10.0 Project Management Plan

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A Project Management Plan (PMP) has been prepared, demonstrating the organizational structure and technical capacity of the Intergovernmental Partnership comprised of the City of Madison with Dane County and the Wisconsin Department of Transportation to undertake the preliminary engineering phase of Transport 2020 project development. This PMP, which follows, describes how FTA requirements for major transit capital project development will be met, and provides a foundation for all planning, design, construction ,and implementation steps of the Transport 2020 project. The PMP is designed as a "living document" and will be updated as the project progresses. A revision log will be maintained to document changes over time to the plan.

Transport 2020

Environmental Impact Statement and New Starts Application

Project Management Plan

DRAFT

June 2008

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1. INTRODUCTION

Transport 2020 is a study of transportation improvement alternatives for the Dane County / Greater Madison Metropolitan Area. Dane County has experienced population growth in recent years, estimated at 16.7 percent since 1990 by the U.S. Census Bureau. In addition, very recent population data substantiate Dane County's rapid growth. According to an August 2007 Wisconsin Department of Administration report, Dane County has added more new residents since the 2000 U.S. Census than any other Wisconsin County. In fact, Dane County has added twice as many residents as Waukesha County, the county with the second most new residents added since 2000. This growth, combined with other factors, puts increased pressure on the region's transportation network. Travel corridors throughout the region are experiencing transportation challenges. In the heart of the greater Madison metropolitan area is Madison's Isthmus, a corridor that has experienced increasing traffic congestion.

On behalf of an intergovernmental partnership of the City of Madison, Dane County, and the Wisconsin Department of Transportation, the Transport 2020 Implementation Task Force has completed an Alternatives Analysis (AA) in the fall of 2007, and expects to produce a Draft Environmental Impact Statement (DEIS) in 2009. The Transport 2020 Implementation Task Force is made up of City of Madison, Dane County, State of Wisconsin, University of Wisconsin - Madison, and community representatives. The City of Madison, Dane County and the Wisconsin Department of Transportation are jointly funding $2.5 million for this planning stage of Transport 2020. The products of this study will be used to support an application to the Federal Transit Administration (FTA) for funding of Preliminary Engineering (PE) under the FTA's New Starts Program.

This chapter describes the general intent of the Project Management Plan (PMP), the proposed schedule, and the current status of the project development to date. Information on project schedule, financing, and legal / statutory authority is also provided.

1.1 PURPOSE OF THE PROJECT MANAGEMENT PLAN

This document is intended to guide the development of the Transport 2020 project from planning through implementation of operations. It fulfills the requirements of the FTA for funding under the New Starts Program as required in the Code of Federal Regulations (49 CFR, Section 5327 – Project Management Oversight). Table 1 lists the elements that FTA requires be part of a PMP. Elements are indexed to the section(s) where each is addressed.

The PMP is written to comply with all of these requirements and to provide a foundation for all planning, design, construction, and implementation steps of the Transport 2020 project. A complete description of project elements is not possible since the planning is preliminary at this writing. Rather, this PMP is designed as a "living document" and will be updated as the project progresses. A revision log will be maintained to document changes over time to the Plan (Appendix A).

This PMP will be progressively revised as development of the Transport 2020 project advances. The following list provides the five primary stages of this development:

1. AA / DEIS (the most conceptual stage)

2. Preliminary Engineering / FEIS
3. Final Design
4. Construction
5. Implementation of Service

This report is one of several products of Stage One, AA/DEIS. The Work of Stage One has been performed by a consultant under contract directly to the City of Madison.

Table 1 – FTA Required Elements of a Project Management Plan (PMP)

FTA Required PMP Elements	Chapter - Section
Adequate staff organization with well-defined reporting relationships, statements of functional responsibilities, job descriptions, and job qualifications	2.3, 2.4
Budget covering the project management organization, appropriate consultants, property acquisition, utility relocation, systems demonstration staff, audits, and such miscellaneous payments as the recipient may be prepared to justify	1.6, 3.3
Design management process encompassing preliminary engineering (PE) and final design	6.2, 6.6, 6.7, 6.8, 6.9
Construction schedule	3.3, 7.1
Document control procedure and recordkeeping system	3.3
Change order procedure that includes a documented, systematic approach to the handling of construction change orders	7.5
Description of organizational structures, management / technical skills, and staffing levels required throughout the construction phase	7.1
Quality control (QC) and quality assurance (QA) programs which define functions, procedures, and responsibilities for construction and for system installation and integration of system components	3.4
Material testing policies and procedures	3.4
Plan for Internal reporting requirements, including cost and schedule procedures	3.3, 4
Criteria and procedures to be used for testing the operational system or its major components	8.1, 8.2
Periodic updates of the plan, especially related to the project budget and project schedule, financing, ridership estimates, and the status of local efforts to enhance ridership where ridership estimates partly depend on the success of those efforts	Appendix A
Recipient's commitment to prepare a project budget and meet each month	4

1.2 TRANSPORT 2020 BACKGROUND

There have been a number of studies prepared previously on possible major transportation improvements for the Dane County/Greater Madison Metropolitan Area; these concluded that high capacity transit is feasible. The results of these studies were considered in the Alternatives Analysis (AA) for the corridor and provided input to the improvement alternatives that were evaluated. The Transport 2020 project was initiated in 1999. The first phase of the study evaluated transportation system improvements for Dane County and the Greater Madison Metropolitan Area; it concluded with a long-term vision and Locally Preferred Alternative for a multimodal transit system consisting of commuter rail, express bus service, park-and-ride lots, improvements to local bus service and future consideration of electric streetcars. The first piece of the LPA, locally known as the Start-Up System, is currently undergoing a detailed analysis. The LPA is centered on a 16-mile rail transit line operating within the existing Wisconsin and Southern (WSOR) railroad corridor connecting commuters from the City of Middleton, just west of Madison, through the west side of Madison and the University of Wisconsin-Madison campus. Likewise on the east, the corridor connects commuters from a point northeast of Madison, just south of the City of Sun Prairie, through the east side of Madison to the University campus (Figure 1).

The recommendations from the Transport 2020 Alternatives Analysis are the outcome a clear progression of land use and transportation studies in the region:

- The Vision 2020 Dane County Land Use and Transportation Plan, completed in 1997, recognized that without improving transit, regional growth would affect mobility for Dane County residents, students and workers. The plan recommends implementing a "balanced" transportation system to "increase reliance on transit…This is especially the case for work trips to central Madison during the peak hours and for school trips. This reduces the demand on the roadway network in terms of congestion and roadway capacity and provides mobility choices for those who wish to use other modes rather than an automobile or who do not have access to an automobile."[1] Along with recommendations for improving commuter transit service between outlying population centers and the Isthmus, establishing opportunities for park-and-ride transit services into the downtown area, and developing alternatives to all-day commuter parking downtown and at the UW-Madison campus, Vision 2020's main transportation recommendation was to initiate a Major Investment Study for transit improvements in the east-west corridor.

In addition to the recommendations contained in Vision 2020, numerous transportation plans and studies conducted in the City of Madison and Dane County have considered high-capacity transit improvements to help meet future transportation challenges.

