#### **MEETING ANNOUNCEMENT**

#### Madison Area Transportation Planning Board A Metropolitan Planning Organization (MPO)

**December 4, 2019** 

## Madison Water Utility 119 E. Olin Avenue, Conference Rooms A-B

6:30 p.m.

If you need an interpreter, materials in alternate formats, or other accommodations to access this meeting, contact the Madison Planning, Community & Econ. Development Dept. at (608) 266-4635 or TTY/TEXTNET (866) 704-2318.

Please do so at least 48 hours prior to the meeting so that proper arrangements can be made.

Si usted necesita un interprete, materiales en un formato alternativo u otro tipo de acomodaciones para tener acceso a esta reunión, contacte al Departamento de Desarrollo Comunitario de la ciudad al (608) 266-4635 o TTY/TEXTNET (866) 704-2318. Por favor contáctenos con al menos 48 horas de anticipación a la reunión, con el fin de hacer a tiempo, los arreglos necesarios.

Yog tias koj xav tau ib tug neeg txhais lus, xav tau cov ntaub ntawv ua lwm hom ntawv, los sis lwm yam kev pab kom koom tau rau lub rooj sib tham no, hu rau Madison Lub Tuam Tsev Xyuas Txog Kev Npaj, Lub Zej Zos thiab Kev Txhim Kho (Madison Planning, Community & Economic Development Dept.) ntawm (608) 266-4635 los sis TTY/TEXTNET (866) 704-2318.

Thov ua qhov no yam tsawg 48 teev ua ntej lub rooj sib tham kom thiaj li npaj tau.

如果您出席会议需要一名口译人员、不同格式的材料,或者其他的方便设施,请与 Madison Planning, Community & Economic Development Dept. 联系,电话是 608) 266-4635 或 TTY/TEXTNET (866) 704-2318。 请在会议开始前至少48 小时提出请求,以便我们做出安排。

#### **AGENDA**

- 1. Roll Call
- 2. Approval of November 6, 2019 Meeting Minutes
- 3. Communications
- 4. Public Comment (for items *not* on MPO Agenda)
- 5. Resolution TPB No. 160 Approving Amendment #1 to the Regional Transportation Plan 2050 for the Madison Metropolitan Area to Add Beltline DPRTSU Project
- 6. Resolution TPB No. 161 Approving Amendment #1 to the 2020-2024 Transportation Improvement Program for the Madison Metropolitan Area & Dane County
  - Beltline (Whitney Way to I-39/90), Resurfacing, Drainage Upgrades, Reconstruction of Median Barrier Wall [Modify scope and cost/funding, adding ITS infrastructure and software to implement dynamic part-time shoulder use, Const. in 2021].
- 7. Review of Round Two Section 5310 Program (Enhanced Services for Seniors and Individuals with Disabilities) Grant Project Applications for 2020 and Preliminary Approval of Draft Recommendations for Project Funding
- 8. Review and Approval of Proposed Revisions to Policies and Scoring Criteria for STBG Urban Transportation Alternatives Set Aside Program Projects
- 9. Update on East-West Bus Rapid Transit Planning Study and Downtown Routing Options Being Considered
- 10. Brief Update on Rebranding Project for MATPB and the Rideshare Etc. Program

- 11. Status Report on Capital Area RPC Activities
- 12. Announcements and Schedule of Future Meetings
- 13. Adjournment

Next MPO Board Meeting:

Wednesday, January 8, 2020 at 6:30 p.m. Madison Water Utility, 119 E. Olin Avenue, Room A-B

#### Madison Area Transportation Planning Board (an MPO) November 6, 2019 Meeting Minutes

Madison Water Utility, 119 E. Olin Ave, Conference Rooms A-B

\_\_\_\_\_\_

Chair Opitz called the meeting to order at 6:32 PM.

#### 1. Roll Call

*Members present:* Sambah Baldeh, Margaret Bergamini, Paul Esser, Steve Flottmeyer, Grant Foster (left during item #8), Patrick Heck, Tom Lynch, Jerry Mandli (arrived during item #5), Ed Minihan, Mark Opitz, Bruce Stravinski, Mike Tierney, Doug Wood

Members absent: Kelly Danner

MPO staff present: Bill Schaefer, David Kanning

Others present in an official capacity:

Brandon Lamers and Michael Hoelker (WisDOT SW Region)

#### 2. Approval of October 2nd, 2019 Meeting Minutes

Minihan moved, Wood seconded, to approve the October 2, 2019 meeting minutes. Motion carried.

#### 3. Communications

- Letter from Village of McFarland to WisDOT regarding concerns about the design of the USH 51 project.
- Letter from WisDOT approving the MATPB work program amendment to allow carryover funding from 2019 into next year's budget.
- Email correspondence from the public related to item No. 5, which was reviewed as part of that item.

#### 4. Public Comment (for items not on MPO Agenda)

None

#### 5. Public Hearing on Amendment to the Regional Transportation Plan (RTP) 2050 and 2020-2024 Transportation Improvement Program (TIP) for the Madison Metropolitan Area & Dane County to Add Beltline Dynamic Part-Time Shoulder Use (DPTSU) Project

Opitz opened the public hearing. Three members of the public registered to speak. Alexander Harding, City of Madison resident, asked WisDOT to consider managing the proposed DPTSU lanes as HOV lanes, rather than general occupancy lanes. He said that adding HOV lanes would create an incentive for ridesharing. The HOV designation could be removed if the lanes were not used. Tom Wilson, City of Madison resident, spoke next. He disclosed that he is a member of the City of Madison's Transportation Policy & Planning Board, but that his comments were his own. Wilson expressed support for the drainage, barrier wall, and resurfacing components of the Beltline Highway project, as currently listed in the Transportation Improvement Program (TIP), but opposed the proposed amendment to include the DPTSU component. He said that DPTSU would increase vehicle miles traveled (VMT) through induced demand. He said creating a transportation system that forces people to drive is inherently inequitable. Harold Kliems spoke next. He disclosed that he is a member of the City of Madison's Transportation Commission, but that his comments were his own. Kliems said that he opposed the DPTSU project because it will increase VMT, emissions, and add pressure to local streets. He added that increasing vehicle capacity would negatively impact planned transit improvements projects. Opitz closed the public hearing.

## 6. Resolution TPB No. 160 Approving Amendment #1 to the Regional Transportation Plan 2050 for the Madison Metropolitan Area to Add Beltline DPTSU Project

Stravinski asked if action on this item must be deferred until the next meeting because of the public concerns expressed. Opitz said that the board could take action tonight or postpone this item until the next meeting. Bergamini asked Schaefer to explain the difference between items 6 and 7. Schaefer said that the resolution for item #6 amends the Regional Transportation Plan (RTP) 2050 to specifically add the DPTSU project, while the resolution for item #7 modifies the existing Beltline Highway project listing in the TIP to add the DPTSU component. The DPTSU project must be listed in the RTP in order to add it to the TIP. Wood clarified that the action at the last meeting was to release the proposed RTP and TIP amendments for public review and comment. Schaefer added that the board also approved the 2020-2024 TIP without the DPTSU project at that meeting.

Opitz said that he was intrigued by Harding's comment regarding how the proposed project could affect the future feasibility of adding HOV lanes on the Beltline. To what extent has WisDOT studied or considered this concept? Michael Hoelker, WisDOT SW Region, said that there would be nothing to preclude converting the part-time shoulder lanes to HOV lanes in the future. He said that if demand for the HOV lanes increased where they would operate closer to capacity, then the lanes could be converted. In this scenario, the shoulder lanes would not be taken away. Rather, their use would be altered.

Foster suggested postponing the decision on this item so the board had an opportunity to ask questions and obtain follow-up information prior to making a decision. Stravinski requested that staff review the major points that were made from WisDOT's prior presentation on the project at the next board meeting and compare those points to the public comments – i.e., how the project would affect drive time, emissions, volumes on other arterial roads, and safety.

Schaefer said that most of the public comments were related to induced demand. He explained the different types of induced demand. One component is the idea that if driving is made more attractive (e.g., reduced travel time, etc.), people will make more trips. That is generally a very small percentage, especially for this kind of project. Some people might shift travel times or make non-work trips during peak periods, but again the impacts are likely to be small. Another component is traffic diversion as more vehicles would be attracted to the Beltline that are currently using alternate roads. This is not induced demand (i.e., increase in the number of vehicle trips). An additional component relates to the long-term impact of a project on people's decisions on where to live and what jobs to take, because the increased capacity would make it more convenient to travel longer distances. He said the project could have some marginal impact on people's locational decisions, but there were many other factors that determine where people choose to live. Some oppose any increase in roadway capacity simply because it makes it easier to drive. The board has not taken this position, since the board voted to award federal funding to two capacity expansion projects this application cycle.

Baldeh asked if a decision would be further postponed if there were still concerns expressed at the next meeting. Schaefer responded that the reason to delay action would be to request information that has not been presented or allow more time to discuss the item. Foster suggested that the board not get into a substantive discussion about the merits of the project at this meeting if the intent is to defer action. Foster requested information about induced demand and possible VMT impacts of the project. He also asked how this project relates to other recommendations from the Beltline study and why those aren't moving forward as well (e.g., ped/bike crossings of the Beltline). Finally, he asked how the project would impact development of regional transit. Heck requested information on the HOV lane option and whether the impacts of that had been studied. Wood also requested information on induced demand, including any objective studies.

Esser said that the timing of the shoulder running project is related to the drainage and repaving project – that is why we WisDOT is proposing it now. He added that there is a need for improvements to all types of transportation. It is reasonable to expect that over time it will be necessary to increase capacity on the

Beltline. There is an opportunity now for a capacity increase during peak use periods because of the other work that will be done. Tierney said that he lives close to the Beltline, and that he often sees significant congestion. He added that it would be beneficial to see where traffic is coming from and going to. Opitz said that WisDOT conducted an origin-destination (O-D) study a few years ago. Schaefer added that the MPO also has the ability to get O-D data now with its Streetlight Insight subscription. Tierney commented on the difficulty of using the auxiliary lanes, and suggested that perhaps more could be done with signs, markings, and barriers so vehicles make their exits and entries at appropriate points. This could help address congestion issues.

Foster asked for additional information on the operating and maintenance cost of the lanes, including snow removal and technology components. Bergamini asked if a final draft of the Beltline Study was ever released, and what alternatives were considered in the Beltline Study. Schaefer said that a final draft of the Beltline PEL study had not been released because it was suspended. Only an assessment of existing conditions was released. Opitz said that it would be interesting to see how the project would affect emergency vehicle access. Lamers said that WisDOT can provide information on occupancy of different sections of the Beltline.

Foster moved, Bergamini seconded, to postpone items 6 and 7 until the December Board meeting. Motion carried.

## 7. Resolution TPB No. 161 Approving Amendment No. 1 to the 2020-2024 Transportation Improvement Program for the Madison Metropolitan Area & Dane County

Item deferred.

## 8. Resolution TPB No. 162 Adopting Annual Federal Highway Safety Improvement Program Performance Measure Targets

Schaefer said that federal transportation legislation has established a transportation system performance management framework that requires state DOTs to track performance measures related to federal goals and set targets for them. DOTs must set targets, while MPOs can set their own targets or choose to support the state targets. Safety is one of the performance measure categories with five different measures established. In addition to setting targets, MPOs must analyze the TIP and long-range regional transportation plan when they are updated, indicating how the projects and policies in those documents will help achieve the targets. Schaefer noted that the analysis for the 2020-2024 TIP was included in the packet.

The performance measures targets for the safety and transit asset management (the following item) categories must be established annually. MATPB staff is once again recommending that the MPO support the state safety targets. The primary reason for this is that the MPO does not program projects with federal safety funding and unlike for the state there are no funding consequences at the MPO level if the targets are not met. The value in the exercise is not so much about the target, but monitoring how the region is doing while working with implementing agencies to make progress. If the MPO did set its own targets, staff would need to develop a way to calculate vehicle miles traveled (VMT) for the urban area, which would be challenging. Currently, the MPO tracks crashes and uses VMT to calculate crash rates at the county level.

Lynch said he was fine with supporting the state targets this year, but said that that most city of Madison alders wanted to take a more targeted and aggressive approach to reducing fatalities and Type A serious injuries. Lynch said consideration should be given to making safety a larger weight safety when considering projects in capital programs. Schaefer said that safety was a factor in the MPO's evaluation and scoring of STBG Urban projects, and increasing the weight will be considered for the next application cycle. Foster concurred with Lynch's comments and suggested that a timeframe be developed for considering having the MPO adopt more aspirational targets. Schaefer said that he would add this item to a future meeting agenda within a suitable timeframe that would allow staff to do that if the board desired. Bergamini said that there is city support for implementing a Vision Zero initiative, and she was interested in whether other communities have this goal. She suggested a regional approach to Vison Zero would be good. Lynch said that the county

indicators for safety were moving in the wrong direction. Schaefer said that a discussion was needed with WisDOT staff to re-evaluate how they score and rank safety projects. Lynch said that safety can be addressed in everyone's capital budgets. He added that the intersections of Millpond Road and CTH AB with USH 12 have the second highest critical injury rates in the city. There was a recent fatality at the Millpond Road/USH 12 intersection. The cost of a grade-separated interchange at that location is about \$35 million, but WisDOT may be willing to use a significant amount of HSIP funds to construct the project. Esser said that the MPO can set difference targets, but there needs to be a way to make improvements to meet those targets.

Esser moved, Baldeh seconded, to approve Resolution TPB No. 162 adopting Annual Federal Highway Safety Improvement Program Performance Measure Targets. Motion carried.

#### 9. Resolution TPB No. 163 Adopting Annual Transit Asset Management Performance Measure Targets

Schaefer said that transit asset management performance targets must be set every year. This relates to assets that Metro Transit owns, including buses, non-revenue vehicles, and major facilities (i.e., Metro's main maintenance facility). As part of the federal performance management requirements, transit agencies must prepare a transit asset management plan. Metro's plan was completed at the end of 2018. Metro Transit established initial measures in that plan. The first measure relates to buses. The target is to have no more than 11% of buses exceed their useful life (i.e., 14 years). Currently, 13% of Metro's fleet currently exceeds its useful life, but Metro expects to meet the 11% target by 2020 based upon their bus purchase schedule (15 buses per year). That could change if service expands with the planned satellite bus facility and revenue boost from vehicle registration fee, requiring a larger fleet. The goal for non-revenue service vehicles is 38%, and Metro has not reached that goal yet. There is a multi-year plan to renovate the Metro garage facility so that it meets the rating that FTA uses. Lynch said that there are five phases for improving the bus facility, but two of the phases could be delayed. Schaefer suggested that the board support Metro Transit's targets, which are based on financial constraints and other considerations.

Esser moved, Minihan seconded, to approve Resolution TPB No. 163 adopting Annual Transit Asset Management Performance Measure Targets.

#### 10. Presentation on Annual Transportation Performance Measures Report and Approval to Release

Schaefer provided an overview of MATPB's fourth annual Transportation Measures Report. The report tracks and publicizes trends in key metrics that indicate whether progress is being made in achieving national and regional transportation plan goals. Schaefer reviewed the data and trends for some of the measures in the report.

Lynch said that the City of Madison experienced 40 roadway fatalities between 2014 and 2018. He added that the city experiences about eight fatalities per year and about 100 critical injuries per year. The city has about one-half of the Dane County population, but about three-quarters of all fatalities in Dane County occurred outside the city. Suburban communities should be concerned about this. Lynch said that 2012 - 2014 was a high point for transit ridership throughout the nation. With the rebound from the recession, more people purchased vehicles, contributing to Metro Transit's ridership decrease since then. Metro's ridership decreased less than the national trend from a percentage standpoint. Schaefer said that national surveys show that vehicle ownership and lower fuel prices have contributed to lower transit ridership. Opitz asked what the modal share is for Uber and Lyft. Schaefer said that the data wasn't available, but he thought the mode share for Uber and Lyft, particularly for work trips, was very small. MATPB's household survey will have some data on that, but it is a small sample.

Bergamini asked if transit on-time figures include campus route 80. Schaefer said that the transit performance measures includes all regular routes, including route 80. Bergamini said that it would be helpful to see transit on-time performance for weekend and holiday service. She said that transfers are more challenging during those times, because service levels are low. Lynch did not think there would be as many late-service challenges during the weekends, except on football Saturdays. Opitz asked if the travel time reliability data is

in relation to posted travel speeds. Schaefer said that the index relates peak period speeds to speeds throughout the day. However, roads with higher posted speed limits will show greater differences in travel time reliability.

Wood moved, Minihan seconded, to authorize approval to release the draft Performance Measures Report. Motion carried.

#### 11. Resolution TPB No. 164 Approving the 2020 MATPB Work Program

Schaefer said that there are no proposed changes to the draft work program.

Minihan moved, Wood seconded, to approve Resolution TPB No. 164 approving the 2020 MATPB Work Program. Motion carried.

## 12. Resolution TPB No. 165 Authorizing the City of Madison to Enter into an Agreement with Dane County for MATPB to Provide Specialized Transportation Coordination Services to Dane County in 2020.

Schaefer said that this was the annual agreement MATPB enters into with the Dane County. MATPB's services include support for Dane County's Specialized Transportation Commission and assistance to Dane County's Human Services staff. It also covers the MPO's work related to the Section 5310 program management plan. The same agreement provides funds to Metro Transit to support their transit information and promotion efforts, since the city is the fiscal agent for the MPO.

Stravinski moved, Bergamini seconded, to approve TPB Resolution No. 165. Motion carried.

