Transport 2020 Finance and Governance Subcommittee
Background Information and Appendices

Draft 2: January 21, 2009

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Transport 2020 Finance and Governance Subcommittee Expanded on 4-30-08

- The Transport 2020 Finance and Governance Subcommittee was expanded on April 30, 2008, in an effort to broaden the community discussion about regional transportation. An agreement was reached to build off the work done by Transport 2020, enhancing that work by expanding the Finance and Governance Subcommittee and diversifying its current participants (to include representatives of large and small businesses; city, village and town governments; and movers of goods).

- Transport 2020 is a regional transportation study process, being conducted jointly by Dane County, the City of Madison, Wisconsin Department of Transportation (WisDOT), the Madison Area Metropolitan Planning Organization (MPO) and the University of Wisconsin-Madison.

- Prior to the expansion of the Transport 2020 Subcommittee, Thrive (the regional economic development enterprise for the Madison region) convened and facilitated a series of conversations among a diverse group of elected officials from throughout the region. The elected officials agreed that transportation is a regional issue that requires regional solutions. They also agreed that transportation solutions cross jurisdictional boundaries, and it is critical that elected officials throughout the region find solutions that benefit the entire region.

- The expanded Transport 2020 Subcommittee was charged with the following:

- Conduct a review of the assumptions underlying the Transport 2020 recommendations concerning the need for a regional transportation authority (RTA);
- Develop models for a regional transportation authority for community review and discussion (RTA models that will accommodate both express bus alternatives and/or potential commuter rail); and
- Develop additional information and communications materials regarding potential regional transportation solutions (and provide for public hearings around Dane County).

Review of Madison Area Metropolitan Planning Organization (MPO): Roles and Responsibilities in Transportation Decision Planning and Decision Making

- The Madison Area Transportation Planning Board (TPB) is the federally designated Metropolitan Planning Organization for the Madison Urban Area. As the MPO, it is the policy body responsible for cooperative, comprehensive regional transportation planning and decision making for the Madison Metropolitan Planning Area.

- The goal of the MPO planning process is to build regional agreement on transportation investments that balance roadway, public transit, bicycle, pedestrian, and other transportation needs and support regional land use, economic development, and environmental goals.

- The Madison Metropolitan Planning Area consists of the City of Madison and the Madison Urbanized Area, including all or portions of the 27 contiguous villages, cities, and towns that are or are likely to become urbanized within a 20-year planning period. Federal rules also require the designation of MPOs in urbanized areas of 50,000 or more in population as a condition for spending federal highway and transit funds.

- The primary responsibilities of the MPO include: (1) carrying out cooperative, continuous, and comprehensive planning processes for making transportation investment decisions in the metropolitan area, and (2) preparing and maintaining a long-range multi-modal transportation plan and transportation improvement program – in order to guide local transportation decisions and investments actions.

- While the Madison Area MPO provides regional coordination and approves use of federal transportation funds within the metropolitan planning area, responsibility for the implementation of specific transportation projects lies with WisDOT, Dane County, the City of Madison, and other local units of government as transportation providers.

- How are local units of government and other agencies represented on the TPB/MPO Board?
  - 6 appointed by Mayor of Madison
  - 3 appointed by Dane County Executive
  - 3 appointed to represent other cities and villages in the MPO area
  - 1 appointed to represent towns in MPO area

- 1 appointed to represent WisDOT

- Every 5 years, the Madison Area MPO prepares a Regional Transportation Plan (RTP) which identifies future transportation improvements and strategies/actions over a future planning horizon of 20 years or more (20+ yrs.).

- The RTP is used to implement an integrated, multi-modal transportation system and is based upon (and designed to support) the regional land use plan and local comprehensive plans of Dane County communities

- The goal of the RTP is to develop an integrated and balanced land use and transportation system that (1) provides for the efficient, effective, and safe movement of people and goods, (2) promotes the regional economy, (3) supports transportation-efficient development patterns and the regional land use plan, (4) provides mode choice wherever possible, and (5) preserves the character and livability of neighborhoods and residential areas where transportation facilities are located.