- In 1992, the City of Madison prepared a Light Rail Transit Corridor Study and in 1998 Dane County completed a Commuter Rail Feasibility Study. Both of these studies concluded that investment in high-capacity transit improvements is feasible and worthy of further consideration. While the light rail study and the commuter rail study focused on a particular modal alternative, the Alternatives Analysis has

[1] Dane County Regional Planning Commission, "Vision 2020 Dane County Land Use and Transportation Plan Summary," 1997, p. 42.

comparatively assessed various transit modes to help determine the most appropriate solution for area transportation challenges.

The City of Madison's 2005 draft comprehensive plan notes strong public support for improving transit in the study area as a means of controlling development, promoting desirable redevelopment, and preserving the city's quality of life, and in consequence endorses the "full system" proposed in the first phase of Transport 2020.[2] To this end, the Madison Comprehensive Plan includes a major recommendation to pursue the implementation of the full system described in the Transport 2020 first phase report.[3]

The Downtown Advisory Report (DAR) completed in 2004 as a component of the comprehensive planning process recognizes that ensuring the vitality, livability, and economic viability of the downtown area is essential to the future of the Greater Madison Area. The DAR notes that increasing the number of transit options into and around downtown Madison is strongly supported by stakeholders .[4]

A number of communities throughout Dane County have addressed transportation issues in their long-term plans.

The City of Middleton Comprehensive Plan specifically identifies the Transport 2020 process in its goals and objectives, specifically listing "support the region's Transport 2020 study that is evaluating the future of the existing rail corridor running through Middleton and other area communities" as one if its goals.[5]

The Village of Shorewood Hills is currently drafting its Comprehensive Plan. The draft plan acknowledges the possibility of improved fixed-guideway transit and includes recommendations to work with Transport 2020 planners to ensure that Shorewood Hills is well-served by any improvements.[6]

The City of Sun Prairie's Comprehensive Plan goals include incorporating "commuter rail service into the design of development and redevelopment projects along the Canadian Pacific Rail line" and providing "modes of transportation that meet the special needs of the elderly, children, disabled persons, and persons unable to provide their own transportation."[7]

- The UW-Madison 2005 Campus Master Plan recognizes that transportation planning is essential to that redevelopment, and that the university drives a substantial portion of the transportation demand in the Greater Madison Metropolitan Area. The Campus Master Plan calls for supporting local and regional transportation planning, which includes limiting on-campus parking and developing express transit and park and ride facilities, commuter rail and streetcars.

[2] City of Madison Draft Comprehensive Plan, p. 3-27.

[3] City of Madison, "Public Hearing Draft Comprehensive Plan," 2005, part 2, p. 3-16.

[4] City of Madison, "Downtown Advisory Report," 2004, p. 27.

[5] City of Middleton "draft Comprehensive Plan," (http://www.ci.middleton.wi.us/plans/CompPlan/Draft20060121/).

[6] Village of Shorewood Hills, "Draft Comprehensive Plan," 2003, pp. 62-74.

[7] City of Sun Prairie, "Master Plan 2020," 2000, p. 100.

The Implementation Task Force, composed of members from the state, county, city governments as well as community members, began work in Dec 2003. Their mandate is to continue progress towards the creation of the recommended Transport 2020 transit system. The responsibilities of the ITF include:

- Advising local government and the State regarding implementation of Transport 2020 recommendations,
- Evaluating potential funding mechanisms for the recommended system,
- Evaluating the creation of a new governing structure for transit in the Madison and Dane County areas,
- Determining details pertaining to the oversight, management, and administration of the Federal application process,
- Other aspects important to the establishment of a regional transit system