# 13. Resolution TPB No. 166 Authorizing the City of Madison to Enter into an Agreement with the Capital Area Regional Planning Commission (CARPC) for MATPB to Provide Transportation Planning Work Activities to CARPC and CARPC to Provide Demographic and Employment Forecasts to MATPB in 2020

Schaefer said that this is an annual agreement that covers the services that MATPB provides to CARPC using pass-thruough funds from WisDOT. Our main work is preparing transportation analyses of Urban Service Area amendment applications. For next year, MATPB is contracting with CARPC for demographic and employment forecasts for our regional transportation plan update.

Esser moved, Heck seconded, to approved TPB Resolution No. 166. Motion carried.

#### 14. Status Report on Capital Area RPC Activities

Stravinski said that CARPC met at the City of Fitchburg Community Center, where city staff gave a presentation on their comprehensive plan. CARPC also discussed staff's new office location and issues pertaining to safety. Schaefer said that a neighborhood police officer would be meeting with staff.

#### 15. Announcements and Schedule of Future Meetings

Schaefer said that staff moved into their new office. The deadline for the second round of Section 5310 applications is next week. Changes to the scoring criteria for the Transportation Alternatives program will be presented at the next board meeting. Applications are due early next year, and about \$1.2 million in funds are expected to be available. Baldeh suggested that items where little or no discussion is expected be placed on a consent agenda. Schaefer said that could done, but that this meeting had an unusually high number of resolutions due to the annual agreements.

#### 16. Adjournment

Baldeh moved, Wood seconded, to adjourn. Motion carried. The meeting adjourned at 7:58 PM.

#### MATPB (MPO) Agenda Cover Sheet December 4, 2019

#### Re:

Resolution TPB No. 160 Approving Amendment #1 to the Regional Transportation Plan 2050 for the Madison Metropolitan Area to Add Beltline DPTSU Project

#### **Staff Comments on Item:**

The currently adopted Regional Transportation Plan 2050 includes a specific recommendation to implement interim transportation system management (TSM) and safety improvements to the Beltline while potential longer-term solutions are being studied. However, the plan does not include a project in the Project Recommendations table (Appendix A) to implement dynamic hard shoulder running on the Beltline. The project needs to be added to the table in the plan since it is a regionally significant project that adds capacity to the Beltline during weekday peak periods and other times when the roadway is congested with low speeds. The project is consistent with the plan goals of improving safety, enhancing the regional economy, and establishing financial viability of the transportation system, and with multiple policies supporting these goals. The financial constraint requirement of the plan is still maintained with the addition of the project as the total cost of listed state highway projects in the 2021-2035 time period would still be well under the estimated revenue available for the period.

The MPO Board deferred action on the resolution at the last meeting in response to some comments received opposing the project due to concerns about induced demand and the plan to at least initially allow use of the shoulder by single occupant vehicles. MPO staff has worked with WisDOT SW Region staff to prepare some information for the board addressing these concerns, drawing in large part from analysis conducted as part of the Beltline Study. See attached memo with attachments.

MPO staff reviewed the project and discussed these issues with the MPO's Technical and Citizen Advisory Committees at their meetings on November 20, and both committees voted to recommend the plan and TIP amendment for the project.

#### **Materials Presented on Item:**

- 1. Resolution TPB No. 160 Approving Amendment to the Regional Transportation Plan (RTP)
- 2. Staff Memo to MPO Board Regarding Issues Raised Concerning the Project

#### **Staff Recommendation/Rationale:**

Staff recommends approval. DPTSU is a cost effective strategy for improving traffic operations and overall safety on the Beltline. The project will benefit downtown/isthmus arterial streets by drawing traffic from them, including the main BRT route. WisDOT has or is in the process of addressing all issues related to the management of use of the shoulder in a safe manner. Staff believes the project will have only perhaps a very small incremental impact on housing location choices by area residents. The current and near-term future demand for use for high occupant vehicles does not justify that restriction on use at this time.

#### **Resolution TPB No. 160**

#### Approving Amendment #1 to the Regional Transportation Plan 2050 for the Madison Metropolitan Area

**WHEREAS**, the Madison Area Transportation Planning Board (MATPB) is the designated Metropolitan Planning Organization (MPO) for the Madison, Wisconsin Metropolitan Area with responsibilities to perform regional transportation planning and programming, in cooperation with the Wisconsin Department of Transportation and Metro Transit, the major transit operator; and

**WHEREAS**, one of the primary responsibilities of the MATPB is to prepare and approve a long-range regional transportation plan in accordance with the Fixing America's Surface Transportation (FAST) Act (23 U.S.C. 104, 134) and implementing U.S. Department of Transportation (DOT) regulations (23 C.F.R. 450); and

WHEREAS, the regional transportation plan is a multi-modal transportation systems plan that defines the goals for the region and specifies the policies, projects, and strategies to help achieve these goals, and also ties the goals to performance measures to be used to track the region's progress in meeting plan goals over time; and

**WHEREAS**, on April 5, 2017 MATPB approved Resolution TPB No. 126 adopting the *Regional Transportation (RTP)2050 for the Madison Metropolitan Area*, which updated the previous RTP 2035 Update, extending the plan horizon to Year 2050 and revising the growth and travel forecasts; and

**WHEREAS**, in preparing RTP 2050 MATPB followed federal guidance as set out in the Metropolitan Transportation Planning rule, 23 C.F.R. 450, including consideration of the federal planning factors, identification of performance measures, and preparation of financial, environmental, and environmental justice analyses of the plan and also utilized an extensive public involvement process; and

**WHEREAS**, the regional transportation plan is intended to guide implementing agencies in development of projects and implementation of other recommendations and supporting actions to guide improvements for all modes of transportation; and

WHEREAS, since adoption of RTP 2050 MATPB has coordinated with WisDOT and Metro Transit to identify federal performance measure targets as these measures have been finalized and worked to implement other performance-based planning and programming requirements, and MATPB has annually prepared a performance measures report indicating progress achieved in reaching the federal measure targets and improving performance on other regional measures selected by MATPB to gauge success in achieving the goals of the regional transportation plan; and

WHEREAS, the Wisconsin Department of Transportation (WisDOT), after extensive research and analysis and outreach with stakeholders and the general public, wishes to proceed at this time with a project to implement dynamic part-time shoulder use (DPTSU) on the Beltline between Whitney Way and Interstate 39/90 in conjunction with work to resurface the roadway, improve the drainage system, and reconstruct the median barrier wall; and

**WHEREAS**, the Beltline DPTSU project is consistent with the goals and policies of RTP 2050, which recommends implementation of transportation system management (TSM) and safety improvements to the Beltline while potential longer-term solutions are being studied, but the long-range transportation plan must be amended to include the project in the plan; and

**WHEREAS**, hard shoulder running has been implemented in 17 other states, DPTSU is considered a best practice for performance based practical design by the Federal Highway Administration, and the Beltline DPTSU project would safely and cost effectively reduce traffic congestion and improve travel reliability on the Beltline during weekday peak periods and during special events and incidents when needed; and

**WHEREAS**, MATPB has provided local officials, citizens, affected public agencies, and other interested parties with reasonable notice and opportunity to comment on the proposed amendment to the long-range regional transportation plan, including holding a public hearing in accordance with MATPB's public participation plan; and

**WHEREAS**, the plan amendment and associated Transportation Improvement Program amendment has been made available for public review, including in an accessible format on the MATPB website;

**NOW THEREFORE BE IT RESOLVED**, MATPB approves Amendment #1 to the *Regional Transportation Plan (RTP) 2050 for the Madison Metropolitan Area* to add the following project to Section 4 – Planned Arterial System Preservation, TSM, and Safety Projects of Figure A-1 "Arterial Street/Roadway Improvements: 2017-2050" in Appendix A: Project and Policy Recommendations:

W. Beltline (USH 12/14/18/151), Whitney Way to Interstate 39/90 (10.4 mi.), Roadway resurfacing, drainage system upgrades, reconstruction of the median barrier wall, and new ITS infrastructure and software to implement dynamic part-time shoulder use with total cost of \$65.28 million;

**BE IT FURTHER RESOLVED** that MATPB certifies the amended plan meets the financial constraint requirements for long-range regional transportation plans since even with the addition of the \$65 million Beltline hard shoulder running project the total cost of all planned state highway projects in the 2021-2035 timeframe in Figure A-1 would still be well below the total estimated revenue for state highway construction for that period (\$1.269 billion) in Figure 6-6 of the financial capacity analysis in chapter 6 of the plan; and

**BE IT FURTHER RESOLVED** that MATPB certifies that the federal metropolitan transportation planning process is addressing major issues facing the metropolitan area and is being conducted in accordance with all applicable federal requirements, including:

- 1. 23 U.S.C. 134 and 49 U.S.C. 5303, and this subpart;
- 2. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 C.F.R. Part 21;
- 3. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- 4. Sections 1101(b) of the FAST Act (Pub. L. 114-357) and 49 C.F.R. Part 26 regarding the involvement of disadvantaged business enterprises in U.S. DOT funded projects;
- 5. 23 C.F.R. Part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

- 6. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 C.F.R. Parts 27, 37, and 38;
- 7. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- 8. 23 U.S.C. 324 regarding the prohibition of discrimination based on gender; and
- 9. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 C.F.R. 27 regarding discrimination against individuals with disabilities.

Date Adopted	Mark Opitz, Chair
_	Madison Area Transportation Planning Board

#### **Transportation Planning Board**

A Metropolitan Planning Organization (MPO)

Memo to: MPO Policy Board

From: MPO Staff

Re: Issues Raised Regarding and Information Requested Regarding the Beltline Hard Shoulder

Running Project

Date: November 27, 2019

Comments by those opposed to the Beltline hard shoulder running project largely focused on two main issues:

- (1) Adding traffic capacity to the Beltline during peak use periods will cause "induced demand," negating some of the benefits of the project and resulting in more vehicle miles of travel (VMT) in the long run than would have otherwise occurred.
- (2) If the shoulders are opened to vehicle travel when the Beltline is most congested, only high occupant vehicles (HOVs) (i.e., 2+ persons or at least one passenger) should be permitted to use the shoulders in order to provide an incentive for transit and carpooling.

Some board members asked for information on the origin/destination patterns of those using the Beltline. There was also a question about how the project related to Bus Rapid Transit (BRT) and other potential future transit improvements. In other words, would the project hinder the success of these improvements by drawing people away from transit into their cars.

This memo is an attempt to provide some information and staff thoughts on these issues to facilitate discussion on the project at the December meeting.

#### 1. Induced Demand

Induced or generated traffic refers to the fact that traffic tends to maintain an equilibrium where volumes increase until congestion delays discourage additional trips during the most congested periods. If the capacity of a congested roadway is increased, it tends to draw more traffic until congestion again limits or constrains future growth.

In the short term, the generated traffic consists primarily of diverted traffic from people shifting their route to the roadway with more capacity (assuming it was previously congested), shifting the time of their trip to the peak use period, and/or choosing a different destination than previously (for certain types of trips). In the long term, there can be induced vehicle travel from people shifting to single occupant vehicle travel, making new vehicle trips, and/or making longer trips due to locational decisions and associated changes in regional land use patterns. Most people agree this phenomenon exists—particularly generated traffic from traffic diversion—but there is disagreement about the extent of the effects, which depend upon many factors, including (1) the details of the capacity expansion project; (2) the level of traffic congestion on the roadway and in the metro area; (3) local economic, demographic, and real estate market conditions; and (4) available transportation alternatives for trips being served by the expanded roadway.

A good example of a major highway expansion project that did not result in significant induced traffic is U.S. Highway 12 between Madison and Sauk City. While we do not have the before/after traffic and area growth numbers, most would agree the project has not resulted in major "sprawl" development and traffic on the roadway has not increased at a high annual rate. The relatively slow growth that the villages of Oregon and Brooklyn have

historically experienced, despite short auto travel times to the Madison area via U.S. Highway 14, is another example that auto accessibility is only one of many factors that influence the rates of growth of communities. In the case of the Beltline hard shoulder running project, the diverted traffic that will no doubt occur has been modeled and the impacts estimated. Broadway, East and West Washington Avenue, University Avenue, and Johnson/Gorham Avenues are streets that would see traffic reductions in the short-term and less growth long-term with the project due to the Beltline becoming more attractive during peak periods. That is a benefit to the people living, working, and traveling in these corridors and for BRT, which will use some of these streets. More people will also likely choose to travel the Beltline during the busiest part of the peak period until traffic congestion gets worse again in 10-15 years as growth occurs at which time the spreading out of the peak period will start again. This will allow more people to travel to work or other destinations when they want to, which one can argue is a good thing.

In regards to induced traffic from people switching modes, making longer or new trips, or long-term changes in development patterns, MPO staff believes the impacts of the hard shoulder running project will not be very significant for several reasons. First, the trips that the Beltline is serving because of its circumferential vs. radial orientation are not conducive to public transit. There are only two transit routes that currently use part of the section of the Beltline where hard shoulder running would operate. Travel modeling done for the Beltline study analyzed the potential ridership of an east-west route operating in the general Beltline corridor (see map below) and the ridership was relatively low. The route was projected to have ridership of 2,000 in 2010 base year (4,900 in 2050) despite connections to west and south transfer points and several major employment areas. In contrast, the east-west BRT was projected at that time to have ridership of 20,000 (though BRT study numbers are lower). There are few bicycle trips in the corridor because of the lack of alternative routes, distances, and roadway's location. Therefore, mode shifting is not an issue. Some people may choose a more distant destination, but this would only apply to a limited number of non-work trips.

### Express buses routed on the Beltline





Finally, the travel time savings from the project are not significant enough to be a determining factor in most people's resident and work location choices given all the other factors that play into those decisions. These include: housing cost; schools; neighborhood/community preference; desired amenities; and spouse work location. The travel time savings from the project for each individual person is limited by the fact that around 55% of cars on the Beltline exit in four interchanges or less. This is because of the way the Beltline is used to connect to radial routes in and out of the central Madison area.

There is no good way to accurately estimate the amount of induced travel (as opposed to diverted traffic) from a capacity expansion project. Eric Sundquist, Director of the State Smart Transportation Initiative, in his comments to the board on the project emailed before the last meeting cites a "VMT calculator" created by professors at UC-Davis to estimate VMT impacts of capacity projects. Aside from questions about the validity of a tool that simply uses length of a project and size of an area to estimate VMT impacts, the stated caveats mention that the calculator should only be used for lane additions and not conversion of a shoulder for part-time use and should only be used for California communities. The authors also note that "knowledge of local conditions can help contextualize the estimates." For those interested in reading more on the topic, the following is a pretty good paper on the subject though staff don't necessarily agree with everything in it: <a href="https://www.vtpi.org/gentraf.pdf">https://www.vtpi.org/gentraf.pdf</a>. For example, the author says the mobility benefits of generated traffic are relatively small since they consist of marginal value trips.

In conclusion, staff believes that while the hard shoulder running project will result in diverted traffic and may result in some induced travel it is simply not the scale, type, or location of a project that is going to have significant long-term impacts on regional development patterns like, for example, a new outer Beltline project.

#### 2. Argument That Shoulder Should Be Used for HOVs Only

The restriction of the shoulder to use by high occupant vehicles (HOVs) would not provide many people with an incentive for taking transit because there are only two buses that use a short section of the Beltline. The most significant one is Route 18, which operates between the South and West Transfer Points every 30 minutes. Even if service was added, there simply isn't a significant market for transit service for crosstown trips that would be using the Beltline. As noted, travel modeling done for the Beltline study demonstrated the limited ridership for even a limited stop, express type route in the general Beltline corridor.

The HOV restriction would provide some incentive for carpooling, but it is difficult to believe it would be enough to persuade many people given the many obstacles to carpooling (e.g., need for persons with nearby residence/work location, need for rigid schedule, etc.). As noted, the time savings for individual persons are limited by fact many are not on the Beltline for a long distance. Other incentives such as a parking cash out policy at work would be much more effective.

WisDOT collected vehicle occupancy data during the weekday peak periods for the Beltline Study. Occupancies varied somewhat, but on average about 13.5% of the vehicles on the Beltline during the PM peak period had more than one occupant. WisDOT calculated the percentage of forecast eastbound PM traffic that would be using the shoulder if 100% of the HOVs used it compared to the estimated capacity of the shoulder lane (either 1,300 or 1,500 vph). Assuming the 1,500 vph capacity, the traffic would be using only 60% or so of the capacity of the shoulder even in this unrealistic scenario. See table below. In reality, given that the majority of motorists exit within four interchanges many HOVs would not use the shoulder as it would require weaving across three lanes of congested traffic twice within a short distance. A more realistic estimate is that perhaps 35-40% of HOVs would use the shoulder, raising questions regarding the cost effectiveness of the project in this case from a congestion management standpoint.

With expansion of regional transit and more park-and-ride (PNRs) facilities strategically located to pull people out of their cars before getting on the Beltline there may be sufficient demand for buses and carpools to justify managing the use of the shoulder for HOVs only. However, this will take many years. If the transit service and PNR facilities are implemented, the management of the shoulder can be reconsidered at that time. By then, the additional capacity may be utilized, which would provide a justification for the change at that time if HOV demand warranted it.

