



SOUTHWEST
transitway

green means go.

Southwest LRT

Technical Memorandum No. 1

PROJECT DEVELOPMENT PROCESS

PRELIMINARY
FOR REVIEW ONLY

September 9, 2009



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1.0 PURPOSE

1.1 Overview of the Project

The Southwest LRT is a proposed transit project intended to improve mobility in the southwest region of the Twin Cities metro area including the cities of Eden Prairie, Minnetonka, Hopkins, Edina, St. Louis Park and Minneapolis. It is the intent of the Hennepin County Regional Railroad Authority (HCRRA) to partner with the Federal Transit Administration (FTA) as lead agencies to develop the Southwest LRT as a major transit capital investment.

1.2 Project Description

1.2.1 Introduction

The Southwest LRT is a proposed 14-mile light rail transit (LRT) line in the Minneapolis/St. Paul region, connecting downtown Minneapolis to high growth areas in the southwest suburbs. The LRT line will increase transportation system capacity in an area of high travel demand, respond to travel demand created by existing and planned residential and employment growth, provide a competitive travel option that will attract 'choice' riders (who have a choice between transit and driving) and serve transit dependent populations. This line will also be an expansion of the region's transitway system comprised of the Hiawatha LRT line, the Northstar Commuter Rail (under construction), the Central Corridor LRT line (proposed), and the Bottineau Corridor (proposed).

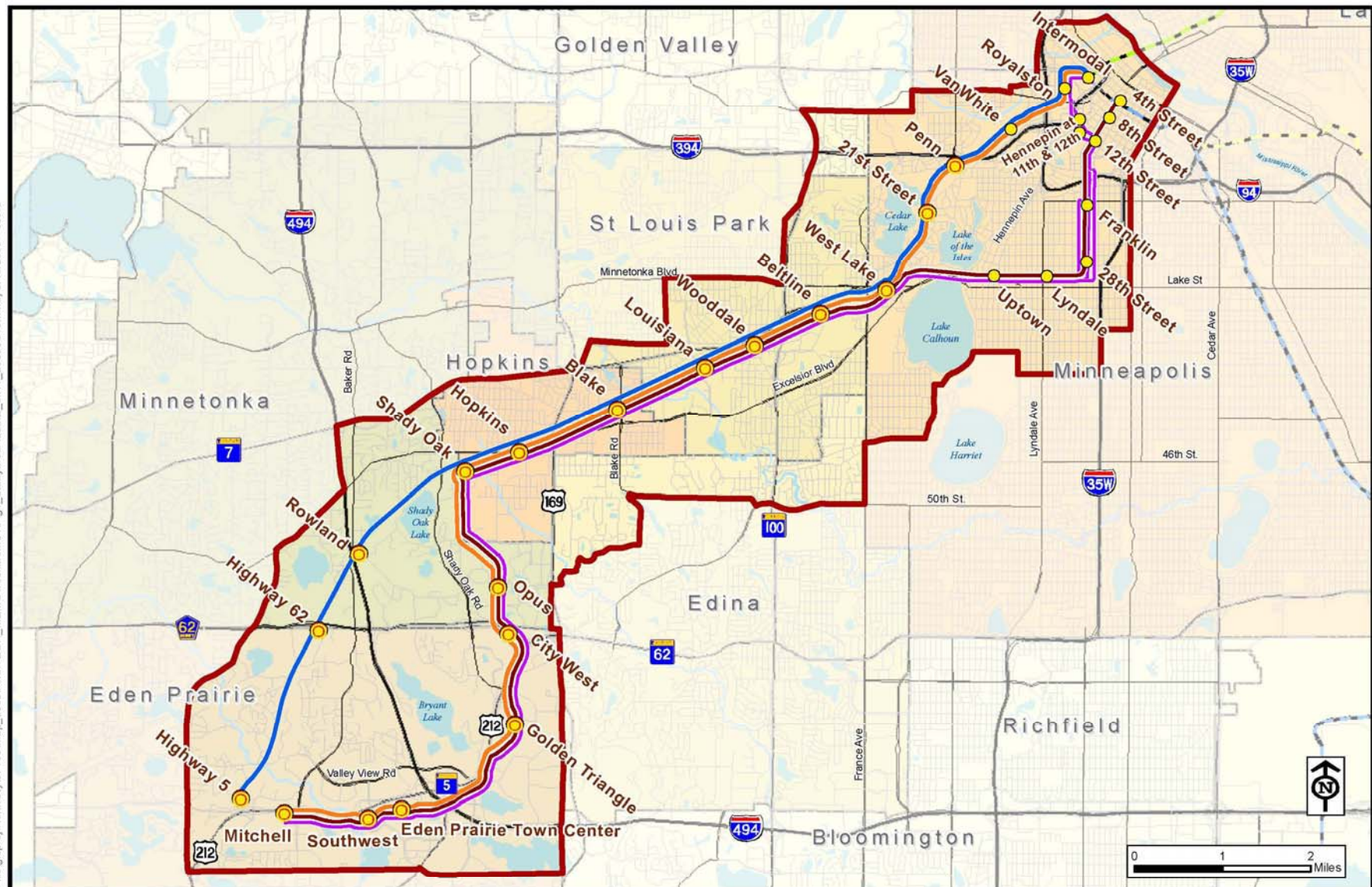
Three primary factors make the Southwest LRT project important for people who live and work in the southwest metro area: 1) growing roadway congestion; 2) lack of competitive, reliable transit options for "choice" riders and transit-dependent persons; and 3) lack of reverse commute transit service.