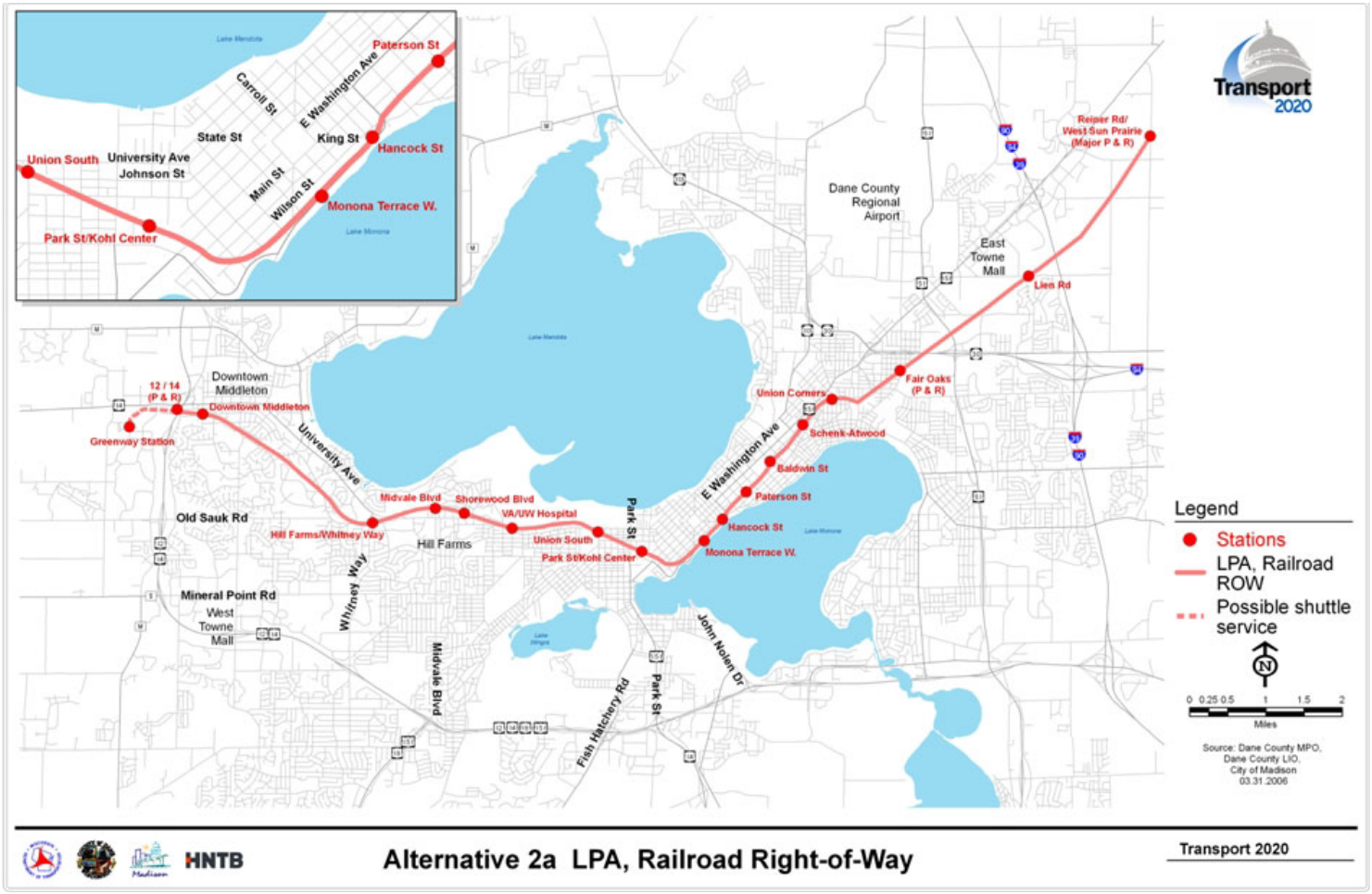
1.3 TRANSPORT 2020 PROJECT DESCRIPTION

The Transport 2020 Implementation Task Force (ITF) selected Alternative 2A as the Locally Preferred Alternative (LPA). Alternative 2A features diesel multiple unit commuter rail vehicles (DMUs) operating in the existing WSOR rail corridor running from the Highway 12/14 interchange in Middleton, through the Isthmus, to Reiner Road, just south of Sun Prairie. This alternative is designed to serve many of metropolitan Madison's major employment, entertainment and shopping destinations, and complements the existing bus system.

Alternative 2A features 17 stations along a 16-mile alignment. The existing railroad corridor will be improved to employ two tracks from WIS 30 on the east to Whitney Way, on the west, a distance of approximately 8.5 miles. Due to right of way limitations, a one half mile segment through the University of Wisconsin at Union South Station will employ a single track. In order to provide cost effective and frequent service in Madison's core, trains will operate on two overlapping routes, identified as the east branch and the west branch. The east branch operates from Reiner Road near Sun Prairie, through downtown Madison, to the Whitney Way; the west branch runs from Middleton to Fair Oaks on the East Isthmus.

The proposed service in Alternative 2A will use DMUs or hybrid vehicle technology operating on the Wisconsin and Southern freight tracks under temporal separation with the existing freight service. The tracks that are currently in place will be upgraded to accommodate the passenger service. Depending on the existing track conditions, the recommended upgrades range from a 33% tie replacement and installation of new continuous welded rail to a complete track rebuild with new ties, rail and ballast. Nine single car trains will be required for the weekday peak service. The planned fleet of eleven vehicles includes two spares. The service design will provide 70 daily trips on weekdays and 40 daily trips on Saturdays on the Western Branch, and 70 and 40 trips respectively on the Eastern Branch. Initially, Sunday service and other special event service will be offered as demand warrants.

Figure 1 – Transport 2020 Commuter Rail Project Alignment



1.4 PROJECT SCHEDULE

A hierarchy of schedules will be produced for the project, ranging from a generalized summary schedule to a cost-loaded critical path schedule for project management and control purposes. A preliminary, generalized schedule for project development through construction is presented in Table 2. As the project advances, the schedule will be replaced with a more formal Project Master Schedule, which will have progressively greater levels of detail. This top level summary version of the Project Master Schedule will, at all times, be a roll-up of a more detailed lower-level schedule network using the Critical Path Method format.

Table 2 – Generalized Transport 2020 Project Schedule

Stage	Task	Start	Finish
AA / DEIS	Draft Environmental Impact Statement	January 2008	October 2009
	Definition of Alternatives	April 2006	September 2007
	Transit Supportive Land Use	May 2006	February 2007
	Ridership Forecasting	April 2006	October 2007
	Capital and O & M Cost Estimates	May 2006	October 2007
	Evaluation of Alternatives	October 2007	November 2007
	Prepare Project Plans	January 2007	May 2007
	Develop Financial Plan	August 2007	May 2008
	Preparation of FTA New Starts Report	June 2007	May 2008
	FTA Application for PE Funding	June 2008	June 2008
FTA Decision on Entering Preliminary Engineering			November 2008
PE / FEIS	Conduct Preliminary Engineering	January 2009	June 2010
	FTA Application for FD Funding	June 2010	June 2010
FTA Decision on entering Final Design			October 2010
FD	Conduct Final Engineering & Design	October 2010	October 2011
FTA Decision on Full Funding Grant Agreement			January 2012
Construct	Procurement & Construction	April 2012	July 2014
	Training and Testing	July 2014	January 2015
	Service Implementation	January 2015	

1.5 PROJECT FINANCING

Enabling legislation must be passed at the State level in order to authorize the creation of an RTA. Once created, the RTA would function to provide funding as well as policy direction and guidance for the Transport 2020 project. The RTA will be a comprehensive, countywide, regional transportation system that would provide transportation infrastructure to the entire region. It is anticipated that this legislation will be passed by the State legislature and signed by the Governor during the January 2009 biennial legislative cycle, which will meet the timeline for implementation of a new sales tax to support the RTA and the Transport 2020 project. The RTA would include participation by the City of Madison, Dane County, local municipalities throughout Dane County, and community partners, including the University of Wisconsin–Madison and the Madison Area Metropolitan Planning Organization. The enabling legislation, which would allow for up to a half-cent sales tax, would go before the citizens in a countywide referendum; its implementation would be contingent upon receiving federal transit funds. It is estimated that this tax would generate $42 million annually, of which a portion is anticipated to cover the entire non-federal share of capital, operating and maintenance costs of the Transport 2020 project. This sales tax funding would be apportioned to Transport 2020, as well as other regional transportation initiatives. The funding breakouts could be as follows (although detailed local discussions are ongoing):

- 33 percent: first phase of Transport 2020,
- 25 percent: Metro Transit buses,
- 25 percent: town, village, city and county road maintenance,
- 17 percent: paratransit services, rail and bus enhancements, and bicycle facilities.

The City of Madison Common Council and Dane County Board of Supervisors passed resolutions in August and September 2007 supporting the passage of this proposed legislation. In addition, the Madison Area Metropolitan Planning Organization also passed a resolution of support for this legislation in September 2007.

The ITF expects that capital costs of the LPA would be evenly funded between the regional sales tax and a FTA New Starts capital grant. Funds for PE, approximately $5.5 million, would be funded through Federal, State and Local grants.

1.6 LEGAL AND STATUTORY AUTHORITY

The Regional Transportation Authority is expected to be enabled by the Wisconsin State Legislature and Governor to coordinate transportation for the communities of Dane County. In the interim, the PE/EIS phase of Transport 2020 will continue to be managed through the collaborative approach established for the AA phase. Specifically, an Intergovernmental Agreement (IGA) formed a Consortium of the Wisconsin Department of Transportation (WisDOT), Dane County, and City of Madison to define management of the alternatives analysis/environmental phase of the project, including initiation of the PE phase. The IGA establishes an Implementation Task Force (ITF), which makes policy and project decisions for Transport 2020.

Building on this IGA, either a modified agreement or memoranda of agreement will be used to specify the roles and responsibilities of each of the three parties in the next phase of project development, the PE phase. The City will continue to act as the agent of the Consortium and both receive and administer funds allocated for the PE work.

2. PROJECT ORGANIZATION

This chapter discusses the organization and staffing of the Project Team needed to complete the Stage Two PE / FEIS. It is anticipated that Stage Three Final Design and Stage Four Construction will be performed under a new Regional Transportation Authority (RTA) as described in Section 2.6. As development of the Transport 2020 project advances through each of these stages, the level of staff resources will be modified to adjust for changes in workload. The PMP will be updated prior to the onset of each project phase.