Beltline DPTSU Lane Usage Estimate with High Occupancy Vehicles (HOV)

November 15, 2019 (Draft)

2032 PM Eastbound	DPTSU Lane Open to All Automobile Traffic			DPTSU Lane Open to HOV Only			
Location	# Lanes with DPTSU in Operation	2032 K250 Target Volume (across all lanes, vph)	% of Traffic in DPTSU Lane (1,300 vph assumed)	% of Traffic in DPTSU Lane (1,500 vph assumed)	HOV Volume in DPTSU Lane (13.5% of Overall Traffic, vph)*	Difference vs. 1,300 vph DPTSU lane (vph)	Difference vs. 1,500 vph DPTSU lane (vph)
Whitney Way to Verona Rd	4 (3 + aux)	5,745	23%	26%	776	-524	-724
Verona Rd to Seminole Hwy	4	6,750	19%	22%	911	-389	-589
Seminole Hwy to Todd Dr	5 (4 + aux)	7,259	18%	21%	980	-320	-520
Todd Dr to Fish Hatchery Rd	5 (4 + aux)	7,117	18%	21%	961	-339	-539
Fish Hatchery Rd to Park St	5 (4 + aux)	7,326	18%	20%	989	-311	-511
Park St to Rimrock Rd	5 (4 + aux)	6,602	20%	23%	891	-409	-609
Rimrock Rd to John Nolen Dr	5 (4 + aux)	6,619	20%	23%	894	-406	-606
John Nolen Dr to West Broadway	5 (4 + aux)	7,535	17%	20%	1,017	-283	-483
West Broadway to Monona Dr	4	6,920	19%	22%	934	-366	-566
Monona Dr to Stoughton Rd	5 (4 + aux)	6,948	19%	22%	938	-362	-562
Stoughton Rd to I-39/90	4	5,524	24%	27%	746	-554	-754

<sup>\*</sup>The 13.5% HOV value is based on the average PM Peak occupancy value (across 6 locations the range equals 10 to 17%) from a 2015 Vehicle Occupancy Report. These estimates of HOV traffic volume using the DPTSU lane could be considered high due to the nature of traffic on the Beltline, where approximately half of trips travel 4 interchanges or less. This table assumes <u>all</u> eastbound HOV traffic would use the DPTSU lane at the locations shown (and not the General Purpose or aux lanes).

#### 3. Origin/Destination (O/D) of Trips Using Beltline

WisDOT collected O/D data from Bluetooth devices for its Beltline Study. The attached Powerpoint presentation slide maps show the AM and PM peak hour traffic patterns – both general and specific distribution for trips accessing the Beltline from different roadways (Verona Road, USH 14 South in AM, John Nolen Drive and Park Street in PM peak). The maps show the very dispersed pattern of trips with traffic using the Beltline for generally shorter distances and then exiting to access other arterials. The PM traffic pattern maps for SB Park Street and John Nolen Drive are good examples as (a) they show the small percentage of traffic that stays on the Beltline through multiple interchanges; and (b) these downtown/campus origin trips are those with the highest potential for transit and carpooling. Given the limited number of these trips using the Beltline for multiple interchanges, an HOV restriction on the shoulder would not be effective in drawing more trips to these modes.

The ramp volumes for both the AM Westbound and PM Eastbound trips are by far the highest for the Interstate, indicating the long distances that many travel before accessing the Beltline. See also attached maps showing O/D data for trips during the AM peak period, which highlight the interregional through traffic on the Beltline. This would include freight traffic through the Madison area, which would benefit from the shoulder running project through reduced traffic in the regular lanes. According to WisDOT counts from spring 2018 at three Beltline locations, an average of 5-13% of the traffic during peak weekday periods was large trucks with as high as 18-21% in the westbound direction during the peaks.

#### 4. Relationship to BRT and Improved Transit Service

The Beltline shoulder running project should not negatively affect ridership on the east-west BRT project or any future transit service improvements such as in the S. Park Street corridor because transit service and the Beltline serve mostly different travel markets. Transit demand is primary for radial trips – mainly to the downtown/UW campus area and to a lesser extent radial travel in the reverse commute direction. For cross-town trips that the Beltline is mostly serving (e.g., south side to west side or southwest side to southeast side), there is not a significant transit market, though some type of service for low-income, more transit dependent persons would be desirable. Therefore, the project would not work at cross purposes with these improvements.

#### 5. Improvements in the Beltline Corridor for Transit and Bicyclists

Concern was expressed that the shoulder running project is being advanced without any corresponding improvements for transit and bicyclists. Improvements for those modes primarily consist of additional and improved crossings of the Beltline. These improvements are being studied and prioritized as part of the Beltline Study. See attached slides from Beltline study presentation on transit scenarios evaluated and the planned strategy packages that were being developed before the study was temporarily suspended.

The MPO should certainly advocate for the most cost effective of these multi-modal improvements in the future. However, that doesn't mean the shoulder running project shouldn't move forward. The project is simply being piggybacked onto the Beltline maintenance project that has been planned and programmed for 2021. That project provides an opportunity for the hard shoulder running project that won't be available in the future. It is most cost effective to implement hard shoulder running with this maintenance project.

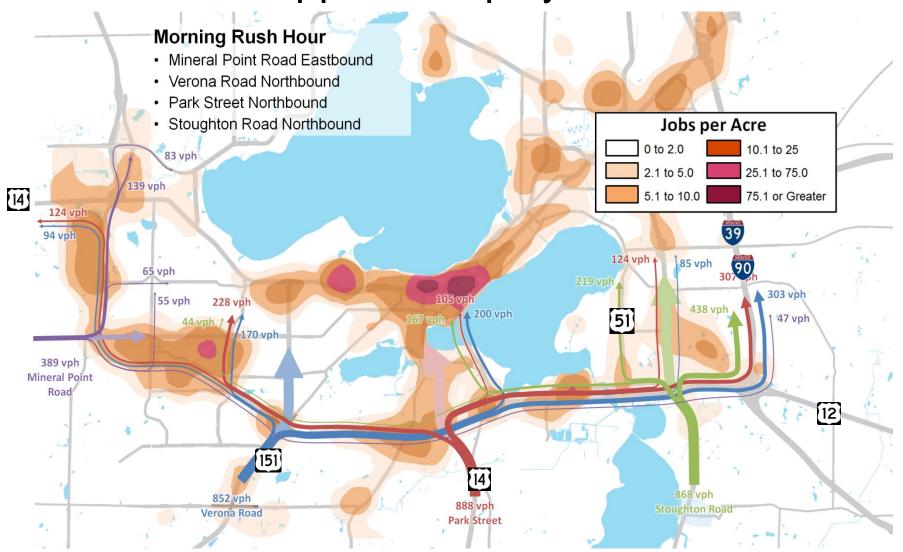
#### 6. Equity

There are a number of "environmental justice" (EJ) areas (concentrations of minority, low-income populations that also face other barriers to access to opportunity) along the Beltline corridor and many use the Beltline for work, shopping, and other trips. Their work locations tend to be in peripheral areas vs. the central Madison area. MPO staff plan to gather more data on travel patterns of people in these areas for future equity analysis, but the project would certainly benefit EJ populations living on the southwest and south sides. While we need to improve transit service for these areas, especially for those without a car, transit is simply not a viable option for many of the trips these people need to make. The shoulder running project will benefit them.





