

Major Issues for the 2013-2017 TDP

The Madison Area Transportation Planning Board (MPO) is planning to update its Transit Development Plan (TDP). The TDP is a five-year strategic plan designed to identify the near-term future direction of the transit system. It is intended to guide the planning activities, service and facility improvements, and budgets of Metro Transit and other transit providers. The issues below are the most pressing concerns that the 2013-2017 TDP update will focus on.

1. Fixed Route Service Improvements

- **Route Performance and Planning Guidelines:** In 2009, the MPO developed Draft Public Transit Goals, Principles, and Service Design/Operating Guidelines and Performance Standards for the TDP Update. The TDP update was interrupted by work for the Dane County RTA and also delayed due to the MPO being short staffed and having to complete two other projects, including the Regional Transportation Plan update. The document will be revisited and changes made based on an analysis of recent boarding data by day and time.
- **Service Changes:** Metro regularly makes service adjustments to its fixed route transit system. Potential service improvements and expansions that could conceivably be implemented in the short term will be investigated. Service changes will focus on improving system efficiency, reducing overcrowding, providing more direct and attractive routing, and reallocating service hours based on ridership, coverage, and other factors. The TDP will also investigate potential service extensions into un-served neighborhoods and communities that may be practical in the next five years. Potential service changes and extensions will be given a priority based on their need, cost, and merit.
- **Overcrowding:** Metro's fixed-route ridership grew to a new record level in 2011 of over 14.9 million riders. During peak commute times, Metro buses experience overcrowding and pass-ups in busy corridors. These corridors have frequent service with over ten buses per hour during the peak commute times. "Extra buses" have been added to Routes 2, 3, 4, 6, 9, 14, 15, 28, 37, 38, 44, and 57 to alleviate this problem. However, adding extra buses to trips is a stop-gap measure that does not make the best utilization of Metro's resources. Adding more extra buses is not possible without expanding Metro's fleet and maintenance facility.

2. Bus Stop Spacing

- Many of Madison's strong transit corridors (Johnson/Gorham Street, Jenifer Street, University Avenue) have bus stops every block – eight or more per mile. This condition has not substantially changed since Mills Street, University Avenue, State Street, Jenifer Street, and Johnson Street were served by streetcars in the early twentieth century. While closely spaced bus stops are convenient for riders in these corridors, they result in delay for all riders using the service. The TDP will evaluate the bus stop spacing in central Madison.

3. Related Transit Studies and Projects

- Several studies related to transit improvements are currently ongoing. The TDP will incorporate the findings and recommendations of these studies, but will not duplicate their effort.
- **Maintenance Facility:** Metro's maintenance facility and bus storage yard at 1101 East Washington Avenue was built in the early 1980's and was designed for 150 buses. Since then, Metro's fleet has grown to include 209 full-sized 40-foot buses and 20 paratransit vans. The existing facility has gone through additions and remodels through the years and has several operational shortcomings that are exacerbated by the volume of buses that it accommodates. Additional bus storage capacity is critical for Metro to provide any new peak-period service.
- **Bus rapid transit (BRT):** BRT is a cost effective corridor transit improvement intended to improve transit travel times, ease of use, ridership, capacity, and image, similar to light rail projects. CARPC and the MPO are conducting a feasibility Study to determine if BRT is applicable in Madison.
- **Bus Size Study:** Metro is in the process of conducting a bus size study which will investigate the use of larger, articulated 60-foot buses that may be part of the solution to the overcrowding problem. The study will also investigate smaller buses for potential use on peripheral routes.