2.1 BACKGROUND

Until the RTA is established, Stage Two of the project (Preliminary Engineering / FEIS) will be managed by the City of Madison. Stages Three through Five (Final Design, Construction, and Implementation) will be funded and administered under the auspices of the RTA. The RTA would function as the operator of the Transport 2020 project.

2.2 POLICY-MAKING ORGANIZATION

Until the RTA is established for later project implementation stages, the existing Consortium described in Section 1.7 will continue in its role of policy making authority. The Consortium, through the ITF, will continue to make decisions on various design aspects such as station locations, travel speeds, and alignment, and operational aspects of the overall system. Other parties involved in Transport 2020, including Madison Metro Transit and Wisconsin and Southern Railroad will also be officially incorporated into any future agreements, either through an amendment to the existing IGA, or through a memorandum of agreement.

2.3 TRANSPORT 2020 PROJECT ORGANIZATION

The Consortium will carry out the PE/FEIS for the Transport 2020 project. For Stage Two, the team is to be comprised of staff of the City of Madison, Dane County, the Wisconsin Department of Transportation, and consultants. Such an approach, which utilizes existing Transport 2020 Consortium personnel and established working relationships will:

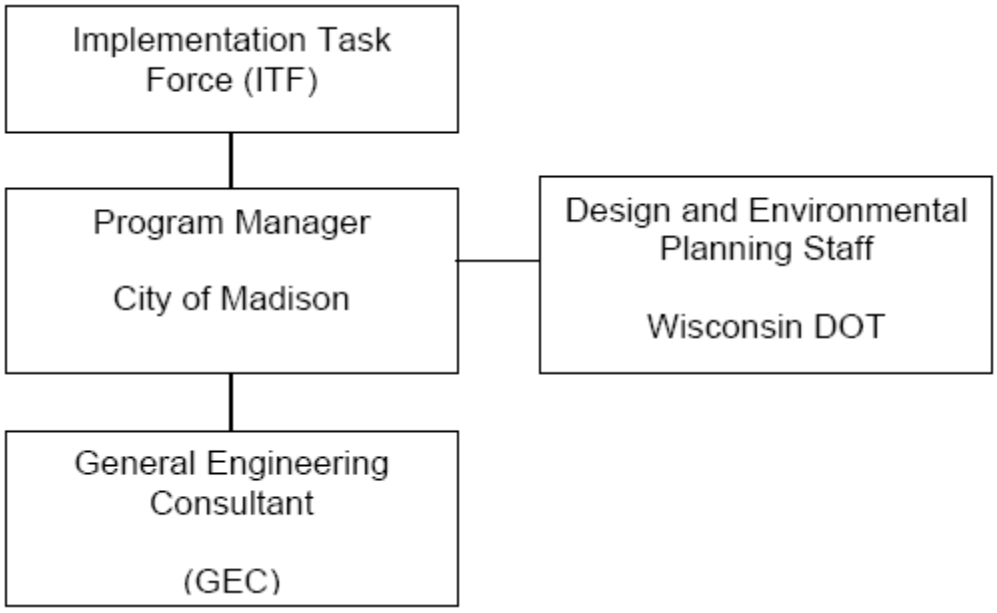
- Maintain the existing Program Manager, who has developed technical capacity and institutional knowledge about planning and project development phases to date;
- Utilize technical expertise and demonstrated capability at the Wisconsin DOT to provide review of, and consultation on the design work; and
- Retain administrative and technical oversight by the Implementation Task Force (ITF) for additional decision making.

To support this existing structure, the Consortium will retain a General Engineering Consultant (GEC) for the PE design phase to continue preliminary engineering to support the FEIS and ROD.

The project management organization for the Transport 2020 project is shown in Figure 2. The existing Program Manager from the City of Madison will continue to lead the project team. The Program Manager is overseen by the ITF, which will continue to make overall decisions related to policies and project implementation. The Program Manager will oversee preliminary engineering and will be responsible for the financial, schedule and overall performance of the Transport 2020 project. The WisDOT Design Liaison, as supported by design discipline staff from WisDOT, will provide

PE review and consultation during the PE/FEIS phase. The Program Manager will be supported by key staff from the GEC, providing engineering, architecture, planning, environmental, scheduling, cost estimating and public involvement functions.

Figure 2 – Organizational Chart of Transport 2020 PE/FEIS Project Staff



The various organizational duties and disciplines that will be required include the following:

- Project administration and coordination
- Project management: budgeting, cost control, document control, configuration control, and scheduling
- Planning and environmental assessment: transportation, environmental, land use, and financial planning
- Engineering: facilities, civil, systems and vehicle engineering
- Public involvement and media coordination
- Architecture / stations: appearance, fit and function of all buildings and infrastructure and coordinating these designs with general engineering
- Property procurement
- Quality assurance and quality control
- Liaison and coordination with other agencies and organizations, including the private railroads whose rights-of-way will be shared

Lead and support roles within each discipline could be RTA staff or consultants, depending on management choices to be made by the RTA. Many start-up transit operations have found it cost effective to run the design and construction phases with a relatively small agency staff relying on a general engineering consultant and a construction management consultant to provide experienced staff to implement specific tasks. The quantity of consultant staff can be adjusted as demanded by the work load. The T2020 team will operate in such a manner with responsibilities assigned as noted below.

2.3.1 General Engineering Consultant

The General Engineering Consultant will be responsible for the preliminary design of the Transport 2020 system under the direction of the Program Manager. Tasks include baseline and control surveys, utility relocation identification, preliminary track alignment, station location studies, land acquisition identification, maintenance facility layout, 30% design plans, cost estimates and project schedule. The GEC will also be responsible for the preparation of the FEIS and conducting public involvement activities.

2.3.2 Agencies and Organizations

Implementation of the Transport 2020 project will involve the efforts of governmental agencies, utility companies, railroad companies and others. Project files will include current listing of need for and status of formal agreements with agencies and organizations. These parties and their roles are described as follows:

Federal Transit Administration (FTA) – FTA administers grants and oversees the expenditure of federal funds for mass transit projects. FTA also contracts with its own PMC consultant to act as an extension of its project management staff in monitoring the grantee's performance on the project.

Federal Railroad Administration (FRA) – FRA is the regulator of freight railroad safety. The Program Manager, assisted by the GEC will coordinate with the FRA to ensure that the design meets applicable safety regulations and that the host railroads operations are not adversely impacted by the new passenger service in the corridor.

State of Wisconsin – The project will be constructed in the State of Wisconsin and is subject to state laws and regulations regarding safety, health, welfare and the environment. Coordination will be necessary with various state agencies including the Wisconsin Department of Transportation. WisDOT is an active participant in the Consortium and will be an important stakeholder in the project. WisDOT owns a substantial portion of the project corridor from the western terminus to Broom Street, and between "Junction A" (around First Street) to the eastern terminus. Union Pacific railroad owns the rail right of way between Broom Street and Junction A. WisDOT has already made contributions to the AA phase and will provide PE review and consultation during the PE/FEIS phase. Furthermore, a portion of the Transport 2020 corridor will be shared with future high speed rail passenger service between Milwaukee and Madison. Close coordination will be required to accommodate future intercity passenger rail service in the corridor.