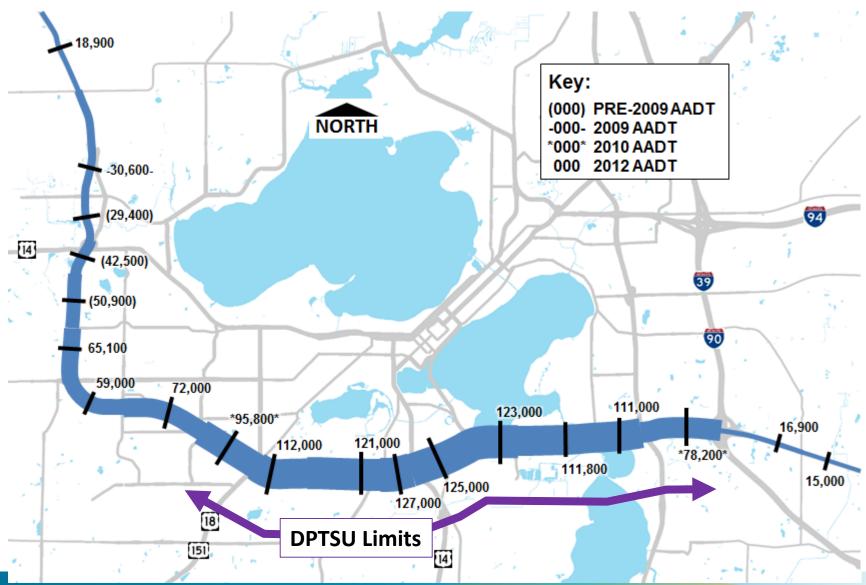
## Beltline supports employment centers







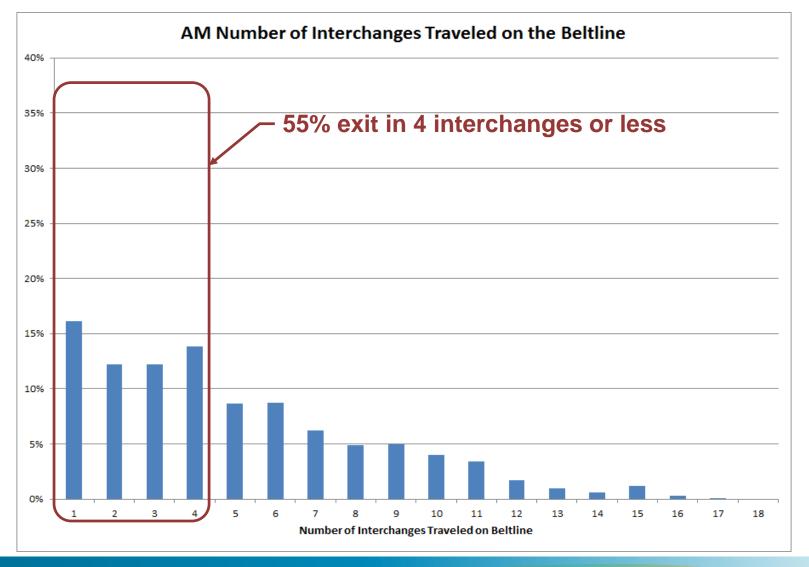
## **Beltline Traffic Distribution**





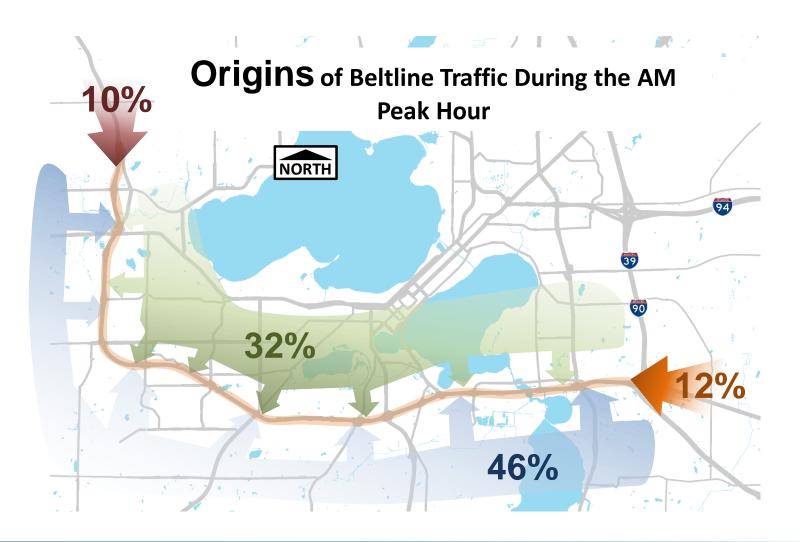


## Beltline Traffic is mix of Shorter and Longer Trips



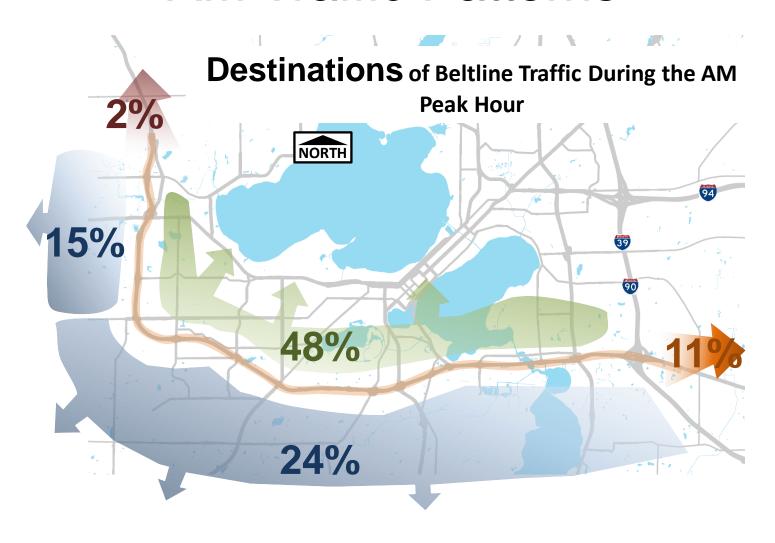








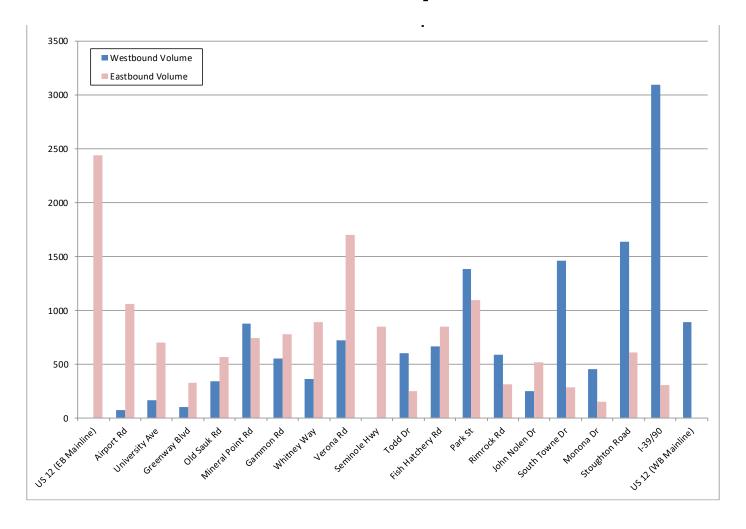






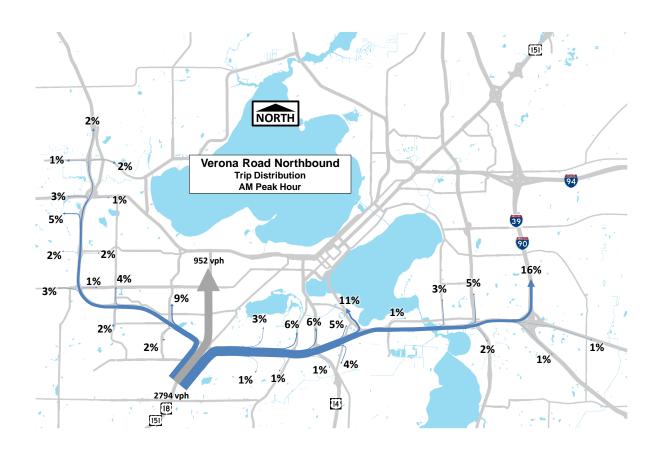


## AM Peak Ramp Volumes



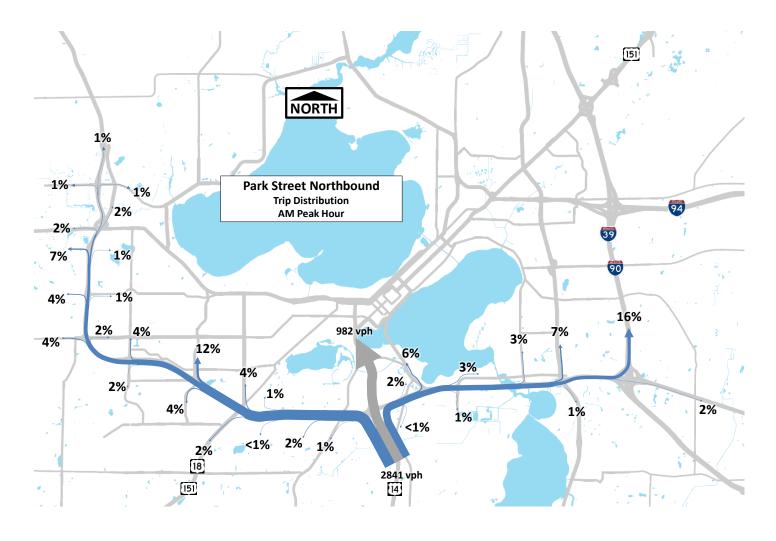






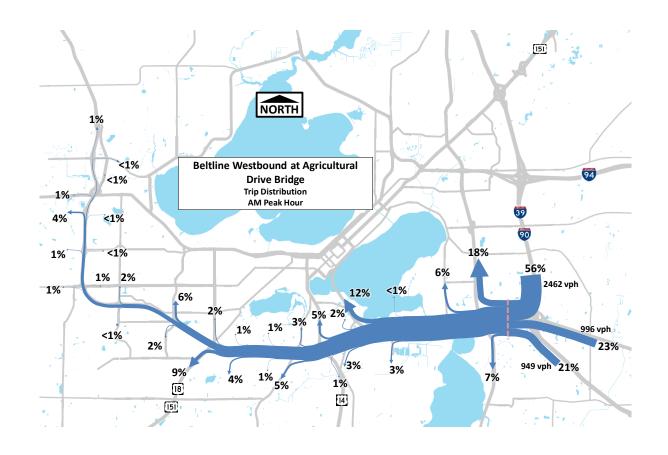






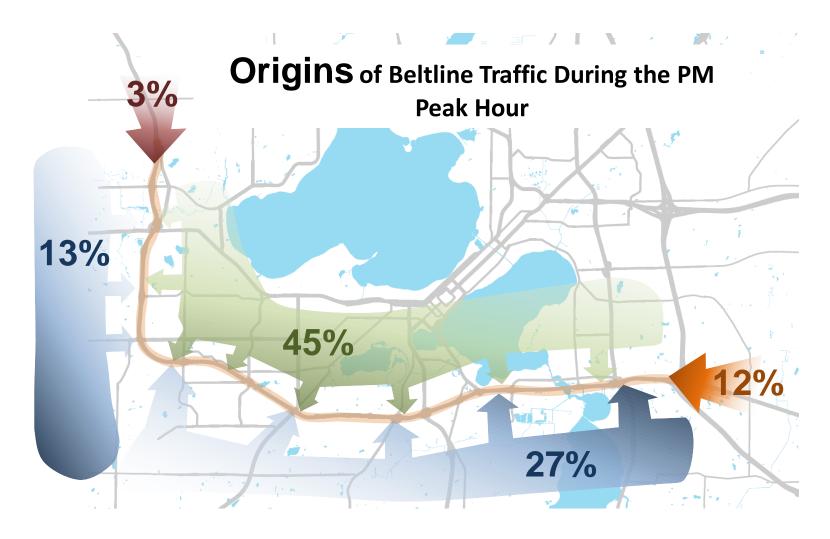






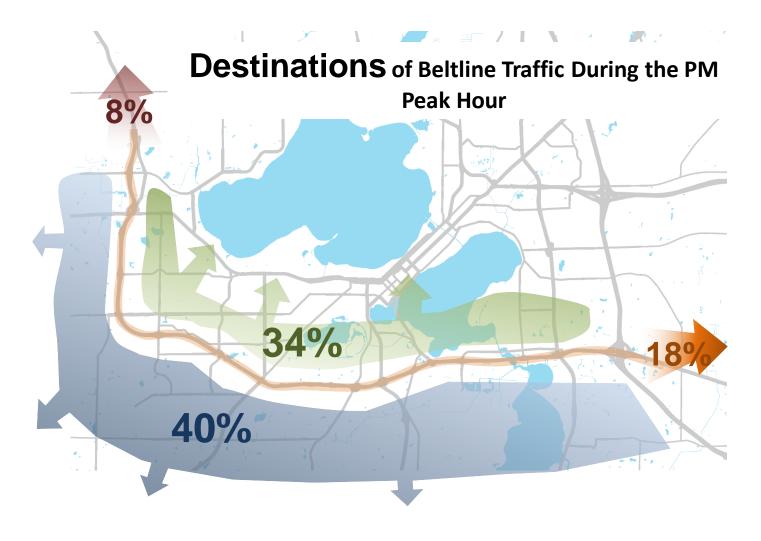








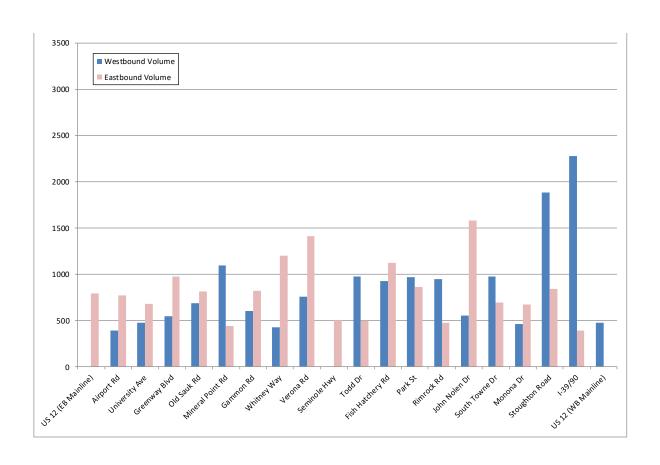






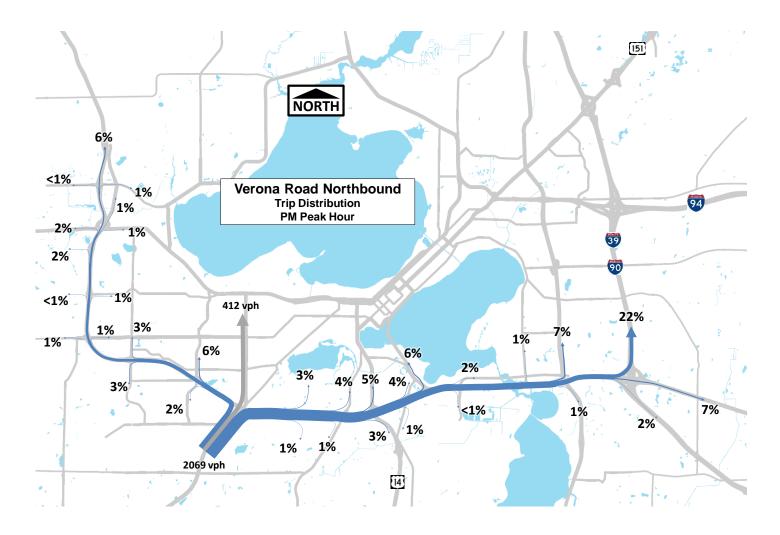


## PM Peak Ramp Volumes



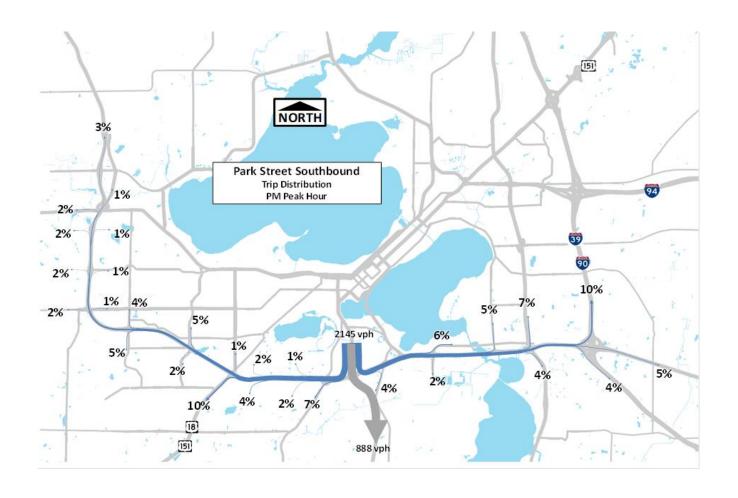






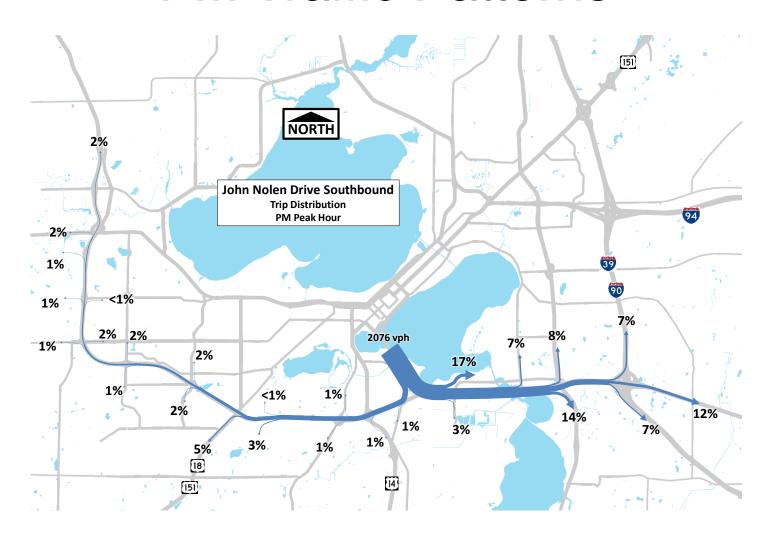






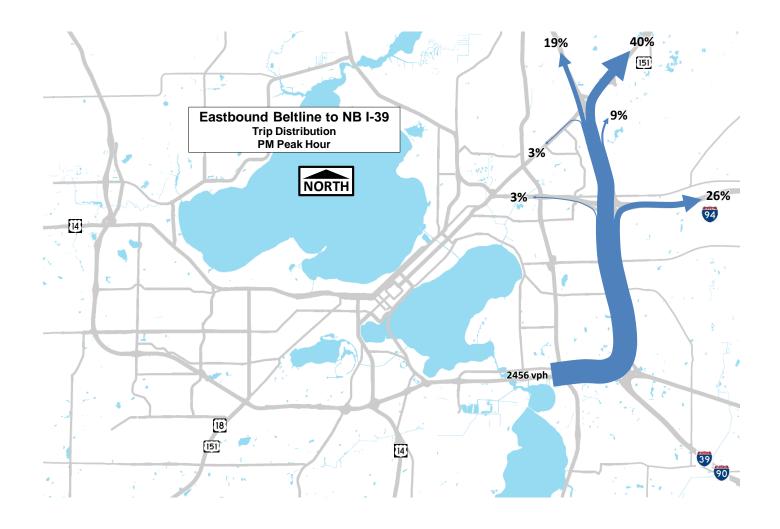










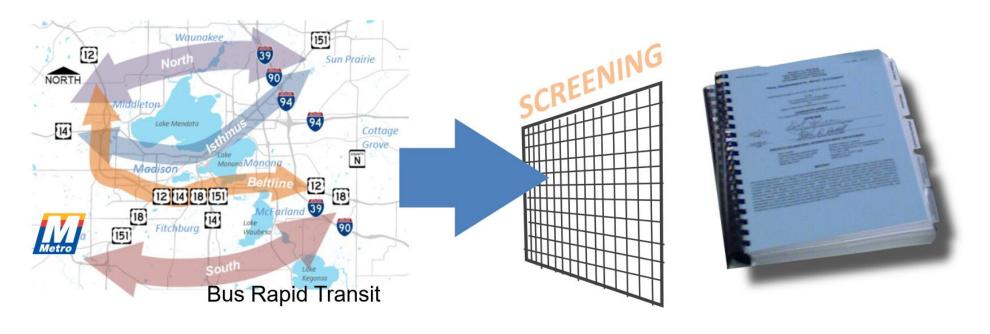


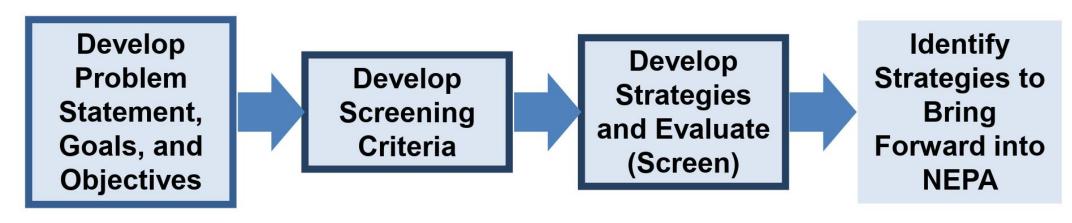
# Beltline Planning and Environmental Linkages (PEL) Study Slides:

Transit Alternatives and Development Scenarios



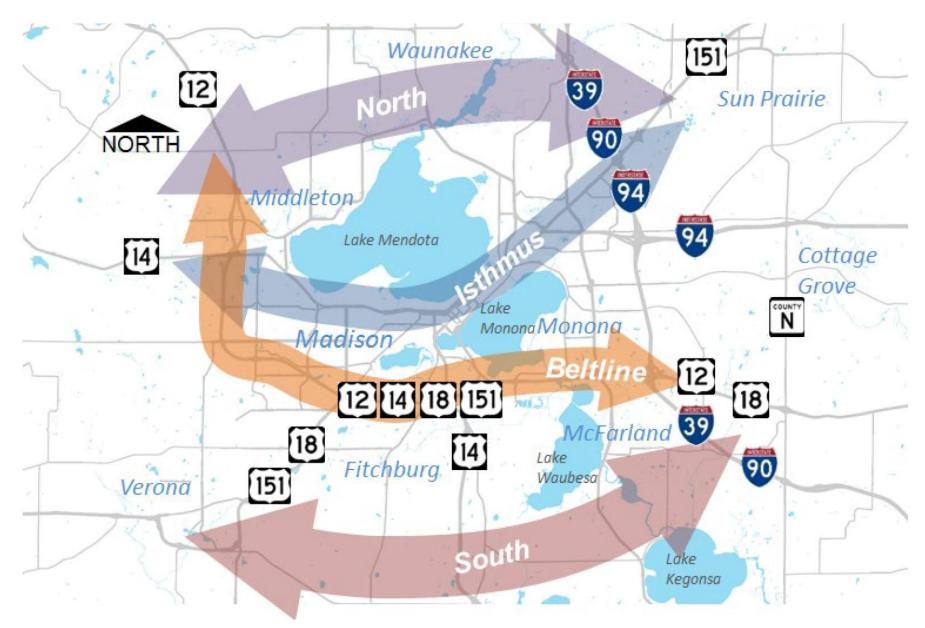
## **PEL Process**







# Many strategies and corridors investigated

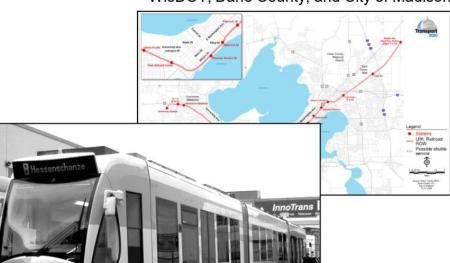




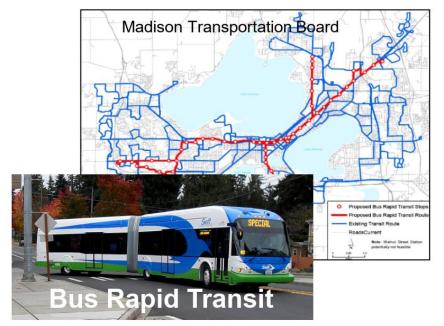
# Many strategies and corridors investigated

Increasing the use of transit and non-motorized modes will be an important part of any strategy. High capacity transit will also be investigated