- Examples of corridor and sub-area studies (that flow from the MPO's long-range Regional Transportation Plan):
  - Verona Road/West Beltline Study
  - USH 51 and Stoughton Road Studies
  - North Mendota Parkway Study
  - Transport 2020
  - WisDOT High Speed Passenger Rail Initiative

- Examples of projects funded by the MPO (that are included in the MPO's Transportation Improvement Program):
  - East Washington Avenue (City of Madison, WisDOT)
  - CTH PD (City of Fitchburg, Dane County)
  - CTH M (Town of Westport, Dane County)
  - Cross Country Rd/Maple Grove Rd/Nesbitt Rd (Madison, Fitchburg, Town of Verona)
  - South Park Street (City of Madison)
  - Rideshare Program (MPO)

- Key transit system recommendations contained in the RTP include the following:
  - Establish a high capacity, fixed-guideway transit service with complementary express bus and connecting local service in an East-West Transit Corridor (e.g. Transport 2020 Study Area)
  - Establish commuter transit service (bus or rail) to selected villages and cities outside of the Madison Urban area

- Important MPO actions over the past several years re: the Transport 2020 project include the following resolutions:
  - January 27, 2003, Res. MPO No. 28, (RTP consistency; accepting the recommendations of the final report of T2020 Alternatives Analysis and recommending moving forward with PE & the EIS)
  - September 5, 2007, Res. TPB No. 6, (RTP consistency of Transport 2020 LPA and recommending moving forward with PE & EIS)

- September 5, 2007, Res. TPB No. 7, (Supporting enabling legislation to form RTA, and creating a local RTA to enable expansion of multi-modal transit in the Madison Metropolitan Area)

Recent History of Transport 2020 (*as Recommended in Regional Transportation Plans*)

- Planning for improvements in the Transport 2020 corridor date back well over a decade. Most significantly, in 1997 the *Vision 2020 Dane County Land Use and Transportation Plan* (prepared by the Dane County Regional Planning Commission - predecessor of the Madison Area MPO) recognized that improvements to high-capacity public transit are important to accommodating regional growth and improving mobility for Dane County residents, students, and workers. The plan recommended implementing a "balanced" transportation system to "increase reliance on transit… to help reduce the demand on the roadway network in terms of congestion and roadway capacity and provides mobility choices (for those who wish to use non-automobile modes or who do not have access to an automobile)."

- Based on those findings, a next phase of study was initiated (Transport 2020), culminating in a proposed integrated multi-modal system for Dane County. The key elements of that system include improving commuter transit service between outlying population centers and the Isthmus, establishing opportunities for park-and-ride transit services into the downtown area and along the east-west travel corridor, and developing alternatives to all-day commuter parking in Madison and at the UW-Madison campus.

- The most recent Regional Transportation Plan, adopted in 2005, recommends the following:
  –Establish a high capacity, fixed-guideway transit service with complementary express bus and connecting local service in an East-West Transit Corridor (e.g. Transport 2020 Study Area); and,
  –Establish commuter transit service (bus or rail) to selected villages and cities outside of the Madison urban area.

Review of Transport 2020 Alternatives Analysis Process and Previous Decisions

- Transport 2020 - a regional transportation study process being conducted jointly by Dane County, the City of Madison, Wisconsin Department of Transportation (WisDOT), the Madison Area Metropolitan Planning Organization (MPO) and the University of Wisconsin-Madison – was established in 1998 to address the land use, transportation and growth challenges affecting the future of Dane County and the surrounding region.

- An extensive evaluation process took place during the Transport 2020 alternatives analysis. The evaluation process led to the decision by the Transport 2020 Implementation Task Force to recommend advancing the commuter rail project to the preliminary engineering phase.

- The following goals and objectives were developed to help guide to the Transport 2020 alternatives analysis process:

GOAL 1: Promote Efficient Land Use/Development Patterns in Madison and Dane County

Objectives:

- Promote relatively compact development in Madison and other established cities and villages in Dane County.
- Concentrate employment and other activity centers along existing and planned transportation corridors (fully considering the relationship of transit and parking availability, as associated with such activity centers).
- Promote development that combines many activities, including commercial, retail, education, recreation and housing.
- Promote development that reuses existing sites and buildings, and that uses existing services.

GOAL 2: Improve Mobility for People and Goods, and Provide/Enhance Transportation Choices

Objectives:

- Provide enhanced non-automobile access to homes, jobs, services and other activity centers.
- Provide transportation options that are competitive with the automobile in terms of trip times, convenience (in the context of specific time-of-day and day-of-week trips), safety, user cost and comfort.
- Increase the geographical market for transit in the study area.
- Provide enhanced transportation options in areas outside of central Madison.
- Support increased bicycle and pedestrian activity.