1.2.2 Study Area Description

The Study Area encompasses the linear corridors for the proposed LRT alignments originating in downtown Minneapolis and traversing the southwest metro area to terminate in Eden Prairie. The Study Area was defined as the geographic area within the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and southwestern and downtown Minneapolis. The Study Area is bounded roughly by I-494 to the south, the HCRRA right-of-way (ROW) and I-494 to the west, TH 169 south of Excelsior Boulevard and I-35W south of downtown Minneapolis to the east, and I-394 to the north. Refer to Figure 1 for a map of the proposed LRT alternatives and the Study Area.

Figure 1 - Study Area Map and LRT Alignments

Southwest Transitway Study Area



Map Document: (W:\spe-gis-file\gisproj\HemCity87130\map_docs\mxd\TECH_MEMO\TechMemo04\Fig1_studyarea\ALLais_8x11_20090810.mxd) 8/13/2009 --csers

<p>LPA Report</p>	Legend		
	<ul style="list-style-type: none"> Study Area Station Park & Ride Station 	<ul style="list-style-type: none"> LRT 1A LRT 3A LRT 3C-1 (Nicollet Mall) LRT 3C-2 (11th/12th Street) 	<ul style="list-style-type: none"> Hiawatha Light Rail Northstar Commuter Rail Central Corridor Light Rail Municipal Boundaries