WisDOT, Dane County, and City of Madison



Transport 2020

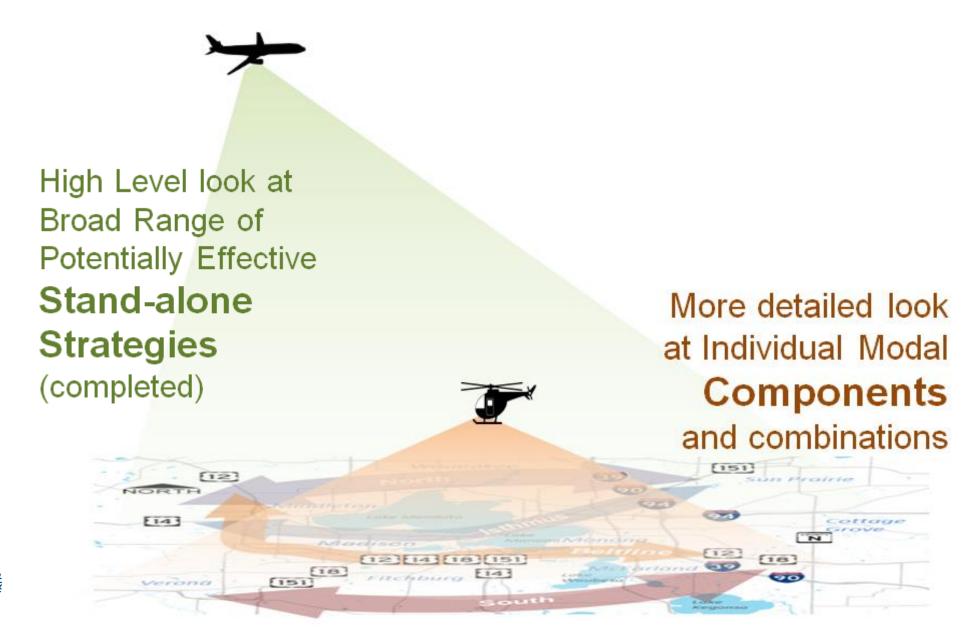




http://www.transport2020.net/

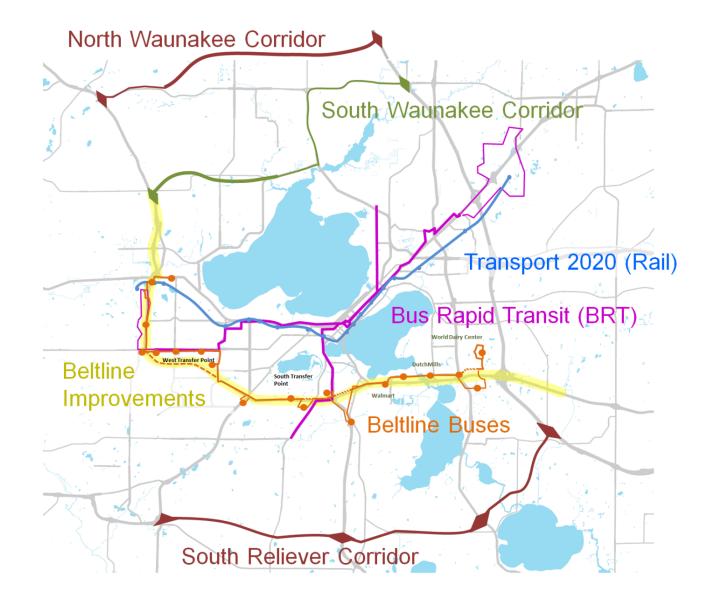


# **Screening Strategies**



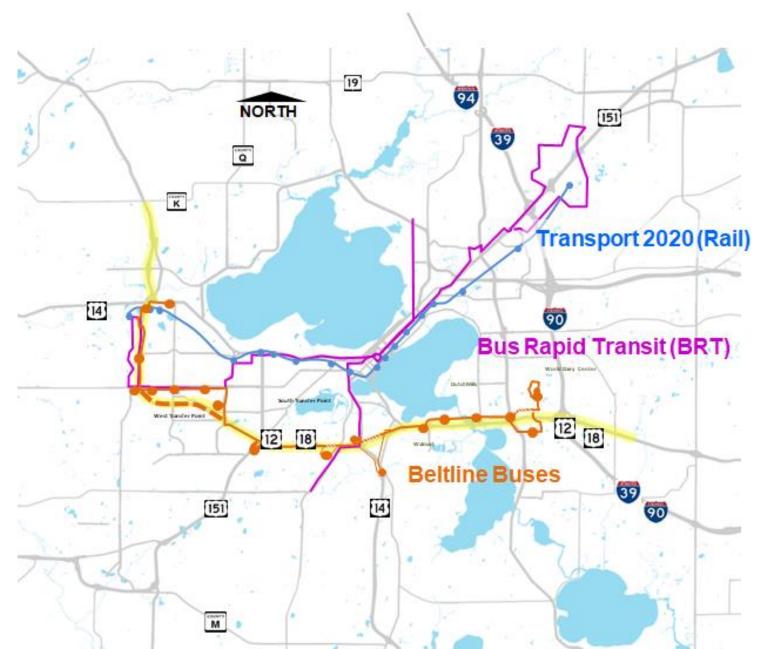


# Stand-alone strategies investigated





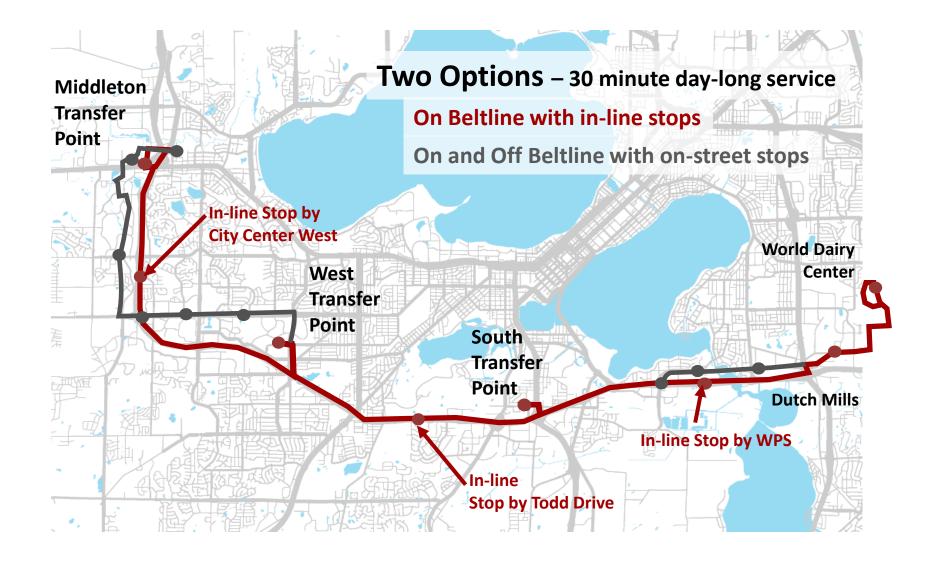
# Evaluation of broad modal strategies



# **Transit**



# Express buses routed on the Beltline





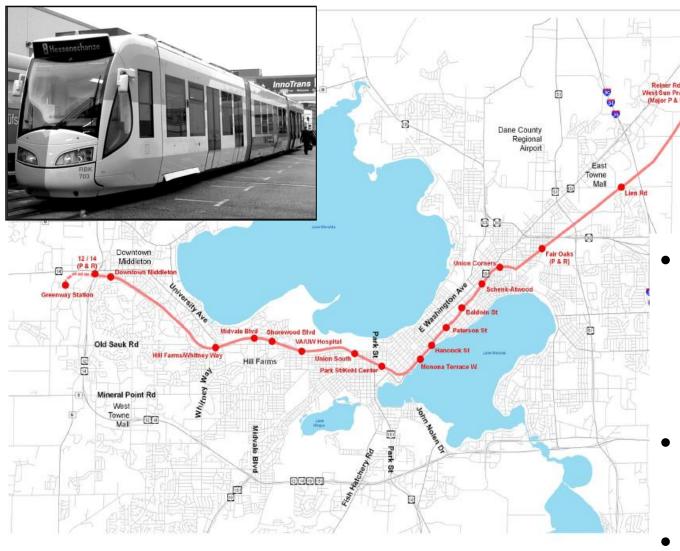
# **Bus Rapid Transit (BRT)**

Webster Street **Park Street** Routes recommended by Madison Transportation Board in 2013 Report Alternative Alignme

Figure 20: Madison BRT System - Proposed System



# **Transport 2020 (Rail)**



- 2008 New Starts
   Application submitted to
   Federal Transit Authority
   (later withdrawn)
- \$255 million (2007 dollars)
- 11,000 ridership in 2030



# **Transit Observations**

- Beltline Transit
  - Draws up to 2,000 riders in 2010, 4,900 in 2050
  - No effect on Beltline volumes
- BRT
  - East-west draws up to 20,000 riders in 2050
  - North-south draws up to 12,000 riders in 2050
  - Almost no effect on Beltline volumes
  - Decreasing price has little effect on ridership
- Transport 2020
  - Draws up to 9,500 riders in 2050
  - No effect on Beltline volumes





# **Evaluation of Development Scenarios**

# **More Compact Land Use**

# Triple Bike/ Transit Ridership







Scenario B

3X

# Scenario planning observations

# Compact Land use (Scenario B)

- Compact land use patterns increase potential BRT ridership by 20%
- Compact land use patterns increase Beltline volumes, and therefore does not reduce Beltline's transportation role.

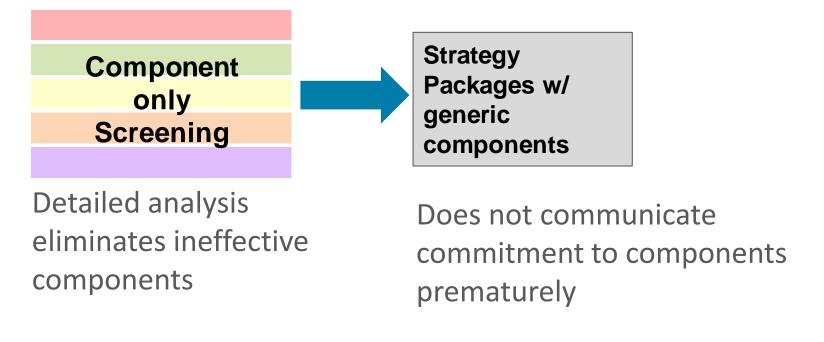
# Increased Transit and Bike Ridership

- Increasing transit and bike ridership reduces traffic volumes through the isthmus over what would otherwise occur.
- Increasing transit and bike ridership has limited effect on Beltline volumes and Beltline improvements would still be needed.



# Strategy Packages Development

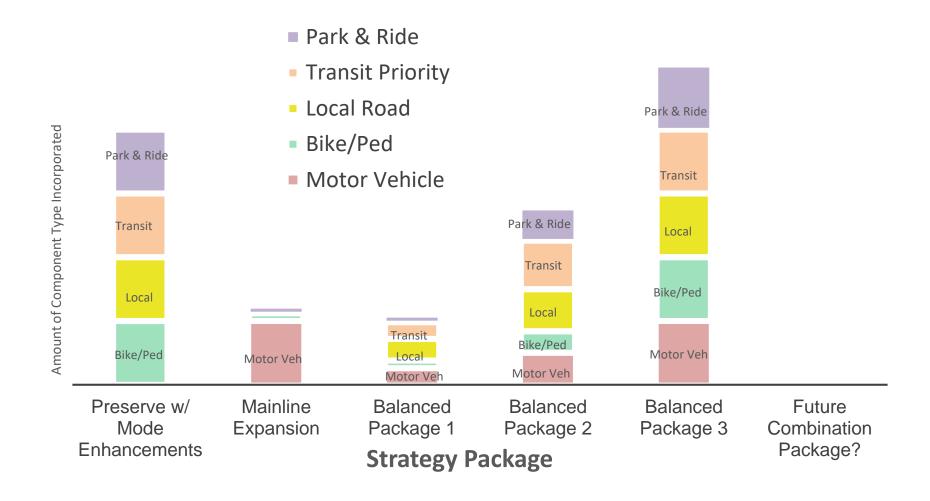
- Component screening analysis will be defined and detailed
- Strategy Package screening analysis non-specific and less detailed





Allows public vetting of different package combinations in next study phase

# Strategy Package Assembly





# **Example Broad Strategy Organization**

# **Example Motor vehicle**

# MV1 BASE

# Reconstruction - no capacity increase

This could reconstruct the Beltline with the existing capacity structure. Small modifications could be made at interchanges to improve safety/merging/diverging address deficiencies.

This could add one, two, or more lanes of capacity to the Beltline in both directions accompanied by appropriate interchange improvements and auxiliary lanes.

# MV 3 Beltline congestion management pricing

This could add lane(s) of capacity to the Beltline and implement some form of congestion pricing or lane management

### MV 4 South Corridor

This could add a new four lane expressway or freeway between Verona and I 39. The expressway option would have at-grade intersections and jug-handles. The freeway option would have interchanges.

### MV 5 North Mendota Corridor

This could a new four-lane expressway or freeway between US 12 and County M/WIS 19. The expressway option would have with at-grade intersections and jug handles. The freeway option would have interchanges.

### MV 6 Part-Time Shoulder Use

This could include the use of shoulders parttime for travel during the busiest hours of the day. This concept is also known as Hard Shoulder Running.

# Example Bike ped

# **BP1 BASE** Standard Bike-Ped Accommodations

This would provide pedestrian and bicycle accommodations with the proposed facility in accordance with Trans 75.

BP 2 Parallel path (new align only)

This could provide an adjacent path to new-

This could create new dedicated path links in

areas where bicycle/pedestrian connectivity

limited. Examples could include new paths

This could provide improved bicycle and

intersections adjacent to the Beltline.

treatments and/or grade separations.

pedestrian crossing of high traffic volume

Examples could include special crossing

alignment highway alternatives

**BP3 New connections** 

and/or grade separations.

treatments

BP 5 ????

BP 6 ????

BP 4 Intersection crossing

# **Example Local system**

## LS1BASE

Under the Base Local System strategy, no additional connections across or perpendicular to the Beltline would be made.

# **Example Transit**

## T 1 BASE Transit

This would maintain the current Madison metro and other transit activities as they currently operate.

# **Example TDM**

# TDM1 BASE - Voluntary TDM

This would create information and incentives for employers to encourage TDM measures,

- Ridesharing
- · Guaranteed Ride Home
- · Sponsored Bus Passes
- Shifted work hours letc.

## MV 2 Beltline capacity expansion

MV7 ???

# LS 2 Parallel local system connections

This could make local system connections that are parallel to the Beltline.

# LS 3 Perpendicular local system connections

This could make perpendicular local system connections across the Beltline.

# LS 4 Interchange access modifications

This could make interchange access modifications, including removing some interchange ramps or movements onto the Beltline.

### LS 5 Isthmus

This could remove some of the congestion associated with traveling through the

LS6 ???

# T 2 Bus Rapid Transit

This could:

- Implement the 2012 BRT report
- Support the BRT system by providing modal transfer stations
- Implement planned transit extensions

# T 3 Commuter Rail

This could:

- Implement the full system recommended under the Transport 2020 New Starts Application (2008)
- Implement the feeder bus system recommended under the Transport 2020 study.

# T 4 Dedicated Beltline Transit Lane

This could implement a dedicated transit lane (shoulder) on the Beltline with four on/line or off/line stops:

### T 5 Transit Extensions

This could implement the Express Bus recommendations in the MPO's 2013-2017 Transit Development Plan, which includes extensions to:

- Oregon
- McFarland/Stoughton
- Cottage Grove
- Sun Prairie
- DeForest
- Waunakee

# T 6 Modal centers (Park and Ride w/

This could provide modal transfer centers for a trip to be finished by transit or bike.

T7???

# TDM2 Government Policy TDM

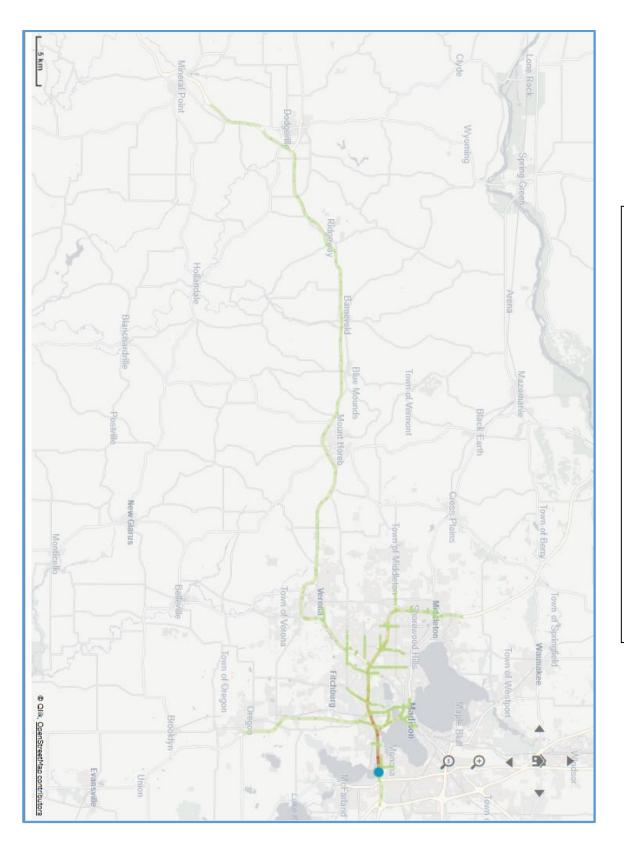
Local and state governments policies that require employers to enact TDM measures. Examples could include:

- · TDM for PUD approvals
- Parking pricing policies
- · Transit sponsorship
- Etc.

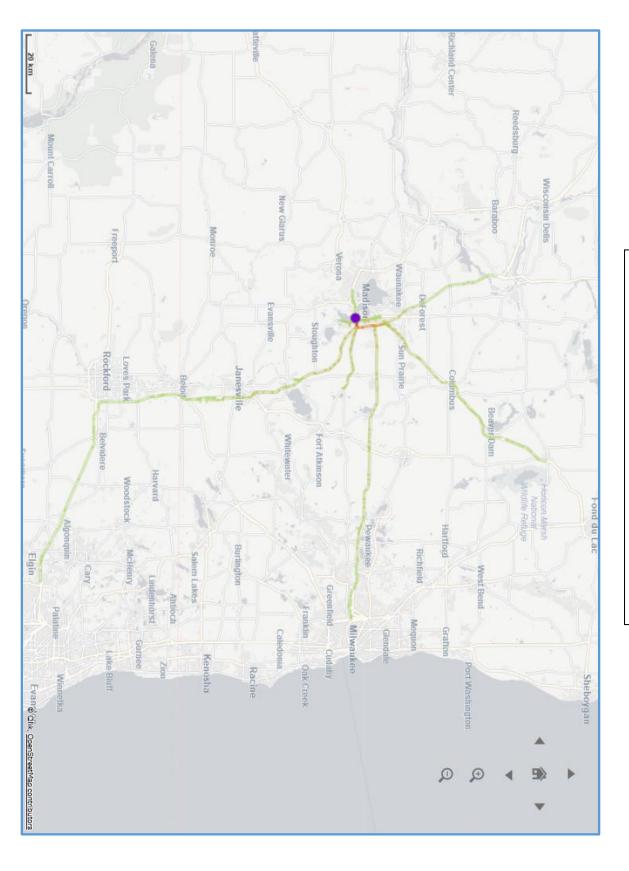
TDM 3 ???