GOAL 3: Improve and Enhance Economic Development and Employment Opportunities, and Expand Access to Jobs

Objectives:

- Support strong, sustainable economic growth while also ensuring a high quality of life.
- Increase housing opportunities for all citizens.
- Increase employment opportunities for all citizens.
- Enhance reverse commute options.
- Provide greater access to special events and other destinations in the study corridor.

GOAL 4: Enhance the Natural and Social Environment

Objectives:

- Improve air quality.
- Minimize transportation-related noise impacts.
- Protect and, where possible, enhance environmentally sensitive areas.
- Minimize community and neighborhood disruption.
- Minimize negative aesthetic impacts of transportation investments and, where possible, design systems that add to the aesthetic environment.

GOAL 5: Develop a Cost-Effective Transportation System Improvement Strategy that Maximizes Community Consensus and Institutional Support

Objectives:

- Achieve public consensus and institutional support for the preferred transportation investment strategy.
- Design a system that provides overall benefits, including those difficult to quantify, that warrant its overall cost.
- Include an evaluation of *all* costs and benefits, both quantifiable and non-quantifiable.
- Ensure that the costs and benefits are shared equitably among citizens and governmental entities.
- Maximize the leverage of local funds.

Alternatives Analysis Process

- In light of the goals and objectives established for the Transport 2020 evaluation process, several public transit options were developed (including express bus, bus rapid transit, commuter rail and street-running light rail options). Lower-cost bus options were considered throughout the Transport 2020 process (as they are required to be by Federal Transit Administration regulations).

- The commuter rail option was preferred by the Implementation Task Force for many reasons, but primarily because it would use the freight railroad corridor - which is highly under-utilized, located very close to many important activity centers, and will allow for fast, reliable service for many years to come.

- In order to make buses operate as fast (and reliable) as the rail corridor option, a significant investment would need to be made (to construct new bus lanes in the street right-of-way, etc.). The capital cost of providing a true east-west bus rapid transit (BRT) system would be less than rail, but would still in the same general range (BRT: $192 million, commuter rail $255 million). In addition, significant amounts of on-street parking would need to be taken for a BRT system (and replaced), and was not included in the cost estimate for that option.

- A (relatively) low-cost bus option - termed a "Baseline" alternative – was developed as well, although it is acknowledged that the Baseline would not provide the same level of transit service as the BRT or commuter rail options. The Baseline is required by Federal Transit Administration regulations to be part of the evaluation process. The estimated capital cost of the Baseline bus alternative is $44 million).

Low-Cost Baseline Option Considered

The Baseline Alternative for the Transport 2020 project includes improvements that increase the attractiveness of existing bus services operated throughout the corridor and Madison metropolitan area. Madison Metro operates an expansive and well-utilized system in the corridor that would be enhanced with some additional elements, as described below. This alternative represents a level of capital investment that is greater than the No-Build Alternative but substantially less than the Transport 2020 LPA and Bus Rapid Transit alternatives considered.

The Baseline Alternative includes a "Transit Priority Corridor" along portions of the east-west transit corridor (somewhat parallel to the Transport 2020 service). This corridor removes on-street parking where it exists now or utilizes existing diamond lanes for use by buses. Curbside bus and right turn lanes will be implemented where feasible throughout the Transit Priority Corridor. The majority of bus lane length is expected to consist of marked curbside diamond lanes in which right-turning traffic is allowed, but through auto traffic is restricted. Conditional

traffic signal priority will be implemented at all feasible intersections in the Transit Priority Corridor. Conditional priority gives extra green time to buses that have significant passenger loads and are running behind schedule as a means to manage headways between vehicles.

Some portions of the transit service have buses operating mixed traffic due to street right of way constraints. Existing auto travel lanes are not converted for bus use in the Baseline Alternative.

The Baseline Alternative is projected to have limited benefits to transit riders, a direct consequence of the heavy traffic congestion that would limit the speeds of buses operating in the corridor. The low-cost Baseline approach, with a significant portion of the service running on essentially the same congested highways that riders are attempting to bypass, would provide an ineffective response to anticipated mobility problems in the corridor. Even with improvements to create a bus priority lane in parts of the corridor, where feasible, the travel time performance of the Baseline Alternative does not match that of the LPA.