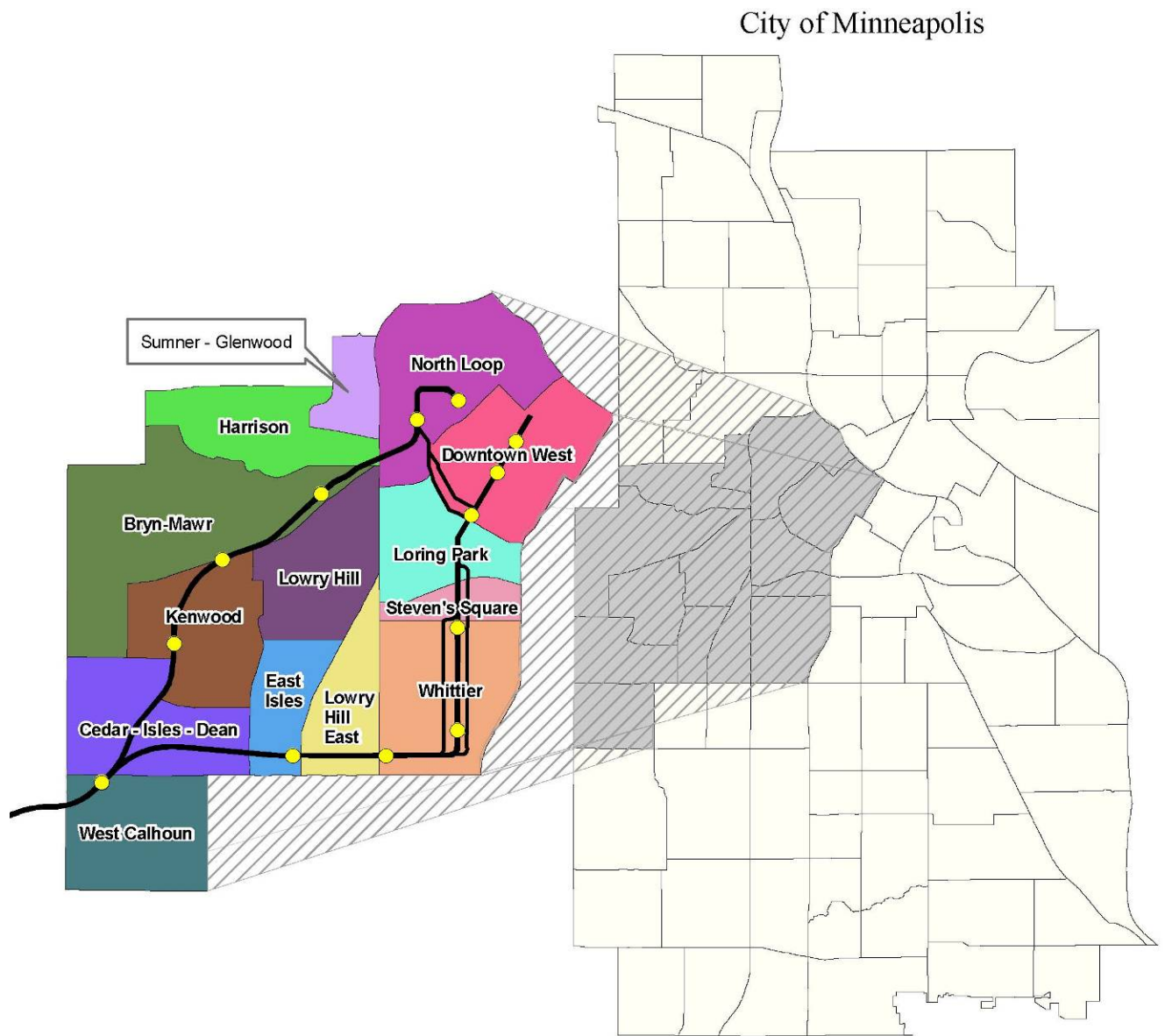
As documented in the 2007 Southwest Transitway Alternatives Analysis (AA) Purpose and Need Statement, the Study Area is experiencing significant roadway congestion resulting from high residential and employment growth and limited infrastructure improvements. In terms of travel, currently 27 percent of all regional trips begin or end in the corridor, and 65 percent of all trips originating within the Study Area remain within the Study Area—people who live in the Study Area, also work in the Study Area. The Study Area is also home to many major employers. Downtown Minneapolis is the region's largest employment center with over 140,000 jobs (78 jobs/acre), and the Golden Triangle is the region's sixth largest employment center with over 20,000 jobs (4 jobs/acre). In addition to the high employment, this area has also experienced high residential growth with over 31,200 new residences since 1980—new homes in Eden Prairie accounted for more than half of this number. As a result of this strong growth, travel on area roadways has increased between 80 and 150 percent in the past 25 years. A number of study-area roadways—TH 100, TH 169, TH 62, I-494, I-394, and TH 7—have been identified by the Minnesota Department of Transportation (Mn/DOT) as having a high mobility deficiency rating. According to Mn/DOT's Metro District long-range transportation plan, the Transportation System Plan (TSP), there are no plans for major expansions or improvements to roadways in the Study Area.