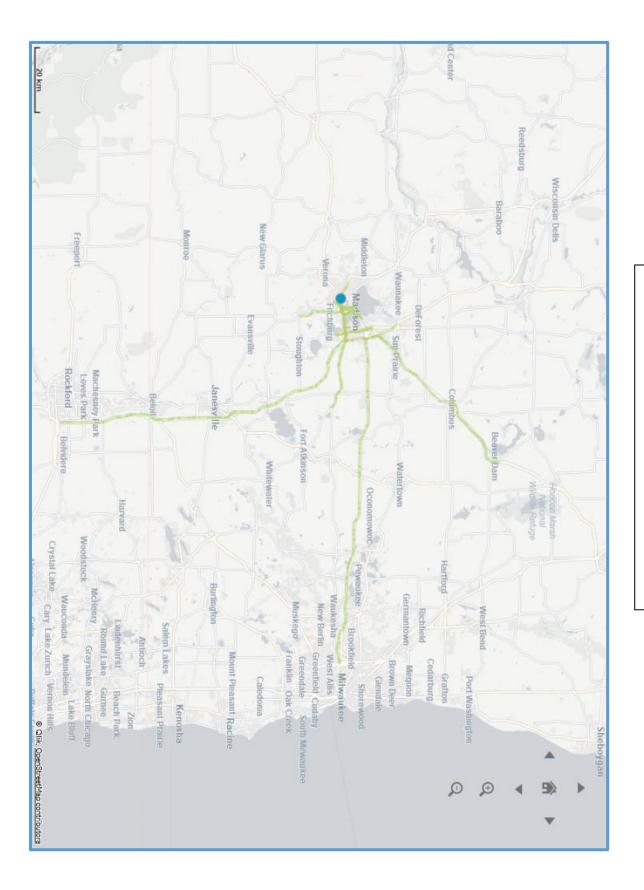
# WB Beltline (between USH 51 and Monona Drive) Destinations Monday – Thursday, 6-10 AM



# WB Beltline (between USH 51 and Monona Drive) Origins Monday - Thursday, 6-10 AM

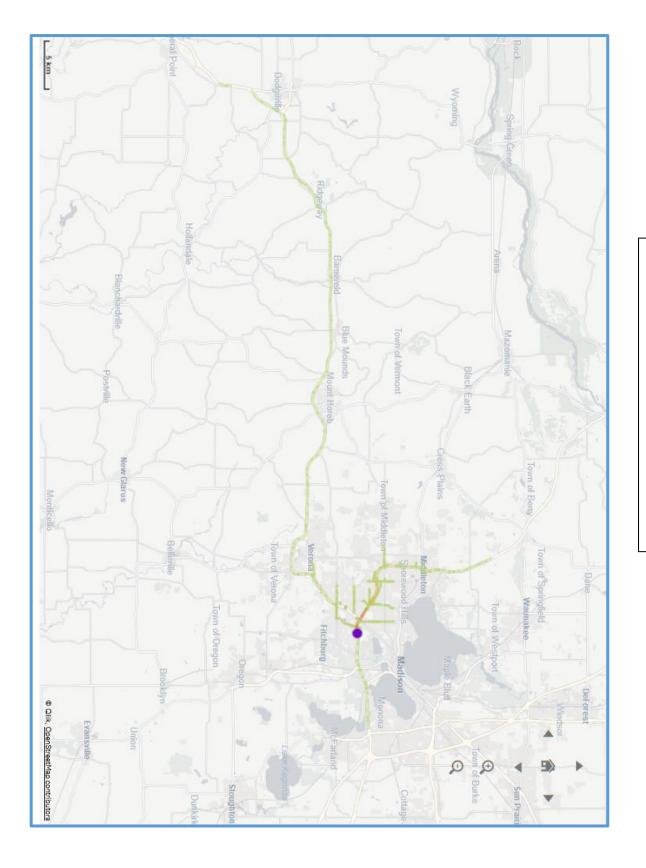


# EB Beltline (East of Seminole Highway) Destinations Monday – Thursday, 6 – 10 AM



EB Beltline (East of Seminole Highway) Origins

Monday – Thursday, 6 – 10 AM



# Re:

Resolution TPB No. 161 Approving Amendment #1 to the 2020-2024 Transportation Improvement Program

# **Staff Comments on Item:**

The TIP amendment, which was requested by WisDOT, modifies the scope of the Beltline (Whitney Way to Interstate) maintenance project to add ITS software and updates the cost estimate to reflect implementation of Dynamic Part-Time Shoulder Use.

MPO staff reviewed the project and discussed the issues that have been raised about it with the MPO's Technical and Citizen Advisory Committees at their meetings on November 20, and both committees voted to recommend the plan and TIP amendment for the project.

# **Materials Presented on Item:**

1. Resolution TPB No. 161 Approving Amendment #1 to the 2020-2024 TIP (including attachments)

# **Staff Recommendation/Rationale:**

Staff recommends approval. The project is consistent with the Regional Transportation Plan as adopted in 2017, which recommended TSM and safety improvements on the Beltline while WisDOT completes a study of potential longer-term improvements. The amendment to the plan (item 5) adds the DPTSU project to meet federal requirements for specific itemization of projects adding capacity.

# **Resolution TPB No. 161**

# Amendment No. 1 to the 2020-2024 Transportation Improvement Program (TIP) for the Madison Metropolitan Area & Dane County

**WHEREAS**, the Madison Area Transportation Planning Board (MATPB) – An MPO approved the 2020-2024 Transportation Improvement Program for the Madison Metropolitan Area & Dane County on October 2, 2019; and

**WHEREAS,** the Madison Metropolitan Planning Area transportation projects and certain transportation planning activities to be undertaken using Federal funding in 2020–2023 must be included in the effective TIP; and

**WHEREAS**, an amendment was requested by the Wisconsin Department of Transportation (WisDOT) SW Region to revise the scope of the West Beltline (Whitney Way to I-39/90) Highway maintenance project, adding a Dynamic Part-Time Shoulder Use (DPTSU) component; and

**WHEREAS**, the TIP amendment will not affect the timing of any other programmed projects in the TIP and the TIP remains financially constrained as shown in the attached revised TIP financial table (Table B-2); and

**WHEREAS**, the MPO's public participation procedures for major TIP amendments such as this have been followed, including an official notice and comment period and holding a public hearing on November 6; and

**WHEREAS**, the revised Beltline project is consistent with the *Regional Transportation Plan 2050* for the Madison Metropolitan Area, the long-range regional transportation plan for the Madison Metropolitan Planning Area, as adopted in April 2017 and as amended by TPB Resolution No. 160 on December 4, 2019, adding a specific project recommendation to implement the Beltline DPTSU project.

**NOW, THEREFORE, BE IT RESOLVED** that MATPB approves Amendment No. 1 to the 2020-2024 Transportation Improvement Program for the Madison Metropolitan Area & Dane County, making the following project revision as shown on the attached project listing table:

1.	<b>REVISE</b> the W. Beltline (USH 12/14/18/151) (Whitney Way to I-39/90) project on Page 27 to
	modify the scope to add ITS software and increase the total cost from \$30.4 to \$65.3 million to
	account for implementation of DPTSU and other cost estimate revisions.

Date Adopted	Mark Opitz, Chair Madison Area Transportation Planning Board

# PROJECT LISTINGS FOR AMENDMENT NO. 1 TO THE 2020-2024 TRANSPORTATION IMPROVEMENT PROGRAM (Cost in \$000s)

Primary Jurisdiction/ Project Sponsor	Project Description	Cost/ Type	Fed	Jan-De State		Total	Fed		ec 2021 Local	Fed		c 2022 Local	Fed	Jan-De	ec 2023 Local	Fed	Jan-De State	24 al Total	Comments
STREET/ROADWAY PROJECTS																			
*	W. BELTLINE (USH 12/14/18/151) Madison to Cambridge Whitney Way to I-39/90 Roadway resurfacing, drainage system-improvements- upgrades, partial-or-full reconstruction of the median barrier wall, and possible new ITS infrastructure improvements, and software for proposed Dynamic Part Time Shoulder Use (DPTSU). (10.4 miles)			13,056 13,056		65,281 65,281	Co	ontinuing		<u>C</u> i	ontinuing								1206-06-08, -78, -79, 88, 89 Design \$ obligated in 2018. Roadway resurfacing between Seminole Hwy. and I-39/90. ITS facilities improvements between Whitney Way and I-39/90. Construction funding to be obligated in 2020. Construction in 2021, possibly continuing into 2022.

Table B-2 Summary of Federal Funds Programmed (\$000s) and Those Available in Year of Expenditure Dollars in the Madison Metropolitan Planning Area

ı	Funding Source	F	Programn	ned Expe	nditures		Estimated Available Funding						
Agency	Program	2020	2021	2022	2023	2024*	2020	2021	2022	2023	2024*		
Federal Highway	National Highway Performance Program	61,877	14,487	2,217	3,337	0	61,877	14,487	2,217	3,337	0		
Administration	Bridge Replacement and Rehabilitation	0	0	0	0	0	0	0	0	0	0		
	Surface Transp. Block Grant Program - Madison Urban Area	171	12,886	181	23,558	1,369	171	12,886	181	23,558	1,369		
	Surface Transp. Block Grant Program - State Flexibility	0	0	2,570	0	13,842	0	0	2,570	0	13,842		
	Surface Transp. Block Grant Program - Transp. Alternatives	675	1,364	0	0	0	675	1,364	0	unknown	unknown		
	Highway Safety Improvement Program	0	3,108	0	1,697	0	0	3,108	0	1,697	0		
Federal Transit Administration	Section 5307 Urbanized Area Formula Program	6,777	8,008	8,249	8,499	8,759	6,777	8,008	8,249	8,499	8,759		
	Sec. 5339 Bus & Bus Facilties	0	939	954	969	984	0	939	954	969	984		
	Sec. 5337 State of Good Repair	0	955	970	985	1,000	0	955	970	985	1,000		
	Sec. 5310 E/D Enhanced Mobility Program	228	0	0	0	0	365	0	0	0	0		
	Sec. 5311 Rural Area Formula Program	1,058	1,075	1,091	1,108	1,126	1,058	1,075	1,091	1,108	1,126		
	Sec. 5314 NRP, Sec. 5339 Alt. Analysis Program	0	0	0	0	0	0	0	0	0	0		

<sup>\*</sup> Fifth year of funding (2024) is informational only.

Note: All state roadway projects using applicable funding sources (e.g., NHPP, STBG State Flexible, BR) are programmed through 2024. Local BR, STBG (BR), and STBG Rural projects are programmed through 2023. HSIP (other than annual small HES program) projects are programmed through 2023. Local STBG -Transp. Alternatives projects are programmed through 2022. Local STBG-Urban (Madison Urban Area) projects are programmed through 2024. Transit funding is not yet programmed and is based on needs and anticipated future funding levels (See also Table B-4 Metro Transit System Projected Expenses and Revenues). Programmed transit funding for 2020 excludes carryover projects for which the Federal funding is already obligated. Roadway and transit inflation rate @ 1.56% per year applied to expenses, except for the STBG-Urban program. The Interstate 39/90 (S. Beltline to Rock County Line) Reconstruction and Capacity Expansion project is not included in the table since it is primarily located in Rock County and/or outer Dane County. Fiscal constraint for this project is being handled at the state level.

<sup>\*\*</sup> Funding shown in calendar year versus state fiscal year.

# Re:

Review of Round Two Section 5310 Program (Enhanced Services for Seniors and Individuals with Disabilities) Grant Project Applications for 2020 and Preliminary Approval of Draft Recommendations for Project Funding

# **Staff Comments on Item:**

MATPB receives an annual allocation of Section 5310 (Enhanced Services for Seniors and Individuals with Disabilities) Program funds and selects projects through a competitive process using scoring criteria outlined in the Section 5310 Program Management and Recipient Coordination Plan. MATPB administered the usual annual application process this summer/early fall, but only received three project applications. These were all approved, leaving around \$115,000 in federal funding still available.

At the request of the board, staff inquired about interest in a second round of applications and based on the positive feedback administered another round. Four applications were received (see project descriptions), which were reviewed and scored by an evaluation committee. Two of the four projects are being proposed for funding.

# **Materials Presented on Item:**

- 1. Description of Round Two Section 5310 Program Project Applications for 2020 Funding
- 2. Draft Section 5310 Program of Projects with Proposed Additional Projects from the Second Round of Applications
- 3. Section 5310 Program Grant Applications with Average Scores
- 4. Project Selection Criteria

# **Staff Recommendation/Rationale:**

Staff recommends preliminary approval of the evaluation committee's recommendations for projects to fund. Final action will be via a TIP amendment in January.

# Section 5310 (Enhanced Mobility of Seniors & Individuals with Disabilities) Program Descriptions of Project Applications for 2020 Funding \*\*2nd Round Applications\*\*

Subrecipient:	Capitol Express Transportation
Project:	Purchase a Replacement Accessible Vehicle (Non-Traditional)
Request:	\$30,359

Capitol Express Transportation is looking to improve rides for seniors and people with disabilities. This project will be a replacement of an older vehicle. We have many newer vehicles that provide comfortable rides, but there are also a few that are older and takes a lot more money to keep it running at an acceptable level. The vehicle we are looking to replace has over 575,000 miles and is frequently in the shop with multiple issues like A/C doesn't work or engine overheating. The struggles with running a full schedule being down a vehicle puts a lot of strain on drivers and the company as dispatcher tries to cover rides of a vehicle that breaks down. Not to mention the driver is not working when his/her van is down. With this project, we would be able to replace an older vehicle and provide more and comfortable rides for the seniors and people with disabilities in the community.

Subrecipient:	Carepool
Project:	Transitional Work Group Program (Non-Traditional)
Request:	\$83,520

This proposal is focusing on the creation of a technology platform that will allow each city on the outskirts of Dane County to share rides and payment resources. We are focusing on employment locations throughout the county and the ability to collaborate on a technology platform and use multiple payment resources for shared rides and potential fixed routes. Carepool is proposing a grant in partnership with Goodwill of South Central Wisconsin (SCWI) surrounding the following project for Walgreens Distribution Center in Windsor, WI known as TWG. Participants of the program are referred by the Department of Vocational Rehabilitation (DVR). DVR has shared they work with consumers who are interested in the program, but due to transportation issues, are unable to participate. The Transitional Work Group (TWG) program is a supported training curriculum developed by Walgreens for use in their distribution centers. Program participants are paid during their training period and if the role is a good fit for both the employer and the trainee, an offer of permanent employment is extended upon program completion. The training program is full-time and covers a PM shift eliminating standard transportation options. Carepool, in partnership with Goodwill SCWI, would like to collaborate on this project to help connect DVR consumers to this training and employment opportunity. Carepool is a technology that simplifies the booking and tracking of a new form of transportation using rideshare. This model works in both urban and rural areas where some people currently have no transportation options and can cross county lines during the day or night time.

Subrecipient:	MARC, Inc. (Madison Area Rehabilitation Centers)
Project:	Purchase Two Accessible Vehicles (MARC Transportation Project – (MTP)) (Traditional)
Request:	\$84,950

The MARC Transportation Project is for the purchase of two wheelchair accessible vehicles used to transport individuals to and from work, to volunteer in the community, and participate in meaningful activities that enrich their lives in the greater Madison and Stoughton communities. MARC's mission is to enhance the quality of life for individuals with significant disabilities. MARC accomplishes its mission through individualized employment supports that enable success in community jobs and individual ownership of businesses. MARC also provides internship opportunities for high school students and young adults with intellectual disabilities at three locations: UW & VA Hospitals, Sauk Prairie Hospital, and Kalahari Resorts. Additionally, educational & training opportunities are offered at all MARC locations, along with personal care services that reduce hospitalizations & health issues, and increase time in the community.

Subrecipient:	City of Stoughton
Project:	Purchase an Accessible Vehicle (Stoughton Public Transit Accessible Van) (Traditional)
Request:	\$30,359

Stoughton Public Transit, owned by the City of Stoughton, is applying for grant funding to purchase an accessible shared-ride taxi minivan to replace a 2008 non-accessible taxi cab. Stoughton Transit operates in the City of Stoughton limits and within a three-mile radius of city limits. This project will replace a non-accessible 2008 Crown Victoria taxi cab with an accessible minivan.

Subrecipient	Service Area	Service Area Urban/Rural	Sub Type <sup>1</sup>	Project Type	Project Description/ALI	FTA Amount	Local Amount	Total Amount	Coordination Plan Page	Project Type <sup>2</sup>
Subrecipient	Service Area	•			d as having met federal requirements and appr			Amount	rage	туре
Dane County DHS	Dane County	Urban/Rural	LG	Capital	One-Call Center, Mobility Training, and Bus Buddy Program	\$112,166	\$28,070	\$140,236	17, 20, 25, 27 - 29, 33	14f
City of Madison - Metro Transit	Madison Area	Urban	DR	Capital	Patatransit Eligibility & Mobility Coordinatior	\$77,040	\$19,260	\$96,300	27, 28, 33, 34	14f
Community Living Connections	Madison Area	Urban	PNP	Capital	Accessible Vehicle	\$38,560	\$9,641	\$48,201	29 - 31	14a
City of Stoughton	City of Stoughton & Three-Mile Radius	Urban/Rural	LG	Capital	Accessible Vehicle	\$30,359	\$7,590	\$37,949	33	14a
Madison Area Rehabilitation Centers (MARC)	Stoughton and Greater Madison	Urban/Rural	PNP	Capital	Accessible Vehicle	\$73,787	\$32,400	\$106,187	35, 38	14a
City of Madison - Metro Transit			DR		Grant Administration	\$33,191		\$33,191		12
Total						\$365,103	\$96,961	\$462,064		
<u>Category B Projects</u> - Pending federal requirements and/or pending approval for funding.										
Total						\$0	\$0	\$0		

<sup>&</sup>lt;sup>1</sup> DR - Direct Recipient, PNP - Private Non-Profit, LG - Local Governmet, PO - Private Operator receiving indirect funds

- 12 Administration expenses
- 14a Rolling stock and related activities (meeting the 55% requirement)
- 14b Passenger facilities (meeting the 55% requirement)
- 14c Support facilities and equipment (meeting the 55% requirement)
- 14d Lease of equipment (meeting the 55% requirement)
- 14e Acquisition of transportation services under a contract, lease, or other arrangement, including user-side subsidies (meeting the 55% requirement)
- 14f Support for mobility management and coordination programs (meeting the 55% requirement)
- 15a Public transportation projects (capital and operating) planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities
- 15b Public transportation projects that exceed the requirements of the ADA
- 15c Public transportation projects that improve access to fixed route service and decrease reliance by individuals with disabilities on ADA complementary paratransit service
- 15d Alternatives to public transportation that assist seniors and individuals with disabilities with transportation

All projects are within Dane County, Madison, WI; Wisconsin Congressional District 2; and consistent with the 2019 Coordinated Public Transit-Human Services Transportation Plan for Dane County.