Review of Existing Transportation Funding Sources (*incl. Streets and Highways, Public Transit and other Transportation Modes*)

- In terms of local funding in Wisconsin, State and federal aid cover about 25% of total local government spending in Wisconsin. State and Federal aid cover about 35% of local government spending for transportation in Wisconsin. Local taxes cover about 30% of local transportation spending.

- Highway user taxes are the primary sources of revenue for federal (motor fuel and heavy vehicle taxes) and State (motor fuel, driver licenses, registration) funding for Wisconsin's highway, transit and multi-modal programs.

- In terms of local revenues, taxes and fees for transportation, Wisconsin units of government rely on a variety of sources including property taxes, assessments, state aids, special fees, farebox revenues (for transit) and advertising.

- In Wisconsin, the street and highway system includes 100,000 miles of local streets/roadways, 12,000 miles of State Trunk Highways (STHs, which includes Interstate highways). 60% of all vehicle travel in Wisconsin is on the STH system.

- The roles of the various levels of government re: the highway system are as follows:
  - **Federal**: planning guidance; priority setting; targeted financial assistance
  - **State**: own and operate STH; pay counties to maintain STH system; planning guidance
  - **Local**: own and operate local system; shared responsibility for Connecting Highway routes
  - **MPOs**: federally required decision-making and planning entity in urbanized areas (including the Madison metropolitan area)

- The roles of the various levels of government re: transit funding and operation are as follows:
  - **Local Governments**: own and operate or contract for all public transit; MPO concurrence on use of federal funds; local share for operations and capital costs

- **Federal**: categorical grants for urban and rural operating and capital costs; targeted aid programs; discretionary capital funding. Decision-maker on "new start" projects.
- **State**: operating assistance for public transit; aids to counties for E&D services. Funds all eligible applicants.

- Wisconsin ranks 6th nationally in paved road miles per capita. The State ranks 17th in per capita state and local spending on highways, which is about $577 per person. Wisconsin ranks 36th in per capita spending for state highways and 3rd in per capita spending for local highways. Wisconsin ranks 25th in per capita federal highway funding. Wisconsin ranks 13th in state funding per capita for transit operating and capital assistance.

- Despite a high gas tax Wisconsin is NOT a high highway user tax state, ranking in the middle nationally and 6th out of 7 Midwest states in user taxes. Wisconsin funds ALL transportation from highway taxes, one of two states to do so. Wisconsin has limited options for local governance and local revenue-raising authority. Statewide vehicle miles of travel (VMT) declined in 2005 and 2006, with a slight upward movement in 2007. Reduced VMT in 2008 and high gas prices have ominous revenue implications. Long term funding is the key state and federal transportation issue.

- Even in best of circumstances, 95% of travel will be on highways. The economic impact of highway spending will always dwarf other modes. Even so, there are many good reasons to invest in transit (although traffic congestion relief is rarely one of them).

Review of Potential Local/Regional Revenue Sources

- Some general principles that are used to determine the adequacy of revenue sources include:
  - Equity
  - Horizontal equity – if in similar circumstances pay similar tax
  - Vertical equity – vary tax on differences (e.g. income, use of service, etc.)
  - Economic efficiency – not interfere with decisions
  - Administrative efficiency – easy to inexpensive to administer
  - Flexibility – adapts to changing circumstances
  - Responsibility – imposing authority reflects voter preferences
  - Productivity – generate sufficient revenue relative to costs
  - Cash flow – timeline of funds allow accounting status to be determined
  - Growth and stability of revenue versus expenditures
  - Impact on economic growth – tax incidence & exportability
  - Competitive – rates versus neighbors

- Property tax is Wisconsin's highest ranking tax (State is 9th in U.S.). In terms of Midwest neighbors, Indiana ranks 10th, Illinois ranks 12th, Michigan ranks 13th, Iowa ranks 20th, and Minnesota ranks 34th.

- Local taxes that are available in Wisconsin include the property tax, county sales tax, baseball and football stadium tax, wheel tax, room tax, Milwaukee Expo taxes (incl. food & beverage tax, car rental, room tax), Premier Resort Area tax (e.g., Wisconsin Dells) and auto rental tax. Other potential future local sources could include personal income tax, employer payroll tax, or motor fuel tax.

- In terms of property taxes, some of the positive attributes include the fact that they are a stable, reliable and predictable revenue source. Property taxes are also productive and generate a relatively high amount of revenue. The down side of property taxes are that they are not connected to current income (i.e., are regressive), are already highly used (9^{th} highest burden in WI), are highly visible (property taxes are all on one bill). In addition, varying tax bases create tax rate disparities and a slowdown in value growth & new construction will force higher tax rates.