Suburban express bus ridership in the area served by Metro Transit and SouthWest Transit has more than doubled in the past ten years and surpassed one million annual riders for the first time in 2007. Transit advantages, including bus shoulder-lanes, park-and-ride lots, and ramp meter bypass lanes have been implemented throughout the area, but bus speeds remain limited, even on shoulder-lanes, to a maximum of 35 miles per hour (mph) under congested conditions. Due to lack of planned highway capacity additions and transit facility capacity limitations in downtown Minneapolis, increased future travel demand by drivers and bus riders will not be adequately met. The bus system uses the same congested roadways as motorists so it is difficult to provide the significant travel time advantages that would attract "choice" riders to the transit system and to adequately serve transit-dependent people in and around downtown Minneapolis.

Reverse commute transit service is deficient in the Study Area. In addition to the strong job growth in downtown Minneapolis, the other cities have experienced, and are projected to continue to experience, substantial job growth into the future. This trend is shown by the 65 percent of the trips generated in the Study Area that remain within the Study Area. Many of these trips are reverse commute trips from the near-downtown neighborhoods to job centers in suburban locations. Currently these job centers are largely inaccessible by transit.

The Study Area roadway network is oriented north-south/east-west whereas development patterns have radiated outward from downtown Minneapolis on a diagonal to the southwest. Travel time is added to vehicle and transit trips due to the orientation of the roadway system. The number of transit-dependent people in the Study Area is growing, especially in and around downtown Minneapolis. The areas of growth include the North Loop, Harrison, and Bryn Mawr neighborhoods. The direction of the roadway network in these areas, especially Harrison and Bryn Mawr, makes it difficult to provide competitive transit travel times. The roadway network through these neighborhoods is circuitous and has many one-way streets. In many cases, people who live only a few miles from downtown Minneapolis have transit travel times ranging from 9 minutes to 13 minutes because of the roadway network used by the bus system. Refer to Figure 2 for a map of neighborhoods in Minneapolis.

Figure 2 - Minneapolis Neighborhoods



2.0 PROJECT DEVELOPMENT PROCESS

FTA's discretionary New Starts program is the federal government's primary financial resource for supporting locally-planned, implemented, and operated transit "guideway" capital investments.

Major transit infrastructure projects, which are candidates for the FTA's Section 5309 New Starts program, progress through a specific project development process, including the Alternatives Analysis (AA), Preliminary Engineering (PE), Final Design (FD), and Construction. Projects eligible for New Starts (49 USC §5309) funding include "any fixed-guideway system that utilizes and occupies a separate right-of-way or rail line for the exclusive use of mass transportation and other high occupancy vehicles, or uses a fixed catenary system and a right-of-way usable by other forms of transportation. This includes, but is not limited to, rapid rail, light rail, commuter rail, automated guideway transit, people movers, and exclusive facilities for buses (such as bus rapid transit) and other high occupancy vehicles."¹

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) directs FTA to evaluate and rate candidate New Starts projects as an input to federal funding decisions and at specific milestones throughout each project's planning and development. SAFETEA-LU further supports a comprehensive planning and project development process that New Starts projects must follow, and which is intended to assist local agencies and decision-makers to evaluate alternative strategies for addressing transportation problems in specified corridors and to select the most appropriate improvement to advance into engineering, design, and construction. Planning and project development for New Starts projects is a continuum of analytical activities carried out as part of metropolitan systems planning and National Environmental Policy Act of 1969 (NEPA) review processes.

2.1 Planning and Project Development Process for New Starts Projects

Figure 3 presents the project development process for major capital transit investments. Projects seeking New Starts funding must emerge from a locally-driven, multimodal corridor planning process. There are three key phases in the project development process for projects seeking New Starts funding: 1) Alternatives Analysis; 2) Preliminary Engineering; and 3) Final Design. These key phases are discussed in further detail.

