
- 3 Participants are ambivalent about participation;
- 4
- 5 Participants place a high value on the personal investment in the process

Metric 28: Other Public Involvement

Some participants may refrain from participating in other public involvement initiatives because their time must be spent on the project in which they are currently involved. The value of these other projects is a measure of opportunity cost. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Other public involvement experiences provided more value than the current project;
- 2 Participants were ambivalent about the process;
- 3 Similar value levels;
- 4 Process is fulfilling and worthwhile to all participants
- 5 Other public involvement experiences have less value than the current project

Metric 29: Continued Involvement

If after one public involvement process, a participant chooses to participate in future projects, it is a good sign that they didn't feel that their authority or influence was unduly compromised. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Participants don't pursue further involvement in decision making process;
- 2 70% of participants remain involved in the process;
- 3 Participants are ambivalent about the process, the decision, or future participation;
- 4
- 5 Stakeholders increase their level of public involvement

Metric 30: Participating Officials

The level and number of participating officials is a relatively good indication of the magnitude of threats felt by officials when they take part in public involvement. A lack of high level managers or a few number of officials indicates that a high cost is associated with involvement (or low esteem for the public's involvement may be present). *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Only required officials are present, low-level managers;
- 2
- 3 Occasional presence indicates marginal levels of interest;
- 4
- 5 Appropriate number of officials, high-level managers, and decision-makers

Metric 31: Stakeholder

Although project managers and officials play an important role, their presence is frequently mandated whereas the presence of community members is voluntary. As a result, the emotional response of stakeholders is a valuable metric of cost. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Process is frustrating, intimidating, disillusioning to participants;
- 2
- 3 Participants were ambivalent about the process;
- 4
- 5 Process is fulfilling and worthwhile to all participants

Metric 32: Continued Participation

The retention rate of stakeholders in the decision making process is another way to gauge if the costs of participation outweigh the benefits. *(Which choice describes this aspect of the US 59/SPUR 527 public involvement program?)*

Choices

- 1 Less than 50% of initial participants remain involved in the process;
- 2 50% > 60% retained
- 3 60% > 70% retained
- 4 70% > 100% retained
- 5 All participants stay in the process through the whole project duration

COMMENTS

(IF YOU HAVE ANY COMMENTS THAT YOU WOULD LIKE TO ADD PLEASE DO SO IN THIS DESIGNATED AREA):

APPENDIX B:
Survey Participants

Survey Participants	
City of Houston	4
Houston-Galveston Area Council (H-GAC)	2
Metropolitan Transit Authority of Harris County, Texas (METRO)	1
Texas Department of Transportation, Houston Division (TxDOT)	1
Downside and Midtown Residents Association	1
Greater Southeast Management District	1
Midtown Civic Association	1
Midtown Management District	1
Midtown Redevelopment Authority	1
Museum District Business Alliance	1
Neartown/Midtown Super Neighborhood	1
OST/Alameda TIRZ	1

**APPENDIX B:
Survey Participants**

US 59/Spur 527 Public Involvement Survey Participants	Surveys Completed
City of Houston	4
Houston-Galveston Area Council (H-GAC)	2
Metropolitan Transit Authority of Harris County, Texas (METRO)	1
Texas Department of Transportation, Houston Division (TxDOT)	1
Downtown and Midtown Residents Association	1
Greater Southeast Management District	1
Midtown Civic Association	1
Midtown Management District	1
Midtown Redevelopment Authority	1
Museum District Business Alliance	1
Neartown/Montrose Super Neighborhood Council	1
OST/Almeda TIRZ	1

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