- In terms of local or regional sales taxes, the benefits are that Wisconsin has a relatively low sales tax burden and administratively can "piggyback" on existing state sales tax. In addition, sales taxes are paid at the point of sale, and are not as visible as some other taxes. The down side of local/regional sales taxes are that they may have border/location issues and that there are tax base disparities (i.e., concentrations of retail activity). When compared to property taxes, sales taxes are harder to forecast (i.e., collections are less stable). In addition, sales taxes are closely tied to economic activity, which can affect significantly affect revenue streams.

- In comparing county vs. municipal sales tax, a number of issues need consideration. Municipal sales taxes have a sharper tax island effect, have greater fragmentation (i.e., they are easier to avoid), have higher administrative costs (start-up and ongoing) and a constant need to adjust for boundary changes. In addition, it can be more confusing for businesses and residents and can affect stability the of tax base as jurisdiction size decreases (such as annexation). Enforcement may also be more difficult. County sales taxes already have been established and can provide for more stability with the tax base.

- In terms of Local Personal Income Tax, that revenue source is currently permitted in about 15-20 states. This tax is typically a flat rate or surcharge on state income tax liability. The benefits of local personal income tax is that is would be easy to "piggyback" on state tax and would be deductible against federal taxes. The negatives are that they have tax base disparities and border effects. In addition, Wisconsin's income tax ranks relatively high and the capacity to provide these taxes greatly varies by region and locality.

- A wheel tax is another local revenue option that is currently used in some Wisconsin municipalities. A municipal or county wheel tax may be added to the state's current $75 annual vehicle registration fee to pay for transportation related expenses. The benefits of a wheel tax are that it is simple and directly related to transportation. It's drawbacks are that it is highly visible and would need to be relatively high to generate significant levels of revenue.

- Regarding other potential future local sources (such as employer payroll tax, or motor fuel tax), local motor fuel taxes would be difficult to collect and would have border issues (since people can easily avoid taxes by driving a potentially short distance). Other potential revenue sources, such as parking fees may be considered.

Regional Governance Review

- Existing governance examples in Dane County were reviewed. The Subcommittee discussed the structure and operation of some of the regional entities, including the following:
  - Metropolitan Planning Organization
  - Capital Area Regional Planning Commission
  - City/County Board of Health
  - Monona Terrace Board
  - Cultural Arts District
  - Henry Vilas Zoo
  - Dane County Regional Airport
  - Public Safety Review Board
  - MATC Board
  - Metro Sewerage Commission

- The Transport 2020 regional public transportation system, if recommended to move forward, should be implemented and funded by an RTA. Relationships of the RTA to other existing governmental entities and service providers (i.e., Madison Metro, Common Council/County Board, Madison Area MPO, other Dane County municipalities, UW-Madison) should be evaluated in future RTA discussions.

- Members of the RTA should be appointed by mixed appointing authorities, and membership should include a diverse representation of the community. There should be some relationship between RTA membership and transportation service provided. The RTA should include representation from (but not be limited to) the following entities:
  - Dane County
  - City of Madison
  - Other cities in Dane County
  - Villages in Dane County
  - Towns in Dane County
  - University of Wisconsin-Madison
  - Wisconsin Governor
  - Transit system operators (or other transportation service providers)

- The geographic area of the RTA should initially be either Dane County or the geographic boundaries of the Madison Area Metropolitan Planning Organization. Provisions should be made for the potential geographic expansion of the RTA to serve additional communities over time, as demand and interest may warrant.

- Existing public transit services - such as Madison Metro and elderly and specialized transportation systems - may continue to receive federal and/or other funding under the new RTA model, where applicable. Governance and operation of those systems may remain in their existing format.

BACKGROUND/APPENDICES

Appendix A: Overview of Transport 2020 Regional Transit Project

The long-term transportation system vision proposed in Transport 2020 is a multi-modal system consisting of commuter rail, express bus services, park-and-ride lots, and improvements to local bus service. This "Full System" transit vision will represent significant progress toward meeting the regional transportation, economic development, and growth management goals established at the outset of the Transport 2020 project and goals that also are reflected in the adopted plans of Dane County communities.