University of Wisconsin-Madison – UW-Madison is an active participant in the ITF. The Transport 2020 alignment will be routed near portions of the UW-Madison campus as well as the UW Hospital and Clinics, which are major traffic generators. The project team will continue the ongoing coordination with UW-Madison staff to provide effective and safe transit service to the university.

Wisconsin and Southern Railroad (WSOR) – The Transport 2020 project will occupy right of way and use rail yard facilities owned and operated by WSOR. WSOR contracts with the Wisconsin River Rail Transit Commission to provide service. The project team will need to obtain a Right-of-Entry permit to use and/or enter upon right of way and ensure that the Transport 2020 project does not conflict with existing railroad operations.

2.4 KEY PERSONNEL

The key staff for and primary areas of responsibility within the management team are described as follows:

Program Manager (City of Madison) – provides for the overall management of the administrative and technical aspects of the project. The Program Manager monitors and controls the scope, budget and schedule of the Transport 2020 project. Another key function is communicating the important aspects of the project to the public, stakeholders, government agencies and the Consortium. The Program Manager ensures that the Consortium's goals, objectives and policies are incorporated into the development of the project.

The Program Manager represents the Transport 2020 project to outside agencies and organizations including federal, state, regional and local agencies as required by regulation. The Program Manager will lead and participate in discussions with community leaders and the public concerning the specific aspects of the project.

The Program Manager is responsible for coordinating negotiations and discussions regarding initial railroad operating agreements.

WisDOT Design Liaison –coordinates with the Program Manager on project controls and quality assurance program, in accordance with the project procedures. The WisDOT Design Liaison will provide PE review and consultation in order to help ensure that the project meets environmental and permitting requirements.

GEC Project Manager - assists the Program Manager in managing the day-to-day activities of the Transport 2020 project. The GEC Project Manager reports directly to the Program Manager; having specific responsibilities for closely monitoring the project activities, budget, schedule and scope and communicating changes to the Program Manager for disposition.

GEC Planning Lead – reports to the GEC Project Manager. Provides management oversight and coordination of planning activities such as detailed alternative evaluation, station planning conducting transportation and parking studies, financial planning and environmental documentation. Oversee the preparation of the FEIS/ROD. The Planning Lead is also responsible for oversight of the separate technical studies to be prepared in support of the FEIS/ROD.

GEC Engineering Lead – reports to the GEC Project Manager. The Engineering Lead provides management oversight and coordination of all engineering activities such as studies, capital cost estimates and plan preparation.

GEC Public Involvement Lead – reports to the GEC Project Manager. The PI Lead develops a comprehensive PI plan and oversees execution. Periodically evaluates and updates the plan. Coordinates all community relations and support efforts related to the Transport 2020 project. The PI Lead is responsible for community and neighborhood outreach activities; preparation and distribution of newsletters, exhibits and all other public presentation materials; news media relations and coordination between the project team and the community.

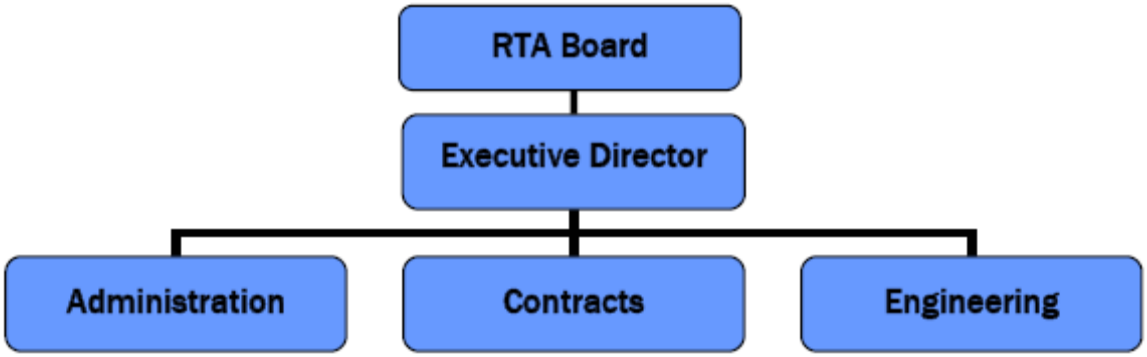
2.5 FUTURE RTA ORGANIZATION

The Regional Transportation Authority is expected to be enabled by the Wisconsin State Legislature and Governor to coordinate transportation for the communities of Dane County. The RTA will be the recipient of state and federal funds. The RTA will be accountable to the state legislature, Dane County and the FTA for the expenditure of funds for Transport 2020.

A plan for the structure of the RTA will be submitted to the state legislature and governor's office. The RTA will draw on the funding generated through the sales tax to provide funding for operating and maintenance costs and to provide policy guidance and direction. It is expected that the RTA will consist of a policy-making structure as shown in Figure 3. An RTA Board will have ultimate authority for regional transportation issues and subsequent specific projects under their authority. The Board composition, structure and manner of appointment is yet to be determined. The Board will address regional issues that go beyond city and town borders or affect the key operational aspects of the overall RTA system. The division between local and regional decisions will be subject to a policy document adopted by the involved parties. Elements of the policy will be incorporated into a Memorandum of Understanding to be signed by all parties. Any MOUs will be appended to this PMP.

It is expected that the RTA will oversee the future stages of final design, construction and implementation of the Transport 2020 project. The four key positions are anticipated to be filled by the RTA or loaned from local agencies such as Madison Metro Transit, the City of Madison or Dane County. The roles and responsibilities of each position will be more fully developed as the RTA structure is finalized.

Figure 3 – Initial Proposed RTA Structure



3. PROJECT MANAGEMENT AND CONTROL

3.1 MANAGEMENT STRUCTURE

The Consortium will be responsible for implementing the PE/FEIS stage of Transport 2020. The management structure for PE/EIS for the Transport 2020 project is comprised of the staff of the City of Madison, Dane County, the Wisconsin Department of Transportation and the General Engineering Consultant. This environment will provide effective project management and control throughout PE/FEIS.

3.2 DECISION AUTHORITY

The existing Transport 2020 Implementation Task Force will retain decision-making authority through the PE/FEIS stage.

3.3 PROJECT CONTROL

Control of the Transport 2020 project will involve four interrelated elements, including:

1. Scope – all work to the account of the agencies making up the Consortium (adjusted in later stages when the RTA is established)

2. Quality of the completed project – meeting established quality standards or specification for planning, design the quality and life of materials and equipment items, the levels operational service, efficiency, safety, security and reliability and the degree of maintainability

3. Capital costs - completed project cost estimate

4. Completion schedule – development through the phases of planning to start-up

Controlling these variables will initially be the responsibility of Consortium, supported by its principal Consultants. Control functions will be centralized even though all project participants feed vital inputs into the project control mechanisms, which include standard project procedures and management information systems. Control of these variables cannot start effectively until the project definition, or system specification, has advanced far enough to permit the project scope, quality, cost and schedule to be reliably defined and then base lined. Projects are controlled by managers who periodically check to determine whether the ongoing work, be it design, construction, procurements, installations or testing, is proceeding as planned, not only "within budget and on schedule", but also as scoped and within agreed quality objectives.