<sup>&</sup>lt;sup>2</sup> Project type defined in FTA C 9070.1G:

			2020 Section 5	310 Program Grant Applications			
	Name of Agency	Type of Project	Average Score	Description	Amount	Pr	roposed
First-Round Applications	Madison Metro	Mobility Management	NA*	Funding for Paratransit Eligibility and Mobility Coordinator	\$77,040	\$	77,040
(Awarded Oct. 2, 2019)	Dane County Call Center	Mobility Management	NA*	Funding for Call Center, Mobility Training, Bus Buddies	\$112,166	\$	112,166
	Community Living Connections	Capital Purchase	NA*	Funding for an accessible vehicle	\$38,560	\$	38,560
Second-Round	Capitol Express	Capital Purchase	67	Funding for an accessible vehicle	\$30,359	\$	-
Applications (to be	City of Stoughton	Capital Purchase	86	Funding for an accessible vehicle	\$30,359	\$	30,359
Awarded Jan. 8, 2020)		Alternatives to Public		Develop Shared-Ride Software and Operate TNC for Workforce			
	Carepool	Transportation	41	Transportation	\$75,240	\$	-
	MARC	Capital Purchase	81	Funding for two accessible vehicles	\$84,950	\$	73,787
				Subtotal	\$448,674	\$	331,912
	*Competetive Scoring was not us	ed in the first round of		Grant Administration	\$44,867	\$	33,191
	applications, as the total funding	requested was less than		Available funding	\$365,103	\$	365,103
	the amount available.			Difference	(\$128,439)	\$	(0)

# 4. Project Selection Criteria and Process

# **Project Planning and Coordination**

Medium-range planning for Section 5310 program projects is included in the five-year Coordinated Public Transit – Human Services Transportation Plan for Dane County, completed by the MPO. This planning process is conducted within the framework of the MPO's long range transportation plan (currently the Regional Transportation Plan 2050 adopted in 2017) and the currently adopted Transit Development Plan for the Madison Urban Area.

A competitive process is used to select and prioritize projects for Section 5310 program funding the Madison urban area. The MPO will solicit project applications from eligible subrecipients.

# **Project Application Process**

The application process will be led by the MPO. Specific tasks, deadlines, and meeting dates will be identified in the materials that are distributed to eligible subrecipients as appropriate.

- MPO staff informs eligible subrecipients of upcoming application cycle.
- Eligible subrecipients notify MPO staff of intention to apply.
- MPO staff distributes application materials to interested eligible subrecipients.
- Completed applications are due to MPO staff.
- MPO staff assembles an evaluation panel with objective individuals who do not represent any of the applicants, which scores the applications. [Note: Evaluation panel will generally be used, but is optional.]
- MPO staff prepares a draft program of projects (POP) based on the scores, funding available, and requirements of the Section 5310 program.
- MPO staff distributes letters to applicants informing them of whether or not they are included in the draft POP. Appeals are due to the MPO staff contact one week prior to the scheduled adoption of the POP.
- MPO board approves the POP with any changes as part of approval of the TIP or a TIP amendment.
- Applicants work with Metro Transit to develop project agreements.
- Metro Transit applies to the FTA for funding for the projects on behalf of the subrecipients.

Project application materials are developed by WisDOT. MPO staff have the option of using these application materials as they are or developing alternative application materials to distribute. The benefit of using application materials developed by WisDOT is that applicants that do not immediately know whether they should apply for state-managed Section 5310 funds or MPO-managed Section 5310 funds can fill out one standard application.

Applicants that are approved for vehicle capital funds should contact Metro Transit as soon as possible to begin the procurement process. Applicants that are approved for operating funds should contact Metro Transit as soon as possible to develop project agreements.

# **Project Selection Criteria**

The projects that receive funds through the Madison Urbanized Area's Section 5310 program are selected by the MPO based on published criteria. The evaluation criteria used by the evaluation panel to score project applications are as follows:

Section 5310 Application Scoring Criteria	Maximum Points
1. Demonstration of Need and Project Benefits	40
The application describes how the existing project or the proposed project will be effective at meeting the transportation needs of seniors and people with disabilities and what happens if the funding is not awarded.	10
<ul> <li>Replacement or Service Level Maintenance Vehicle- Explains why current fleet cannot meet current needs (10 Points)</li> <li>Expansion Vehicle- Describes the planned service expansion and how the need for the expanded service was determined (8 Points)</li> <li>Mobility Management (Traditional)-Describes how project will help meet the transportation needs of seniors and individuals with disabilities, and identifies specific services and activities the project will provide (10 Points)</li> <li>Non-Traditional Projects- Describes how project will help meet transportation needs of seniors and individuals with disabilities. Identifies specific services and activities the project will provide (8 Points)</li> </ul>	10
Supported by the Coordinated Plan- The project overcomes barrier to transportation and/or meets an unmet need.  • Identified as a Tier 1 Strategy Project (10 Points)  • Identified as a Tier 2 Strategy Project (6 Points)  • Not identified as a strategy, but addresses a need (3 Points)	10
<ul> <li>The project serves a reasonable number of individuals or trips given the project budget.</li> <li>Should include total number of people served, and percentage of seniors or individuals with a disability served</li> </ul>	10
2. Promotes the Development of a Coordinated Network	30
The application identifies other transportation services available and how the project complements rather than duplicates them.  • Could include (but not limited to) increased hours of operation, reduction of coverage gaps, increased access to medical/employment/recreation trips	15
The application identifies steps that will be taken to ensure a coordinated effort with other local agencies (including human services agencies, meal and shopping sites, employers etc.), and how the service will be marketed.	10
<ul> <li>The application describes who is eligible to ride/participate in proposed service.</li> <li>Public- Project/service is open to all eligible seniors or individuals with disabilities (5 Points)</li> <li>Private- Project/service is limited to a select client base (2 points)</li> </ul>	5
3. Financial and Management Capacity	30
The project has a reasonable level of administrative costs	10
The application identifies local match sources that are backed up by budgets, support letters, and other documentation.	10
The project sponsor has the capacity to meet the project management, reporting, and project delivery functions of the Section 5310 program.	10

Projects will be selected by the MPO for inclusion in the POP based on their scores and the extent to which they fulfill the general funding priorities and address specific service needs identified in the Coordinated Public Transit – Human Services Transportation Plan, including the Priority Tier each project falls under:

# Tier 1- Maintain existing level of service of viable programs or operations

Tier 1 supports existing transportation services and projects that:

- Have shown to be effective in meeting transportation needs of seniors, people with disabilities, and those with limited income
- Continue to demonstrate effective transportation operations within the county's coordinated network

# <u>Tier 2a- Accommodate increasing demand for services within existing programs and operations</u>

Tier 2a supports existing and new services and projects that:

- Require capital and operating assistance to meet growing demand for the service(s) within present boundaries
- Are able to improve efficiency and functionality by building on existing infrastructure
- Allow for growth, but do not automatically extend new service without a careful evaluation of transportation needs across populations and jurisdictions

# Tier 2b- Respond to emerging community needs, opportunities, and create new partnerships

Tier 2b supports projects that:

- Are under development and bring new resources
- Address identified transportation needs and gaps and/or focus on an underserved group of individuals
- Improve the efficiency and effectiveness of the overall system
- Provide an added benefit to the transportation services network and riders
- Are innovative in their approach in reaching out to new riders or geographic areas

Additionally, the MPO will select and prioritize projects based on their ability to satisfy the Section 5310 Program Goals and Objectives described in Section 2: independence, accessibility, efficiency, and resourcefulness.

# Annual Program of Projects Development, Appeal, Approval, and Amendment Process

The MPO is responsible for developing and amending the Program of Projects (POP) since it has the responsibility for selecting the projects and prepares the five-year Transportation Improvement Program (TIP). The POP must be consistent with the TIP and the federal share cannot exceed the allocation of Section 5310 program funds; however, the TIP may include illustrative projects that do not yet have completed and accepted project applications. The requirements for the POP include:

- Identification of each subrecipient, including whether they are governmental authorities, private non-profit agencies, or Indian tribal governments or tribal transit agencies
- A description of each project
- The total project cost and the federal share
- Whether each project is a capital or an operating expense and whether or not it meets the requirements for a "traditional Section 5310 capital" project

MPO staff develops a draft POP after project applications are reviewed and scored by the evaluation panel. The draft POP and a description of any projects not selected for funding are presented to the MPO's advisory committees.

MPO staff distributes letters to each applicant with the draft POP, informing them whether or not their project is included. Applicants may appeal the decision of MPO staff to include or not include any project in the draft POP. Applicants must submit their appeal in writing by one calendar week prior to the scheduled adoption of the POP. Appeals must be submitted to the MPO staff contact, who will be identified in the notice and is listed on page 23. Any appeals will be included in the meeting packet for the MPO board. The MPO board will make the final decision on which projects are included in the POP.

Following review and a recommendation by the MPO advisory committees, the MPO Policy Board may approve the project recommendations (with or without modifications), or direct staff to develop alternative proposals. The approved POP is then forwarded to Metro Transit, which forwards it to the FTA and carries it out. Amendments to the POP are conducted as needed using the same process.

# Re:

Review and Approval of Proposed Revisions to Policies and Criteria for STBG Urban Transportation Alternatives Set Aside Program Projects

# **Staff Comments on Item:**

As with the STBG Urban Program, MATPB receives an allocation of STBG Transportation Alternatives Program (TAP) funding. In conjunction with WisDOT, MATPB solicits project applications and scores and selects projects for funding. One half of the total funds available are allocated to MPOs and for use in other urban areas while WisDOT receives the other half and selects projects for funding with these statewide funds. Projects selected with those statewide funds can be located anywhere. For this 2021-2024 program cycle, MATPB will have \$1.15 million available for projects.

MATPB completed a major revision to its TAP policies and project scoring criteria for the 2014-2018 cycle and then a minor revision again for the 2016-2020 cycle. Staff initiated another minor revision to the document for this program cycle. The primary change was to move Project Readiness and Constructability from a scoring criterion to a screening criterion (i.e., projects must demonstrate they are ready, otherwise they would not be considered for funding). The points that had been allocated to this criterion were moved to other criteria.

Staff reviewed the proposed revisions to the policies and criteria with the MPO's Technical and Citizen Advisory Committees at their November 20 meetings, and both committees voted to recommend approval of the revisions to the board.

# **Materials Presented on Item:**

- 1. TAP Project Scoring Criteria Summary showing current and proposed weights
- 2. Draft Revised Policies and Scoring Criteria for Transportation Alternatives Program Projects
- 3. Supplemental Application Form with additional questions to add MATPB staff in scoring projects

# **Staff Recommendation/Rationale:**

Staff recommends approval of the revised TA Program policies and criteria.

**TAP Project Scoring Criteria - Bicycle/Pedestrian Infrastructure Projects** 

	Current	Proposed
1. Enhances Mobility and Connectivity	20%	25%
Regional or Local/Neighborhood Importance	10%	10%
New or Missing Link, Network Extension, or Elimination of Barrier	10%	15%
2. Usage and Accessibility	20%	30%
High Usage	8%	8%
Increases Access to Jobs, Services, and Other Destinatinos	4%	5%
Quality of Life	3%	5%
Facility Maintenance	1%	0%
Environmental Justice	2%	12%
Health Equity	2%	12/0
3. Safety	20%	20%
Crash History and/or Documented Safety Problem	15%	20%
Safety and Accessibility	5%	2070
4. Project Readiness and Constructability	15%	0%
Project Readiness	10%	0%
Past Project Experience	2%	0%
Local Ranking	3%	0%
5. Cost Effectiveness	15%	15%
Project Cost/Benefit	10%	10%
Other Funding, Cost Efficiencies	5%	5%
6. Congestion Management	5%	5%
7. Opportunity/Risk	5%	5%

**TAP Project Scoring Criteria - Safe Routes to School Non-Infrastructure Projects** 

	Current	Proposed
1. Scope of Audience/Reach/Impact	45%	50%
Large portion of students in district impacted	15%	15%
Adds value to other improvements or programs	15%	10%
Likely to increase # of students walking and bicycling	15%	15%
Engages broader community	0%	10%
2. Health, Safety, and Environmental Justice	35%	50%
Located at schools with high rate of students eligible for free and reduced price lun	15%	20%
Fosters improved childhood health, reduced childhood obesity, and encourages a h	10%	15%
Increases real or perceived bicycle, pedestrian, and traffic safety	10%	15%
3. Project Readiness	15%	0%
Ready to move forward	5%	0%
Similar funding in the past, successfully completed	4%	0%
Necessary financial commitment and local support	3%	0%
Project ranking given by sponsor	3%	0%
4. Opportunity/Risk	5%	0%



# **DRAFT 2020**

# **Policies and Scoring Criteria For**

# STBG Transportation Alternatives Set Aside Program Projects

# Introduction

The Moving Ahead for Progress in the 21st Century Act (MAP-21), established the Transportation Alternatives Program (TAP), which replaced the funding from some previously separate federal programs, including Transportation Enhancements (TE), Safe Routes to Schools (SRTS), and Recreational Trails, consolidating them into a single funding source. As a result, WisDOT incorporated its previously separate SRTS, TE, and state funded Bicycle & Pedestrian Facilities Program (BPFP) into one program and application process. The Fixing America's Surface Transportation (FAST) Act, adopted in December 2015, restructured some of the federal programs, replacing TAP with a set-aside of Surface Transportation Block Grant (STBG) program funding for Transportation Alternatives (TA). The TA set aside program includes all of the same activities that were previously eligible under TAP so the program name is the only thing that really changed.

As with TAP, federal law mandates that WisDOT distribute approximately one-half of Wisconsin's federally allocated STBG Transportation Alternatives Set Aside Program funds to metropolitan planning organizations (MPOs) serving larger urban areas with a population over 200,000, called Transportation Management Areas (TMAs). The Madison Area Transportation Planning Board (MATPB) is the MPO for the Madison urban area.

The following is a description of the program policies and criteria for scoring projects that the MATPB will use to select and fund TA projects using the MPO's sub-allocation of funding. The policies listed below are those that differ from the policies that WisDOT will use for projects approved with the statewide funding. Any policies not mentioned in this document, such as eligible project sponsors, follow WisDOT's policies. Projects in the Madison urban area are eligible for those statewide funds as well. WisDOT's TA guidelines, policies, procedures, and the application form that project sponsors must use are available on WisDOT's website at http://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/tap.aspx. In addition to the WisDOT TAP application, sponsors of projects seeking MPO funding for projects in the Madison urban area must complete MATPB's Supplemental Application for TAP Funding [link].

# **MATPB Policies**

<u>Eligible Project Categories</u>:
 MATPB will accept projects within only the following federally eligible STBG
 Transportation Alternatives Set Aside Program categories:

- Construction of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation;
- Enhancement of existing off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation (e.g. paving unpaved trails, or adding wayfinding to existing facilities);
- Construction of infrastructure-related projects and systems that will provide safe routes for non-drivers, including stand-alone wayfinding and system enhancements such as bicycle fix-it-stations or rest areas;
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users; and
- o Safe Routes to School (SRTS) <u>non-infrastructure</u> <u>projects [SRTS infrastructure projects should be applied for as Bicycle/Pedestrian Infrastructure Projects].</u>

Federally eligible projects for which MATPB will not utilize its TA funds include reconstruction of existing multi-use paths, recreational trails, and most "transportation enhancement" activities, including environmental mitigation, historic preservation, and scenic beautification (see 23 U.S.C. Section 133 (b) for the complete list of eligible project activities under federal law).

# • Eligible Project Costs:

For infrastructure projects, funding will only be awarded for construction. Design, right of way, and utilities costs will not be eligible expenses for TA funds awarded by MATPB.

# Cost Share:

In order to stretch the limited funding available, projects will be required to provide a larger local match than the required 20% minimum. A sliding scale between 80/20 and 60/40 will be used, calculated by the formula below with all projects costing over \$600,000 requiring a 40% local share.

Formula for computing the federal share:

P = Federal participation percentage (round to zero decimal places)

X =- Project cost

Total Project Cost	Federal Share (Percentage)
= or $<$ \$300,000	80%
\$300,001 - \$599,999	P = 80 - ((X - 300,000)/15,000)
=  or  > \$600,000	60%

# • Project Screening:

Beginning with the 2020 TAP application cycle, MATPB eliminated Project Readiness and Constructability from the scoring criteria and established project readiness as a screening criterion. Do not submit applications for funding for projects which do not meet the following requirements:

# For Infrastructure Projects:

• The project will be ready for construction when scheduled. This means that at least some initial design work has been completed and it is beyond a purely conceptual stage.

- [TA projects are required to begin within 4 years of project award and be completed within six years.]
- There are no serious engineering feasibility, real estate, environmental, railroad, or funding issues that need to be resolved. [These issues make it more likely that projects cannot meet the required WisDOT timelines.]
- The project has the necessary financial commitment and local support so that it can begin to move forward immediately upon notice of funding.
- The project will be maintained for year-round use as appropriate (if not plowed in winter, it should be groomed or set for cross-country skiing or otherwise maintained for appropriate year-round use).
- The project will include appropriate wayfinding to ensure that it can be accessed and used conveniently, safely, and consistently.

# For Safe Routes to School Non-Infrastructure Projects:

- The project is ready to move forward upon notice of funding.

  [TAP projects are required to begin within 4 years of project award and be completed within six years.]
- The project has the necessary financial commitment and local support so that it can begin to move forward immediately.

# **Project Scoring Criteria - Bicycle/Pedestrian Infrastructure Projects**

# 1. Enhances Mobility and Connectivity – 2520%

Regional or Local/Neighborhood Importance – 10%

• Degree of importance to the regional pedestrian/bicycle system (i.e., located on the designated primary and secondary bicycle network or providing an important connection to this system).