The first piece of this long-term transit vision recommended to move forward is the Locally Preferred Alternative (LPA), selected in May 2007 by the Transport 2020 Implementation Task Force (ITF). In June 2008, a New Starts Application was submitted to the Federal Transit Administration (FTA), with a request for the Transport 2020 LPA to advance to the next phase of project development - Preliminary Engineering (PE).

The ITF consists of City of Madison, Dane County, state, university, Madison Area Metropolitan Planning Organization (MPO) and community representatives. The LPA recommendation emerged from a comprehensive planning process and alternatives analysis. The following are key elements of the LPA:

- Approximately 16-mile commuter rail line operating within an existing freight rail corridor between the City of Middleton and an area just southwest of the City of Sun Prairie, directly through the Isthmus of the City of Madison. This Start-Up System project is the first phase of an integrated multi-modal transit system for Madison and Dane County, and extensions of this system to serve many communities in Dane County are anticipated over time. Extensions of this system could serve a number of cities and villages in Dane County - including Fitchburg, McFarland, Stoughton, Oregon, Verona, Cottage Grove, DeForest, Waunakee, Cross Plains, Black Earth and Mazomanie. In addition, a short near-term extension to the north could provide direct service to the Dane County Regional Airport (which would also provide a direct linkage to future high speed intercity passenger rail service planned for that location).

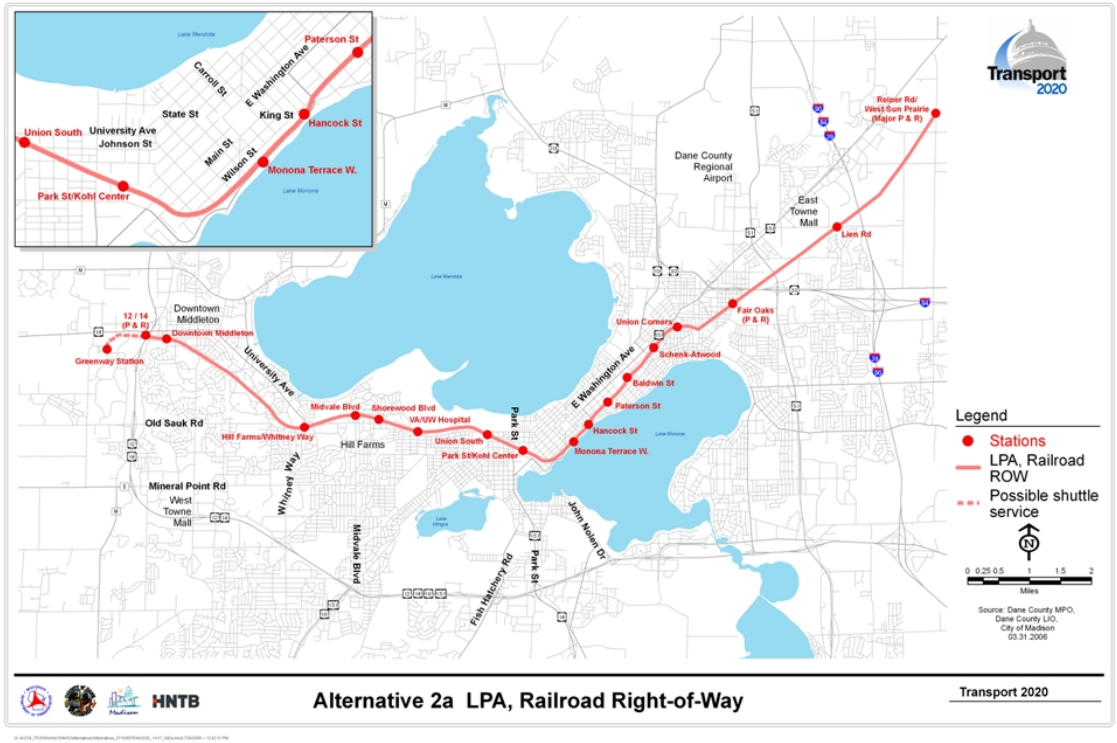
- New regional express bus service to numerous Dane County communities and improved local bus services to supplement and feed the rail service.

- 17 stations, including (from west to east):
  - Two in Middleton: one at the intersection of Highways 12 and 14 and the other in downtown Middleton.
  - Three in the Hill Farms/Midvale subarea, located just west of the University of Wisconsin: one at Whitney Way, one near the railroad intersection with Midvale Boulevard, and one at the railroad intersection with Shorewood Boulevard.
  - Three in the University area: one at the University of Wisconsin and Veterans' Administration Hospitals, one at Union South, and one serving the Kohl Center.
  - Three in the Capitol area: one at Monona Terrace, one at Hancock Street, and one at the railroad intersection with Paterson Street.