Base lining begins early in PE/FEIS starting with the establishment of design criteria. At the end of PE/EIS, the baseline for the four variables for final design is established for project control. Based on frequent review of and application of Quality Assurance processes, the Consortium and other agencies with appropriate authority should be able to approve the preliminary designs and specifications in a timely manner, and to expect that final design, construction, and procurements will follow consistent with the base lined definitions or values for scope, quality, price, and completion schedule. Preliminary design, of which “preliminary engineering" is a part, will see all basic design alternatives resolved

and will produce a design definition, for facilities especially, which can and should become frozen as the bases of final or detailed design.

3.3.1 Project Baselines

Although there are other methods of control, the one that is principally used on major projects consists of setting a series of project baselines or objectives. These are developed during PE/FEIS and set at the completion of preliminary design. As design and construction progresses, periodic comparisons are made between baselines and current projections of what those project qualities will be at completion. For example, when the base lined completion date and its current projection differ significantly or show a trend of widening variation, a "red flag" or exception report is produced. This is intended to alert management to a variable, schedule in this case, which is straying from plan. Such an early warning is intended to give management time to assess the cause of the problem, to evaluate alternative courses of action to restore the project to plan, and to order the concluded action be taken. When restoration to the original plan or the current baseline is impractical, the baseline must be formally revised and updated and the impact of such change on the other baselines must be recognized. Thus, baselines are specific references the Program Manager, with assistance from the GEC will develop during PE/FEIS and set at around the 30 percent level of design completion, upon which "back sights" are taken periodically to verify the project is "on time and within budget" and otherwise on track.

Physical Scope Baseline

The physical scope of the Transport 2020 Project will be well established during PE/FEIS. Early in PE/FEIS a baseline scope will begin to emerge. The adopted scope will be formalized and a process will be implemented to review and accept or reject changes to the baseline. During the PE/FEIS stage, the Consortium will maintain authority in defining the project scope. The preliminary alignment and station location analyses along with the design drawings will help to define the scope. In general, the project scope baseline at the end of PE is the preliminary design submittal, once approved, for final design.

During the implementation of the Transport 2020 Project, responsibilities for scope control and approval will be delegated including:

- Project Definition/System Specification
- Configuration Management/Change Control
- Interface Control.

These mechanisms will be formalized during PE for use during final design.

Functional Scope and Quality Baseline

What the Consortium may adopt as the project's functional scope and quality is more difficult to define than its physical scope. Functional scope includes such objectives as level of service and degree of safety. Quality in this usage refers to such objectives as the reliability of the public service, the comfort of the trip, the convenience of intermodal transfers and the cleanliness of the rolling stock. Base lining, or establishing a reference objective, for these qualities requires the characteristics of the system to be defined and norms or minimum standards be stated or described. These become

reflected in various written plans and programs that help control these variables, preventing costly "creeping enhancement" and the opposite, failure to conform. Among the plans that help manage these variables are:

- Operating Plan
- Maintenance Plan
- System Assurance Plan
- System Safety and Security Plan
- Rail Fleet Management Plan

These plans, programs and design bases will be described later in this PMP.

Capital Cost Baseline

The capital cost of the project is one of the more recognized variables that must be controlled. At the outset of PE, an initial review will be made of the cost estimate produced during the AA. That cost estimate will be refined at the 10 percent and 30 percent levels of design. Once the project definition has advanced to about its 30 percent level of design an estimate of its cost will be prepared and projected over the project schedule to day-of-expenditure-dollars. This estimate will include all costs that apply to the Transport 2020 Project, including the direct cost of facilities and systems, the costs of right-of-way; adjustment or relocation of conflicting third party facilities and start-up costs. Other costs will include the allocated share of Consortium agency staff costs, costs of project management and control, design, appraisals, construction and procurement management, insurance costs, training costs, and other soft costs. In addition, the base lined estimate will include a project reserve fund including an allowance for escalation in excess of that inherent in the projected costs.

3.3.2 Schedule Baseline

In a manner similar to the capital cost, the "Project Master Schedule", will be developed early in PE and updated in concert with the preliminary designs (10 percent and 30 percent level of design development), approved by the Program Manager, in consultation with the WisDOT Design Liaison, then published as the schedule reference to project completion. All events that can conceivably impact the progress of the work, even events whose costs are not to be borne by the project, will be shown, along with the logic of their timing.

The project's schedule control system will periodically compare current status of work against the base lined Project Master Schedule and will report where progress is falling behind the intended rate of advance.

3.3.3 Management Information and Control Systems

A common method of project control entails taking periodic reviews on adopted baselines and references, then comparing current status with intended status. Where these are trending apart, the project's Management Information System highlights them and calls management's attention to the need to take corrective action of some type. Managers will use the information produced by the project control systems and react appropriately.

Work Breakdown Structure

A Work Breakdown Structure (WBS) will be devised early in PE and updated as necessary to facilitate the management and control of costs and schedule. The Program Manager and GEC, in consultation with the WisDOT Design Liaison, will develop the WBS to a level of detail needed for project control. The WBS is a subdivision of all project work into manageable units to facilitate control. It will include non-work cost items as well. The WBS will become a common reference for cost control and schedule control and will also be reflected in the mechanisms that control scope and quality.

Cost Control

The control of capital costs is vital to project success because neither the Consortium agencies, nor the future RTA will have unlimited funds and their financial plans will rely on a specific level of budget. The information system software will be loaded with the base lined capital cost estimate (preliminary design base) and its report formats and scopes devised. Such reports could, for example, display the following information for each WBS account and level:

- WBS Reference (alpha/numeric)
- Cost Item (Name)
- Cost Item Category Code
- Original Base lined Cost ($)
- Amended Base lined cost ($)
- Current Working Estimate (CWE)
- Budgeted Amount To Date ($)
- Expenditures This Period ($)
- Actual Expenditures To Date ($)
- Percent of Baseline Expended (%)
- Cost To Complete ($)
- Final Cost Forecast ($)
- Variance from Baseline ($)
- New Current Working Estimate.

The cost control system includes the procedures for making forecasts of the cost system elements and publishing reports periodically. It also identifies the managers responsible for analyzing cost reports, noting trends or deviations from baseline, evaluating alternative courses of action to restore the forecast to plan, selecting corrective action and recommending actions to control costs. Where there are causes for cost variance beyond the control of management, a formal revision or updating of the baseline is required, borrowing from the project reserve if warranted. In this manner, the Consortium agencies and project consultants "steer" the project to stay within the targeted cost.