¹ FTA. New Starts Project Planning and Development. http://www.fta.dot.gov/printer_friendly/planning_environment_5221.html

Figure 3 - Project Development Process

Project Development Process



2.1.1 Alternatives Analysis

To specifically qualify for New Starts funding (49 USC §5309), projects must complete an alternatives analysis which evaluates appropriate modal and alignment options for addressing documented mobility needs in the Study Area. The Alternatives Analysis can be viewed as a bridge between systems planning (which identifies regional travel patterns and transportation corridors in need of improvements) and project development (where a project's design is refined sufficiently to complete the NEPA environmental process). The AA is intended to compare the benefits, costs, and impacts of alternatives to determine which alternative best addresses the purpose and need for the project.

The AA is considered complete when a locally preferred alternative (LPA) is selected by local and regional decision-makers and adopted by the metropolitan planning organization (MPO) into the financially constrained long range metropolitan transportation plan. At this point, the local project sponsor may submit to FTA the LPA's New Starts project justification and local financial commitment criteria and request FTA's approval to enter into the preliminary engineering phase of project development. Refer to Appendix A for more details on the New Starts project justification and local financial commitment criteria.

2.1.2 Preliminary Engineering

Preliminary Engineering (PE) includes refinement of the LPA's design with consideration of all reasonable design alternatives. PE results in estimates of project costs, benefits, and impacts at a level of detail necessary to complete the NEPA process, the culmination of which is a Record of Decision (ROD). PE for a New Starts project is considered complete when FTA has issued a ROD as required by NEPA. Projects that complete PE and whose sponsors are determined by FTA to have the technical capability to advance further in the project development process must request FTA approval to enter final design and submit updated New Starts criteria for evaluation.

2.1.3 Final Design

Final design (FD) is the last phase of project development, and includes right-of-way acquisition, utility relocation, the preparation of final construction plans (including construction management plans), detailed specifications, construction cost estimates, and bid documents.

2.2 National Environmental Policy Act (NEPA)/Minnesota Environmental Policy Act (MEPA)

As the public agency responsible for completing the Draft Environmental Impact Statement (DEIS), the HCRRA is required to comply with the requirements of the Minnesota Environmental Quality Board (EQB) pursuant to the Minnesota Environmental Policy Act (MEPA)² (Minn.Stat. §116D.04 and 116D.045). The project will also pursue federal funding from the FTA. As a result, the FTA is required to undertake environmental review in compliance with NEPA³. The FTA, as the federal lead agency under NEPA, and the HCRRA, as the responsible governmental unit (RGU) under EQB, has determined that the Southwest LRT project may have significant environmental impacts. To satisfy both NEPA and EQB requirements, the HCRRA and the FTA are preparing a DEIS for the Southwest LRT project.

The preparation of an Environmental Impact Statement (EIS) consists of four primary components:

- 1) Scoping – a process by which the purpose and need for the project is determined and or refined; reasonable alternatives to meet the project purpose and need are developed; and key social, economic, and environmental issues that will be analyzed are identified.
- 2) Draft Environmental Impact Statement – a detailed evaluation of the social, economic, and environmental impacts of the proposed project and identification of mitigation requirements (presuming that impacts cannot be avoided). Once complete, the DEIS is published and made available to federal, state, and local agencies and the general public for review and comment.
- 3) Final Environmental Impact Statement – the FEIS addresses substantive comments from agencies and the public on the project, updates impacts, and finalizes mitigation requirements.
- 4) Record of Decision – as noted above, the successful completion of the EIS process results in a ROD that documents the decision made by the lead federal agency, along with mitigation commitments. At the state level, the satisfactory completion of the EIS process results in the RGU issuing an Adequacy Determination.

The current phase of the Southwest LRT project includes the scoping and DEIS components of the overall EIS process. FTA integrates environmental policy into all planning and decision-making procedures in order to balance infrastructure, economic prosperity, health and

² The Minnesota Environmental Quality Board (EQB) plays a vital role in Minnesota's environment and development. The board develops policy, creates long-range plans, and reviews proposed projects that would significantly influence Minnesota's environment. The EQB writes the rules for conducting environmental reviews. The EQB's environmental review duties are directed by Minnesota Environmental Policy Act Laws 1973, Chapter 412 (MEPA) Minnesota Statutes 116D.04.