- Three in the East Isthmus subarea: one at Baldwin Street, one in the heart of the Schenk-Atwood neighborhood near Second Street and Winnebago Streets, and one at Union Corners.
- Three in the East Towne subarea: one at the railroad intersection with Fair Oaks Avenue, one on Lien Road near the East Towne shopping mall, and one at the Reiner Road intersection north of Nelson Road.
- Four park-and-ride lots would be included within the stations noted above (Highway 12/14; Whitney Way/Hill Farms; Fair Oaks; and Reiner Road).

- A high level of service would be provided:
  - Service provided in both directions during all weekday time periods and Saturday (initially, Sunday service and other special event service will be offered as demand warrants);
  - 20 minute peak headways;
  - 70 weekday trains;
  - Average operating speed of 23-26 miles per hour; and,
  - Diesel-multiple-unit cars ("DMUs" or self-propelled coaches) or new hybrid technology commuter rail vehicles.

Map 1: Transport 2020 Locally-Preferred Alternative



Appendix B: Review of Regional Transportation and Development Trends

The Setting

The City of Madison, the state Capitol of Wisconsin, is home to significant regional and statewide government, education, employment and cultural resources that attract both local and regional residents and visitors on a daily basis. Besides the State Capitol and government offices, the city is home to the University of Wisconsin-Madison (the nation's top public research university in total dollars), three major regional health care facilities, a new convention facility, and major cultural facilities. Additionally, the area is one of the top three tourist destinations for the state. The city, along with many of these facilities is uniquely situated on a narrow isthmus of land between lakes Mendota and Monona. Two primary arterial roadways serve as the east-west connection through the Isthmus; University Avenue on the west and East Washington Avenue on the east. An existing, but lightly used freight rail corridor runs roughly parallel with these two roadways through the Isthmus.

A planned regional land use strategy adopted in the 1970s has concentrated growth in the central area and existing suburban communities rather than in dispersed subdivisions. Civic re-investment has resulted in a vibrant urban fabric that consistently results in high ratings for the city and region in major national listings on quality of life.

Current Conditions

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. As of 2002 (the modeling base year), there were just over 400,000 residents and 285,000 jobs in Dane County. In addition, residential growth in Dane County since the 2000 Census is outpacing current projections. Dane County has added 50,000 additional residents here since that time, and has a 2007 population of 476,000.

Many of these residents commute daily to jobs located along the Transport 2020 east-west travel corridor. A majority of residents in most communities outside Madison commute to Madison for employment. In addition, lower housing prices in communities outside of Dane County have created more commuters and longer commute times into Madison (real estate sales figures from 2006 show Dane County home prices at 25 to 40 percent higher than surrounding counties). In fact, the number of employees commuting to Dane County from surrounding counties has nearly doubled during the 10-year period 1990-2000, growing from 16,000 to 30,000, a trend that is expected to continue.

The Transport 2020 study area contains the majority of the region's activity centers, representing 80 percent of the employment and two-thirds of the population in Dane County. The major destination for Isthmus trips is the University of Wisconsin (UW)-Madison Campus. The adopted campus plans call for no additional parking spaces on campus while envisioning continued growth in academic and research facilities. In fact, the campus land is too valuable as an investment in potential facilities for it to permit parking growth. Further, travel demand forecasts show that riders at the three UW area stations would be significant users of the proposed commuter rail system, with over 3,300 daily boardings in 2030 and half of these at the Union South station. Thus, improved regional transit is a requirement for the campus' future growth. The university is also the region's major economic engine, and the economic success of this region is tied to the UW's success.

Currently, traffic volumes during both the a.m. and p.m. peak periods on University and East Washington avenues are congested, operating primarily at highway Level of Service (LOS) E, with some spots now operating at LOS F. University Avenue currently carries between 50,000 and 55,000 ADT (average daily traffic) and East Washington Avenue carries between 50,000 and 60,000 ADT. Neither of these arterial roads can accommodate added physical capacity due to dense commercial and residential developments on both sides of the streets. Ongoing street improvements for capacity are limited to spot upgrades at intersections.