General TDP

1. Planning horizon of this TDP
 - 2013-2017
 - Last TDP was adopted in 2004 for 2004-2008
2. Table of Contents/Sections
 - 1. Intro/Background
 - 2. Today's System
 - 3. Performance/Goals
 - 4. Transit Development Plan
3. Committee Members
 - Main group (+/- 4 meetings)
 - Outer service area (1-2 meeting) – Verona, Sun Prairie, McFarland, Stoughton, Waunakee, etc.
 - Representatives from the outer service area are welcome to attend main group meetings.
4. Other studies and timelines
 - Feb 2012 – Begin collecting data for TDP
 - Spring 2012 – Begin TDP committee meetings
 - Fall 2012 – Finalize draft TDP report
 - BRT study – Begin Spring 2012 (9 months)
 - Bus size study – Begin Summer 2012
 - City of Madison Transportation Master Plan – Begin Summer 2012 (18 months)
 - Intercity Bus Terminal Planning – Ongoing

Service Planning

1. Service design guidelines
 - Draft 2009 guidelines (revisit, modify as needed)
 - Used to prioritize service changes
2. Ridership data
 - About 20% of the fleet has a problem with the GPS not sending coordinates to the fare-box, so all the boardings on those buses are recorded at a single erroneous location. However, this is not a problem because the AVL data is also available with about one-minute time stamps and boarding coordinates can be assigned retroactively.
 - Metro provided fare-box and AVL data for six weeks in September and October 2011.
 - The MPO assigned boarding locations for buses that are not reporting correctly and stripped bad data points.
 - The data was processed to prepare stop-level boarding maps, time period-based productivity charts, etc.
 - The TDP will provide a more in-depth system-wide ridership analysis by route segment, for example, breaking long routes into “West”, “East”, “Transfer Point”, and “Downtown” components.
 - Grouped service will be analyzed, such as shared corridors with high levels of service and paired one-way routes.
 - On time performance will be included if possible.
3. Service changes
 - Prioritize based on ridership, cost, and coverage
 - Improve service in areas with overcrowding, alternatives to extra buses
 - Improve directness and travel times
 - Improve routing and scheduling efficiency
 - Reallocate unproductive service hours to areas with a greater benefit
 - Simplify for ease of use
 - Low- to moderate scale changes, no major restructures
 - Pre-BRT service changes
 - Campus routes – UW is studying potential changes to campus service
 - Alternative service – flex route, etc?
 - Summer schedules?

- Assigning priority to proposed service changes/extensions
- 4. Plans for service extensions into planned new neighborhoods
 - Prioritize based on ridership, cost, and coverage
 - New potential express commuter service (Waunakee, Sun Prairie, Cottage Grove, McFarland, Stoughton, Verona, Oregon, DeForest)
 - Owl Creek
 - Pioneer/UWRP Ph II
 - Fitchburg (McKee Rd, Lacy Rd)
 - Bishop's Bay
 - Sprecher / Northeast
 - Other
- 5. BRT study
 - Preliminary findings from the study will be incorporated. The study will not be finalized before the TDP is completed, but the initial work on routing and feasibility should have draft results that will be used in the TDP.
- 6. Paratransit

Facilities / Operations

1. Fleet
 - Hybrid buses
 - New procurement and retiring of older buses
 - Smaller and larger buses (bus size study)
2. Bus stop spacing
 - Downtown/Campus
 - Johnson/Gorham St
 - E Washington Ave
 - Jenifer St
 - Park St
 - Mills St
 - Monroe St
 - University Ave
 - Stop spacing distribution and travel time analysis
3. New fare boxes (planning for eventual smart cards)
4. Maintenance facility
 - Planning for new facility
5. Transfer Points
 - No major changes to the transfer points or transfer point system
 - The BRT study may investigate possible changes, outside the 5-year horizon of the TDP
 - Possible changes with BRT
6. Shelters, sidewalks, platforms, signs, etc
 - Signage replacement removing "board bus at corner"
 - 2-sided signs or decals
 - Schedule information
7. Park and ride lots
 - Expansions to existing
 - New built or leased lots
8. Engineering spot improvements (bus bulbs, stop relocations, etc)
 - BRT
 - Non-BRT
 - With road projects
9. Intercity bus/rail terminal

- Long-term campus- and city- oriented sites, assume the short-term situation on Langdon St will be finalized by then

10. ITS infrastructure

- Mobile phone and computer apps with real-time arrival information
- Real-time arrival information at bus stops

11. Idle policy

Other

1. RTA

2. Fare policy

- Investigate alternative long-term fare structures, probably beyond the 5-year horizon

3. Marketing

4. Customer service

5. Customer information

- Signs
- Ride guide
- System map
- Frequency mapping