³ The National Environmental Policy Act (NEPA) [42 U.S.C. 4321et seq.] was signed into law on January 1, 1970. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment, and it provides a process for implementing these goals within the federal agencies. NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

environmental protection, community and neighborhood preservation, and quality of life when making decisions about initiating new transit infrastructure or making improvements to existing infrastructure. FTA and the HCRRA work with federal resource agencies; affected state, local and tribal governments; public and private organizations; and the general public to balance these goals. Refer to Appendix B for a listing of the federal, state and local agencies involved in the Southwest LRT DEIS process.

NEPA establishes an umbrella process for coordinating compliance with each law through the preparation of an EIS for all major federal actions significantly affecting the environment. The regulations of the Council on Environmental Quality (CEQ) implementing NEPA ensure that information on the social and environmental impacts of any federally funded action is available to public officials and citizens before decisions are made and before actions are taken. NEPA regulations direct federal agencies to integrate into their planning and decision-making the natural and social sciences, environmental amenities and values, and the design arts along with the necessary engineering and economic considerations. The objective is to balance infrastructure development, economic prosperity, health and environmental protection, community and neighborhood preservation, and quality of life.

In addition to NEPA, the provisions of other statutes, regulations and executive orders affect the decision-making on federally assisted transportation projects. These mandates and considerations cover such concerns as air and water quality, historic preservation, parklands protection, habitat preservation, civil rights and social burdens of transportation investments. FTA uses the NEPA process as the overarching umbrella under which the mandates and considerations of all laws affecting transit project development are considered.

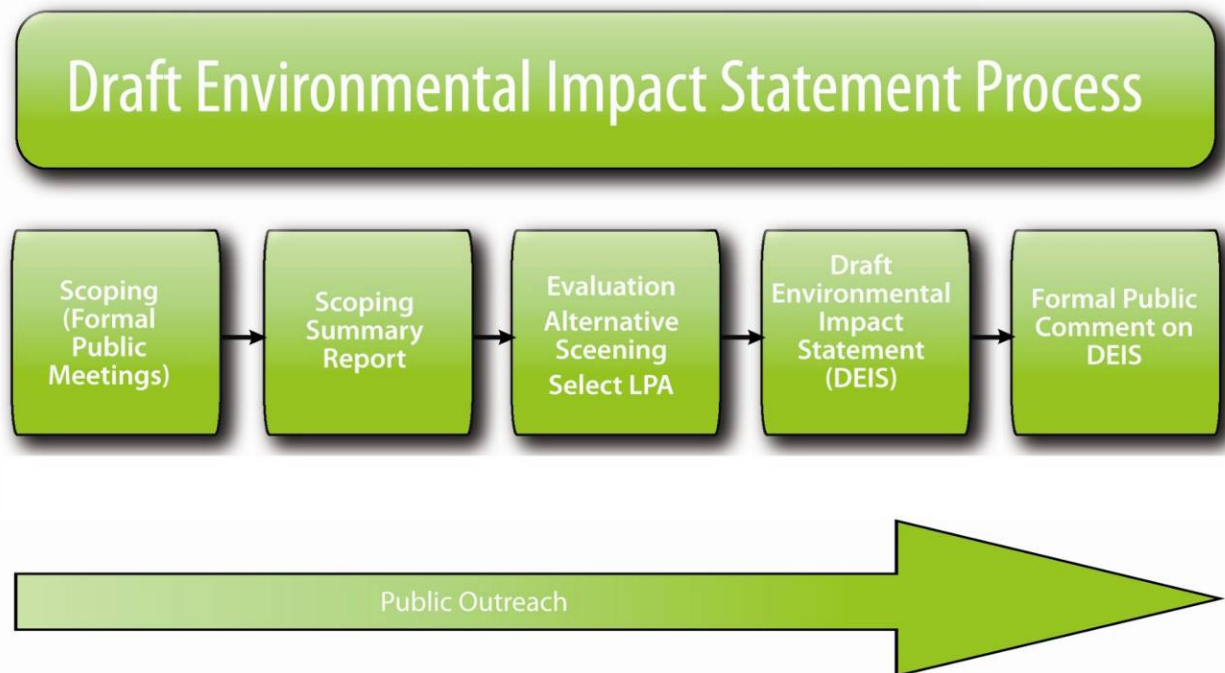
2.3 Southwest LRT Project Development Process