Due to the fact that Madison's physical geography is constrained by two lakes, alternative east-west street corridors through the study area are limited. There is no alternative corridor to University Avenue on the west side of the study area. On the east side, Williamson Street and the Johnson Street/Gorham Street one-way pair provide alternative east-west routes to East Washington Avenue. Growth on these two east side parallel arterials has increased on average 25 percent over the past 10 years indicating that growing East Washington Avenue congestion is forcing additional trips onto these corridors. Both these corridors carry traffic at or near their maximum capacity with Williamson Street operating at LOS E and Johnson Street/Gorham Street at LOS F. These alternative corridors are similarly constrained by dense development and cannot be physically expanded to meet traffic demand.

The Metro Transit system supplies a very high level of service compared to those of its peer cities, providing more than twice the revenue miles per capita than the average for its peer group. Consequently, transit ridership per capita is nearly four times the average for similarly sized urban areas. In its most recent Transit Development Plan, Metro Transit notes that Core and Commuter Routes through the study area accounted for about 60 percent of all Metro Transit trips and 73 percent of total system revenue service hours. Because of Madison's unique geography, nearly 50 percent of all weekday routes travel through Capitol Square in the heart of downtown Madison. But while transit service is high through the study area, bus service suffers from the same congestion that other traffic experiences on the limited number of arterial streets serving the area.

Anticipated Conditions in 2030

By 2030, the population of Dane County is projected to reach almost 600,000 residents (a 36 percent increase from 2000). Note that if very recent current growth trends (2000-2007) are realized, Dane County would grow to a population of 630,000 by 2030. Over that same period, employment in Dane County is projected to increase to be 382,000 workers (an increase of 34 percent). Nearly 70 percent of the forecasted growth in jobs is expected to occur in the area served by the Transport 2020 project.

The Madison Area Metropolitan Planning Organization (Madison Area MPO) projected that in 2030, 48 percent of the labor force will reside in the City of Madison, but that the City of Madison will account for 64 percent of the employment in the County.

Congested roadways will make the Transport 2020 system an attractive option for many of these commuters, given the reliable, consistent nature of the rail service. Traffic projections for 2030 indicate that the entire length of University Avenue and about 85 percent of the length of East Washington Avenue will operate at LOS F during peak periods. Similarly, the parallel streets of Williamson Street and the Johnson Street/Gorham Street one-way pair will all operate at LOS F.

Future traffic congestion is particularly marked at intersections where traffic queues and delays will increase. For example, during the a.m. and p.m. peak hours, traffic delays at the

intersections of John Nolen/Williamson Drive, Old Middleton Road/Whitney Way and University Avenue/University Bay Drive are projected to exceed two minutes, which translates into LOS F operating conditions. This delay is an increase of roughly one to six minutes more than existing conditions at each intersection. Another intersection reviewed during the alternatives analysis, Broom Street/John Nolen Drive, is also expected to fail during the a.m. peak in 2030, when intersection delay more than doubles. Thus, an auto trip in the corridor between Hill Farms and Reiner Road that currently take about 16.5 minute, with increase to 25.4 minutes in the year 2030, nearly a 50 percent increase. Additional travel time data will be obtained with a planned survey in the spring of 2008.

The addition of new roadway capacity along the Isthmus corridor has been determined to be financially infeasible, due primarily to the very high cost of adding roadway capacity and the resulting destruction of existing neighborhoods. Therefore, alternative investments are required to maintain mobility through and quality of life in Dane County's densest employment and population center. Improved transit investment is a major component of the regional growth management strategy for Madison and Dane County.

The proposed Transport 2020 LPA would provide significantly better transit options in the corridor and generate substantially higher mobility benefits than the Baseline alternative. Rail service will have a travel speed of 23-26 miles per hour, which includes stops; this is comparable to auto travel speeds today during peak periods. In addition, a major advantage of the commuter rail option is the fact that Transport 2020 LPA speeds/travel times will be the same on opening day as they will in 50 years (even though that is beyond the typical planning horizon for such projects).

In response to the substantial service improvements provided by the Transport 2020 LPA, ridership from the corridor is projected to be 11,000 riders per day in 2030 for work trips, or three million annually (including projected special event trips).

The Transport 2020 system will also help encourage new development to locate along the rail corridor, especially at station locations. A market study conducted during the alternatives analysis found that investment in rail transit could translate into a 10 percent greater increase in households and over a 200 percent increase in employment.