Budget Control

The Consortium agencies will set a specific budget for the PE/FEIS stage. The overall cost of the project must be controlled, and it also must be controlled in annual increments or budgets. Therefore, the project control mechanisms must include reference to cash flow and contractual commitments in relation to the current annual budget, as well as reference to the base lined capital costs. "Capital Cost"

The budgeting process plans for budget revisions, budget amendments and revisions to the authorized personnel position levels. As necessary, budgets and staffing levels can be changed with proper justification.

Contingency Control Program

The base lined capital cost will include contingencies within selected line items and a project reserve. Amounts no longer needed in the contingency fund will be transferred to the project reserve.

The construction line items will include a contingency that will be managed over the period of construction and drawn upon for non-anticipated events. It will be managed on an aggregate basis, not by contract unit, although each contract awarded will be given a fixed percentage allowance for normal changes and claims. As construction and procurements progress, and risk of unknowns diminish, the contingency funds shown in the line items will also be reduced, independently of allocations made for cause. Amounts no longer needed in the line items will be transferred to the project reserve.

Schedule Control

Conceptually, control of the time aspects of the project is effected in the same manner as the control of costs. In this case, the Project Master Schedule is the baseline, and periodic projections of the time of completion and intermediate milestones, as contrasted to the Master Schedule, gives management a new reading of project status and schedule adherence. The selected software will facilitate schedule maintenance and test impacts of proposed schedule changes. The Program Manager, the WisDOT Design Liaison and members of the consultant team will be required to input monthly data on project progress by WBS. These reports will be correlated and a monthly assessment of progress will be produced along with a narrative progress report. When such reports show trends away from the base lined schedule due to any cause, the responsible manager will highlight exceptions for response.

In later phases, during construction or procurement, the members of the consultant team, as manager of construction in concert with the appropriate RTA staff, will work with the contractors and develop remedies for restoring the project to schedule. Where such restoration is impractical, the parties would recommend a revision in the schedule.

Change Control

During PE, the Program Manager and GEC (in consultation with the WisDOT Design Liaison) will draft, as necessary, a set of Change Control Procedures that will support the Configuration Management and Interface Control Programs. The Program Manager, in consultation with the WisDOT Design Liaison, will institute a formal change proposal when a change in the ongoing work or a base lined quality is being proposed or precipitated by project circumstances.

The Change Control Procedures will formalize the assessment of proposed changes. The secondary or ripple effects of proposed changes, on other factors such as capital cost or schedule, will be analyzed. The proposal will then be advanced up the line to the proper decision-making level of authority where approval or rejection of the change can be made. During final design and construction a proposed RTA Contract Administrator would be responsible to rule on changes that have potentially profound impacts. The need for specific degrees of formalization and the decision making process of the Contract Administrator will be defined when the Change Control Procedures are written.

Changes can only be controlled after a baseline is established. Before that time, the bases of final design are still evolving and changes can be made without the strict control that must be imposed during final design and construction/procurement, except for those technical baselines such as design criteria that may be established before completion of preliminary design.

3.4 Quality Assurance/Quality Control

A Quality Assurance/Quality Control Plan must be developed to cover the preparation of the Final Environmental Impact Statement and Preliminary Engineering of the Transport 2020 Project, which would provide details of the quality assurance activities of the Program Manager, the WisDOT Design Liaison and GEC. The plan will have to be updated and amended for final design, equipment procurement, manufacturing, installation, construction and testing, and start-up phases. Well before final design, an updated plan will be prepared. The focus of a quality plan should be to establish a methodology for maintaining specified quality by establishing a timely, independent review and checking procedure designed to minimize reworking, re-engineering, and rethinking of previously completed tasks.

The GEC will be required to submit for approval a Quality Assurance/Quality Control Plan including the procedures necessary to implement the requirements of this plan with regard to the engineering aspects of the project.

In future stages of implementation, the Quality Assurance /Quality Control program will follow professional standards with an RTA overall plan and specific compliant sub-plans for each consultant and /or project element.

4. COMMUNICATIONS PROGRAM

This section addresses the communications program primarily to be used by the ITF and Program Manager during the PE/FEIS stage. The communications program will continue to be updated in the Project Management Plan through future project stages when the RTA is in place to manage the project.

Two levels of communication will be addressed: (1) between the ITF, the FTA, and consultants, and (2) between the ITF and affected agencies, and the public at-large.

4.1 Monthly Status Reports

The Transport 2020 GEC project manager will be responsible for preparing written and oral reports about the status of the project to present to the Program Manager. The Program Manager, in consultation with the WisDOT Design Liaison, will provide a summary of the current status of project work to ITF members and present status summaries at ITF meetings. The Program Manager will prepare a written project status report directed to FTA covering in particular:

- Project budget versus expenditures,
- Projections of costs to complete and total cost;
- Progress made to date versus scheduled progress;
- Issues and changes,
- Financial status of the project,

- Cash flow status and projections, and
- Any anticipated funding shortfalls.

In addition to the monthly reports, the Program Manager will prepare and submit to the FTA the following:

- Quarterly Financial Report,
- Quarterly DBE Progress Report
- Reports of Significant Events - special reports to be made to the FTA when unforeseen events impact the project schedule, cost, capacity, usefulness or purpose.

4.2 Coordination Meetings

The GEC project manager and key personnel will meet regularly with the Program Manager as needed, but not less than once a month. These meetings may be by conference call. The GEC project manager and the Program Manager will attend scheduled ITF meetings to provide project updates.

Additional special coordination meetings may be held and attended by various project team members, depending on discussion topics. These meetings can include technical subcommittee and elected official meetings, or individual agency and community staff meetings.

Effective communication will result from properly planned, led and chaired meetings. The GEC project manager will establish guidelines for these meetings to include as principles:

- Every meeting will have a scheduled location and scheduled time to begin and end.
- Weekly issuance of a calendar of upcoming meetings to help participants avoid conflicting schedule commitments.
- Participation at these, and all other meetings, by invitation, not by "drop-in."
- Every meeting will have a leader.
- The leader should publish and distribute the meeting agenda beforehand.
- Meetings will be conducted to reach conclusions. Set directions or have some positive, definitive outcome.
- The meeting leader will clearly identify the party or parties responsible for the actions determined to be necessary.
- Notes will be taken at every meeting.
- Notes will be reproduced promptly after the meeting and distributed to participants and other non-participants predetermined to receive such documentation.
- Action item lists will be used to track the progress of issue resolution. Updated action item lists will form a part of the notes documenting the meeting.

- Attendance at the meetings will be recorded on a sign-in sheet for recording of name, firm affiliation, telephone number, and e-mail address. Copies will be provided to all participants at the meeting's end and the attendance record will become a part of the meeting notes.

When requested by the FTA or the Program Manager, Quarterly Project Management Meetings will be scheduled and held to provide a forum for management briefings with FTA representatives, presentation of oral status/progress reports, discussion of problems and accomplishments, and inspection of construction in progress.

4.3 DBE Program Progress Reports

Monthly PMC invoices will report on the commitment to DBEs, the invoice amounts, percentages invoiced to date, and the projected amounts and percentages at completion.