The Southwest LRT delivered an AA in 2007. During the AA process, a Transportation System Management (TSM) or Enhanced Bus Alternative along with ten build alternatives were evaluated. The ten build alternatives include two bus rapid transit (BRT) and eight light rail transit (LRT) alternatives. After a thorough review process and extensive public involvement, the ten build alternatives were narrowed to three LRT alternatives (LRT 1A, LRT 3A, and LRT 3C) for further evaluation during the DEIS process through which the LPA would be selected.

Although the Southwest LRT project did not conduct environmental streamlining by conducting an AA/DEIS, the project did intend to consider potential impacts to critical environmental resources prior to selecting the LPA. In addition, the Southwest LRT project intended to conduct the NEPA/MEPA Scoping process prior to selection of the LPA. The intent of proceeding in this fashion was to ensure consideration of potential impacts to critical environmental resources and allow the public and resource agencies the opportunity to officially comment on the purpose and need for the project and the proposed alternatives prior to selection of the LPA.

The DEIS process is illustrated in Figure 4. The intent was to begin the process by conducting NEPA/MEPA Scoping for the alternatives recommended for further evaluation during the DEIS process. After the NEPA/MEPA Scoping process was completed, a screening process would be conducted to further evaluate the alternatives including an assessment of the potential for impacts to critical environmental resources prior to selection of the LPA. The screening process would be conducted in a manner consistent with the FTA New Starts guidance and NEPA. After the LPA was selected, the DEIS would be completed.

Figure 4 - DEIS Process



The process for selection of the LPA will include screening of the alternatives to determine which one best meets the purpose and need for the project as documented in Chapter 3 of the Southwest Transitway Alternatives Analysis AA, 2007. A preliminary LPA recommendation will be made by the Southwest Technical Advisory Committee (TAC), a group composed of staff planners and engineers from the affected agencies. The preliminary LPA recommendation will be shared with the public and the resource agencies. A formal public hearing convened by the HCRRA on behalf of the Southwest Policy Advisory Committee (PAC) will occur to formally receive public comment on the preliminary LPA before the PAC will act to recommend a final LPA to the HCRRA. The HCRRA will then consider the final LPA recommendation at a formal HCRRA meeting and forward a request to the Metropolitan Council, acting as the Metropolitan Planning Organization (MPO), to amend the long-range transportation plan—the Transportation Policy Plan (TPP)—to include the Southwest LRT LPA.

The purpose of the DEIS process is to explore, in a public setting, the effects of the proposed alternatives on the physical, human, and natural environment. All potentially significant environmental, social, economic, and transportation benefits and impacts of the proposed alternatives will be evaluated and include the following topic areas:

- ◆ Ecosystems and natural resource benefits and impacts including geology and soils, air quality, water resources including hydrology and water quality, noise, and vibration;
- ◆ Land use, zoning, and economic development;
- ◆ Demographics and socioeconomic factors;
- ◆ Displacements and relocations;
- ◆ Neighborhood compatibility, community facilities and services, and environmental justice;
- ◆ Visual quality and aesthetic characteristics;
- ◆ Cultural resource benefits and impacts, including those related to historical and archaeological resources, traditional cultural resources, parklands/recreation

- ◆ Section 4(f) resource impacts;
- ◆ Hazardous materials;
- ◆ Energy use;
- ◆ Construction effects; and
- ◆ Transportation benefits and impacts (including transit, roads and highways, railroads, and pedestrian and bicycle facilities).

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