4.4 Community Participation Program

During the PE/FEIS phase of the work, a Public Involvement Plan (PIP) will be prepared and a Public Involvement Program will be initiated to maximize involvement of the public, and other stakeholders, in the Transport 2020 Project. The PIP will be adopted and appended to this PMP.

During construction and during operation of the system, neighboring communities may be subject to increased noise, traffic, and other inconveniences. The RTA will make every effort to mitigate these potential imparts. The RTA will continue the community involvement work that commenced during the PE/FEIS phase and will offer more opportunities for the public to participate meaningfully, through final design and construction.

4.5 Public Information Program

The public information program is a component of the public involvement program. As such, the information program is discussed in the Public Involvement Plan (PIP). A PIP will be developed during the PE/FEIS phase of the project and will be incorporated, by reference, to this PMP. The goals of the PIP will be:

- Generate public ownership of the decision-making outcome
- Identify potential obstacles and anticipate possible solutions. Pave the way for more efficient implementation by avoiding revisiting decisions and potential litigation
- Enhance the Consortium/RTA's credibility

Subject to plan development, the PIP will address or include:

- Measures to manage the accuracy and quality of project information to be released to the public including: drafting press releases covering significant projects events, continuing preparation and distribution of a project newsletter which exists; developing display and projection graphics to better convey the Transport 2020 Project, preparing or editing feature articles about the project, preparing communication materials;
- Maintaining a "fact book" as a common reference for all staff and Board members;

- Media contacts;
- Planning and staging special events and campaigns related to the Transport 2020 project.
- Process for maintaining a project website along with a feedback mechanism.

A key function of this program will be development and maintenance of an Internet web site to serve as a repository for public project documents and to receive community feedback from e-mail postings.

5. HUMAN RESOURCES AND LABOR RELATIONS

Consistent with the AA stage, the PE/FEIS stage will be subject to the City of Madison's existing Human Resources and Labor Relations requirements. As such, there are few, if any, statutory or regulatory requirements in the realm of human resources and labor relations with which the city has not dealt. To the extent researched, those that constrain, control or otherwise impact the Transport 2020 Project are listed in the following sections. Most of these derive from the city's historic operations and will be modified to apply to the operation of a rail transit system, an activity new to the Consortium, which includes the city, Dane County and WisDOT. When the RTA is implemented, formal Human Resource and Labor Relations requirements will be formulated, but are expected to continue to largely mirror those of the city, which currently operates a transit system.

5.1 FEDERAL REQUIREMENTS

By use of Federal funds on the Transport 2020 Project, the city, as an agent for the Consortium during the PE/FEIS must conform to certain Federal requirements in the personnel/labor area as well as in the procurement process, plus meet other Federal regulations that apply regardless of funding sources. Those cited here cover most of the Federal requirements that apply.

5.1.1 Civil Rights Requirements

The city must comply with all civil rights program requirements that apply to transit-related projects. The applicable civil rights program areas are:

- Title VI of the Civil Rights Act of 1964 (Service Delivery/Benefits);
- Equal Employment Opportunity (EEO);
- Disadvantaged Business Enterprise (DBE) Program (Section 1101(b)); and
- Americans with Disabilities Act of 1990.
- NEPA Environmental Justice requirements.

All required civil rights program submissions must be approved by the FTA and are periodically updated in accordance with program guidelines.

Nondiscrimination in Federal Transit Programs (49 USC Section 5332), which prohibits discrimination on the basis of race, color, creed, national origin, sex or age, shall be excluded from participation in, be denied the benefits of, or be subject to discrimination under any project, program, or activity funded in whole or in part through FTA financial

assistance. This nondiscrimination provision applies to employment and business opportunities and is to be in addition to the provisions of Title VI of the Civil Rights Act of 1964, as amended.

Title VI of the Civil Rights Act of 1964, as amended (Service Delivery/Benefits). Once the initial Title VI submissions have been approved, updates are required every three years unless otherwise requested by the FTA.

Equal Employment Opportunity. Because of the magnitude of the Transport 2020 Project, the City of Madison is required to have its EEO programs approved by the FTA. Further, this requirement must be extended to City contractors who have more than 50 employees. The city has established its own Equal Employment Opportunity Program that is regularly maintained and updated. The current program will be reviewed for any changes that the Transport 2020 Project may precipitate.

Disadvantage Business Enterprise Program (DBE). The city must meet the requirements of the US Department of Transportation's regulations "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." The city will renew and update its DBE Program as necessary to support the Transport 2020 Project.

Americans with Disabilities Act (ADA). The city and its contractors must comply with all applicable requirements of the Americans with Disabilities Act of 1990; Section 504 of the Rehabilitation Act of 1973, as amended; Section 16 of the Federal Transit Act, as amended, and the following regulations and amendments thereto:

- US DOT regulations "Transportation Services for individuals with Disabilities; Americans with Disabilities Act (ADA)," (49 CFR Part 37);
- US DOT regulations. "Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 CFR Part 27);
- Joint US Architectural and Transportation Compliance Board/US DOT regulations, "Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 CFR Part 1192 and 49 CFR Part 38;
- Department Of Justice regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," (28 CFR Part 35);
- US DOJ regulations, "Nondiscrimination on the Basis of Disability Public Accommodations and in Commercial Facilities," (28 CFR Part 36);
- General Service Administration regulations, "Accommodations for the Physically Handicapped," (41 CFR Subpart 101 -19):
- EEO Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," (29 CFR Part 1630);
- Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled," (47 CFR Part 64, Subpart F), and
- FTA regulations, "Transportation for Elderly and Handicapped Persons," (49 CFR Part 609).

- Architectural and Transportation Barriers Compliance Board regulations,"Electronic and Information Technology Accessibility Standards," 36 CFR Part 1194; and
- Other Nondiscrimination Statutes that may apply to the LRT Project

5.1.2 Wage and Hour Requirements

The city must comply with all Federally-decreed wage and hour requirements, including but not limited to, the Davis-Bacon Act, 40 USC; the Copeland Act, 18 USC Section 874, at seq. as supplemented by Department of Labor regulations set forth in 29 CFR Parts 1, 3, 5, 6 and 7.

5.2 Local Labor Conditions

5.2.1 Existing Labor Agreements

5.2.2 Transport 2020 Project Outlook

5.2.3 On-Site Construction

5.2.4 Off-Site Manufacture/Assembly

5.3 Affirmative Action Plan

6. DESIGN PROGRAM

6.1 Basis of Design

6.2 Management of Design

7.4 Value Engineering Change Proposal Evaluations

7.5 Final Acceptance/Contract Close-Out

8. START-UP PREPARATIONS

8.1 Integrated Test Program

8.2 Activiation Planning

8.3 Operations and Maintenance Period

9. REAL ESTATE PLAN

10. RISK MANAGEMENT

11. SYSTEM SAFETY AND SECURITY

12. DISPUTE RESOLUTION

APPENDIX A
LOG OF TRANSPORT 2020 PROJECT MANAGEMENT PLAN REVISIONS

Date of Revision	Affected Section	Revision Description	Reason for Revision