[The MPO's <u>Bicycle Transportation Plan for the Madison Metropolitan Area & Dane County</u> (2015) used criteria to functionally classify the bicycle network (primary, secondary, other) and also identified and mapped high priority regional path projects. The planned bicycle facilities, functional class, and regional priority path maps were updated as part of the <u>Regional Transportation (RTP) 2050 for the Madison Metropolitan Area</u> (2017). See maps on pages D-22, D-25, and D-27. For a small local infrastructure improvement, degree of importance to neighborhood or school area pedestrian/bike connections will be considered.]

# New or Missing Link, Network Extension, or Elimination of Barrier – 115%

- Project provides a new bicycle and pedestrian link where other suitable alternatives do not currently exist.
- The project provides a missing link that would connect a neighborhood, employers or other services to a route or facility that already exists.
   [See map of gaps and barriers within the regional bikeway network in the RTP 2050 on page D-26.]
- The project provides an important missing link in the low stress bicycle network. [See the current Low-Stress Bicycle Network Map at <a href="https://cityofmadison.maps.arcgis.com/apps/webappviewer/index.html?id=5d9b5793">https://cityofmadison.maps.arcgis.com/apps/webappviewer/index.html?id=5d9b5793</a> e6404b8c89872c06bd5f26c2]
- The project is an extension of a current bicycle and/or pedestrian facility, facilitating increased usage.

• The project eliminates a barrier to use of a facility such as providing a new crossing of a major highway or improving an existing crossing.

# 2. Usage and Accessibility – 2030%

High Usage – 8%

- High estimated usage based on significant population user pool and/or employment located within 0.5 mile.
- Location within the overall pedestrian/bicycle facility network (particularly low stress network).

Increases Access to Jobs, Services, and Other Destinations – 4-5%

• Important link in increasing walking and bicycling access to jobs, shopping, parks, schools, transit stops, or other services.

Quality of Life – 3–5%

• Improves quality of life by providing walking and/or bicycling opportunities in areas of natural, cultural or historic interest, thereby improving the pedestrian and/or bicycle experience.

Environmental Justice and Health Equity – 12%

• The project improves pedestrian/bicycle access for environmental justice areas. [These include areas with concentrations of low income and minority populations and households with no motor vehicle available. See maps in Appendix D – EJ Analysis of the current *Transportation Improvement Program for the Madison Metropolitan*Area & Dane County.]

Health Equity 2%

• The project is located in an area with health disparities and limited access to active transportation options.

[Note: See Figure 10-3 on page 122 of the Bicycle Transportation Plan.]

# 3. Safety – 20%

<u>Crash History and/or ,Documented Safety Problem, or other Safety and Accessibility – 1520%</u>

• The project is located in an area with a history of bicycle/pedestrian crashes or an area with documented safety concerns, and the project addresses the safety problem(s) or issue(s).

Safety and Accessibility 5%

- Improves safety and accessibility for wide range of users.
- Improves the perception of safety where documented safety problems do not exist.

# 4. Project Readiness and Constructability 15%

Project Readiness - 10%

- The project is ready to move forward.
   [Note: TA projects are required to begin within 4 years of project award and be completed within six years.]
- Is there engineering feasibility, real estate, environmental, railroad, or funding issues that need to be resolved? These issues make it more likely that projects cannot meet the required WisDOT timelines.
- Does the project have the necessary financial commitment and local support that it can begin to move forward immediately?

Past Project Experience 2%

 The project sponsor has received similar funding in the past and successfully completed their prior projects, or has not received funding in the past.
 Local Ranking 3%

• Project ranking given by municipality (if submitting multiple projects).

# **5.4.** Cost Effectiveness -15%

# Project cost/benefit – 10%

• Takes into account the overall benefits of the project based on the other criteria compared to the cost of the project.

# Other Funding, Cost Efficiencies – 5%

- Maximizes use of available federal funds.
- Project demonstrates public and/or municipal commitment, which adds value, reduces costs, and/or leverages additional funding from past or for future project phases or enhancements.

# **6.5.** Congestion Management – 5%

The project will increase the attractiveness of pedestrian/bicycle travel in a corridor or area with significant peak period traffic congestion.
 [See RTP 2050 (pages D-13 to D-17) and <u>Congestion Management Process for the Madison Metropolitan Planning Area</u> (2011) for information on congested travel corridors and their traffic, transit, pedestrian/bicycle facility characteristics.]

# **7.6.** Opportunity/Risk – 5%

- Is there a risk of a lost opportunity or loss of other funding if not selected in the current program cycle?
- If funded now the project could be done more cost effectively because it can be built at the same time as another project in the same corridor.

# Project Scoring Criteria - Safe Routes to School Non-Infrastructure Projects

# 1. Scope of Audience/Reach/Impact- 4550%

- The project will reach a broad audience and a large portion of students within a school district would be impacted by the programming or activities (15%).
- The program or activities adds value to other improvements or programs that are happening in the community or school (4510%).
- Project is likely to increase the number of children walking and bicycling to school safely and ensure that infrastructure that is added is being used (15%).
- Project engages the broader community beyond the school, students, faculty/staff, and parents (10%).

# 2. Health, Safety and Environmental Justice – 3550%

- The program or activities is/are located at schools with a high rate of students eligible for free and reduced lunches (4520%).
- The program or activities foster(s) improved childhood health, reduced childhood obesity and encourages a healthy and active lifestyle (1015%).
- The program or activities increase(s) <u>real or perceived</u> bicycle, pedestrian, and traffic safety (<del>10</del>15%).

# 3. Project Readiness 15%

- Project is ready to move forward (5%)
   [Note: TAP projects are required to begin within 4 years of project award and be completed within six years.]
- The project sponsor received similar funding in the past and, if so, has successfully completed their prior projects (4%)
- The project has the necessary financial commitment and local support so that it can begin to move forward immediately (3%).
- Project ranking given by sponsor (if submitting multiple projects) (3%).

# 4. Opportunity/Risk 5%

• There a risk of a lost opportunity or a successful program not continuing if not funded at current time.



## **DRAFT 2020**

## **Supplemental Application**

For

## STBG Transportation Alternatives Set Aside Program Projects

## Within the Madison Urban Area

## **Introduction**

This application should be completed by project sponsors applying for funding through the Transportation Alternatives Program (TAP) for projects located within the Madison urban area. Projects in the Madison urban area are eligible for funding from both the statewide funds for which projects are selected by WisDOT and the sub-allocated funding to the Madison Area Transportation Planning Board (MATPB), the metropolitan planning organization (MPO) for the Madison urban area. MATPB selects the projects for these sub-allocated funds. All projects for which sponsors are seeking funding from MATPB's sub-allocation must complete this supplemental application designed to provide additional information not covered in WisDOT's application in order to assist MATPB in project evaluation and scoring.

WisDOT's TAP guidelines, policies, procedures, and the application form that all project sponsors must use are available on WisDOT's website at <a href="http://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/tap.aspx">http://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/tap.aspx</a>.

MATPB's Policies and Scoring Criteria for STBG Transportation Alternatives Set Aside Program Projects, available at [link], includes: restrictions on what types of federally eligible projects will be funded with MATPB's funding sub-allocation; the formula for computing eligible federal cost share of a project; project screening criteria; and the project scoring criteria used by MATPB to evaluate and score project applications for funding.

## Instructions

Provide written answers to the questions listed under the appropriate type of project (bicycle/pedestrian infrastructure project <u>or</u> safe routes to school non-infrastructure project) in .doc, .docx, or .pdf format with your completed WisDOT TAP application to MATPB's designated TAP contact:

Ben Lyman

<u>BLyman@cityofmadison.com</u>
(608) 243-0182

## Supplemental Application for Bicycle/Pedestrian Infrastructure Projects

- 1. Does the project provide a new or missing link, network extension, or eliminate a barrier? If so, describe what network(s) is/are being connected or extended, and/or what barrier is being eliminated and how. [Limit response to 1 page]
- 2. Is there a risk of a lost opportunity or loss of other funding if the project is not selected in the current program cycle? If so, describe that risk. [Limit response to 1 page]
- 3. Could the project be completed more cost-effectively if funded now than if it was delayed because it can be built at the same time as another project in the same or an intersecting adjacent corridor? If so, describe. [Limit response to 1 page]

## Supplemental Application for Safe Routes to School Non-Infrastructure Projects

- 1. Does the program or activity add value to other improvements or programs that are happening in the community or school(s)? If so, describe how the program or activity adds value to those other improvements or programs, as well as describing those improvements or programs. [Limit response to 1 page]
- Does the program or activity engage the broader community beyond the school, students, faculty/staff, and parents? If so, describe how the program or activity engages the broader community, including listing involved organizations. [Limit response to 1 page]
  - a. Include letters of support, offers of engagement/volunteers, or other documentation of outreach and engagement. [no response limit]
- 3. Does the program or activity foster improved childhood health, reduced childhood obesity, and/or encourage a healthy and active lifestyle? If so, describe how the program or activity achieves those goals, and how success at meeting those goals will be measured and evaluated. [Limit response to 1 page]

## Re:

Update on East-West Bus Rapid Transit Planning Study and Downtown Routing Options Being Considered

## **Staff Comments on Item:**

The current phase of the East-West BRT Study is wrapping up. Most aspects of the "locally preferred alternative" project have been worked out. The next steps will be for the City of Madison to apply to the Federal Transit Administration to formally enter into project development and then start that more detail project design process along with the environmental analysis. Most of the technical analysis documents have been posted on the project website for those interested (<a href="http://www.madisonbrt.com/project-documentation/">http://www.madisonbrt.com/project-documentation/</a>).

The most controversial and debated issue surrounding the project thus far is the downtown routing. City Transportation staff prepared a detailed memo on the downtown routing options, concluding that the State Street and Capitol Square option (Alternative 1) provides the most benefits for BRT (with buses detouring to the outer loop during events on the square as is done now).

## **Materials Presented on Item:**

1. Draft East-West Bus Rapid Transit Downtown Routing Analysis, dated October 31, 2019

## **Staff Recommendation/Rationale:**

For information and discussion purposes at this time. The MPO Board will need to approve an amendment to the Regional Transportation Plan, adding the BRT project to the fiscally constrained plan, early next year.

## **City of Madison**

## **DEPARTMENT OF**







## DRAFT East-West Bus Rapid Transit

Downtown Routing October 31, 2019

## **Table of Contents**

1.		Introduction	1
2.		Goals and Objectives	1
3.		Alternatives	1
	Α.	Alternative 1: State Street and Capitol Square	2
		Figure 3-1 Downtown Alternative 1	2
		Figure 3-2 Detours events for Alternative 1	2
		Figure 3-3 Bus Pulses (Occurrences) On State Street	3
		Figure 3-4 West Washington Avenue with a Bus Lane and Bike Lane	4
	В.	Alternative 1A: Outer Loop	4
		Figure 3-5 Downtown Alternative 1A	4
	C.	Alternative 2: Broom/Henry and Wilson/Doty	5
		Figure 3-6 Downtown Alternative 2	5
		Figure 3-7 Broom Street with a Bus Lane	6
	D.	Alternative 3: Two-way Broom and Wilson/Doty	6
		Figure 3-8 Downtown Alternative 3	7
		Figure 3-9 Broom Street with Contra Flow Bus Lane	7
	Ε.	Dismissed Alternatives	7
		Figure 3-10 Dismissed Alternatives	8
4.		Evaluation	9
	Α.	Ability to Serve Important Regional Destinations	9
	В.	Station Pairs	9
		Figure 4-1 Station Pair Distance Alt 1 and Alt 1A	LO
		Figure 4-2 Station Pair Distance Alt 2	ΙO
	C.	Station Areas2	11
		Figure 4-3 Bus Shelter Capitol Square	11
		Figure 4-4 Size of BRT Stations	12
		Figure 4-5 State Street Bus Stop, Alternatives 1 and 1A	L2
		Figure 4-6 Possible Henry Street Station	13
		Figure 4-7 Possible Broom Street BRT Station	13
		Figure 4-8 Possible Broom Street BRT Station	L4
		Figure 4-9 Mifflin and Pinckney Bus Stop	15
		Figure 4-10 Possible Dayton St BRT Station	15

	Figure 4-11 Outer Loop Doty MLK Jr Blvd BRT Station	15
	D. Transfers and Local Route Integration	16
	Figure 4-12 Local Bus Integration Alts 1 and 1A	16
	Figure 4-13 Local Bus Integration Alts 2 and 3	16
	Table 4-1 Comparison of BRT Station Pairs	17
	E. Travel Times of BRT	17
	Table 4-2 BRT Route Travel Time	17
	F. Traffic impacts	17
	G. Parking impacts	18
	Table 4-3 Parking Comparison	19
	F. Bike Network	19
	Figure 4-14 Bike Accommodations	20
	Table 4-4 Summarizes the effects of all the alternatives.	20
5.	6 Observations	21

### 1. Introduction

The City of Madison is planning to implement its first Bus Rapid Transit (BRT) line in 2024 along the east-west corridor. BRT is a high-quality bus-based transit system that delivers fast, reliable, and cost-effective transit services. It does this through the provision of dedicated lanes, off-board fare collection, limited stops, and frequent service. With the right features, BRT is able to avoid the causes of delay that typically slow regular bus services, such as traffic congestion and waiting for people to pay as they board.

BRT is a key transportation strategy in the Imagine Madison Comprehensive Plan. The first stage implementation runs between the West Towne Mall area and East Towne, generally following Mineral Point Road or Odana Road, Whitney Way, University Avenue, and East Washington Avenue. The buses are planned to be electric 60-foot articulated buses which are both quieter and have more capacity that Metro Transit's current fleet.

BRT routing through downtown Madison is complex because of the constrained geography, network of one-way streets, frequent special events, and competing needs of other modes like autos and bikes. Interactions with the local bus system and planning for future BRT lines is also a factor. The purpose of this memo is to describe and evaluate the alternative routes in downtown Madison.

### 2. **Goals and Objectives**

The locally preferred alternative route, stations, and roadway changes downtown is chosen based on the following objectives.

- Ability to serve important regional destinations (State Street, Capitol Square, Monona Terrace, government offices)
  - BRT needs to serve where people are going. This also includes serving major employment centers such as city and state offices on Wilson Street.
- Ability to provide dedicated running way (bus lanes)
  - Dedicated running ways allow BRT to compete with, and even provide faster travel times than auto traffic. Having at least 50 percent dedicated running ways will help the project achieve an FTA Small Starts grant.
- Provide BRT stations in the best locations. The best locations:
  - Are logically spaced and located. Intuitively most riders tend to return to the stop where they got off. On oneway streets, sometimes station pairs are a block apart. However, station pairs that are more than one block apart add confusion to unfamiliar users. New and occasional users may get frustrated and have a poor experience if they cannot find the stations.
  - o Are amply sized stations to serve potential riders. This includes the pedestrian environment and space at stations, including room to accommodate shelters, platforms, and sidewalk space.
  - Are located in visible, trafficked areas that promote security. One advantage of BRT is its increased frequency later into the night and it is important that riders are able to safely and comfortably walk to the stations.
  - Allow for convenient transfers from BRT to local Metro routes. Allowing easy transfers from regular Metro routes to BRT routes opens up the advantages of the BRT system to all residents served by Metro.
- Travel times of BRT
- Bike routing and changes to bike facilities associated with each alternative
- Impacts to on-street parking and parking revenue lost

### **Alternatives** 3.

West of the Capitol Square, BRT is planned to use the University Avenue and Johnson Street one-way couplet, and east of the Capitol Square, BRT will use East Washington Avenue. All other routes into and out of downtown are likely to be slow, circuitous, unreliable, and/or unbuildable. However, MPO and Metro staff recognized in the 2013 BRT feasibility study that there are several ways to route BRT through downtown Madison. This memo lays out the options identified in the area between Bassett Street and Blair Street.

## A. Alternative 1: State Street and Capitol Square

Alternative 1 uses the route used by most bus routes today. From Johnson and Gorham Streets, the route follows State Street which is restricted to buses, bikes, and authorized vehicles, then continues around the Capitol Square, and to East Washington Avenue.



Figure 3-1 Downtown Alternative 1

The route is the most direct of the four alternatives, central to the downtown and isthmus, and uses existing facilities on State Street and the bus lanes on the Capitol Square. The stations would be at existing high use, prominent bus stops in central, pedestrian friendly locations. The route would be detoured about 70 times a year because of events on the Capitol Square and State Street, similar to the detours currently performed by Metro Transit. For some of the time, usually during the summer on weekends, BRT would be detoured to the Capitol Loop (Doty, Webster, Dayton, and Fairchild Streets), and to other streets for major events like marathons. The detour would require two auxiliary stations to be constructed at MLK and Wisconsin. The following graph illustrates times when Metro is routed off of the square, which amounts to about 10 percent of the time.

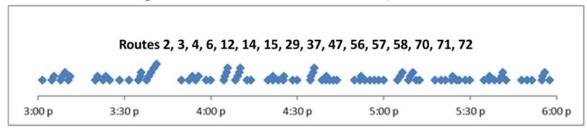


Figure 3-2 Detours events for Alternative 1

Few roadway changes would be associated with Alternative 1. Traffic signal timing would be reviewed to optimize it for bus progression between State Street and Blair Street and a new westbound transit activated left turn arrow would be added at State Street and Gorham Street. With these signal improvements, it would have similar travel times to Alternative 1A.

This alternative includes the rerouting of several bus routes. At least two routes currently serving the Capitol Square would be replaced with BRT. Additionally, about two thirds of the current bus traffic during weekday peak periods would be diverted from State Street to West Washington Ave to make room for BRT on State Street. State Street is saturated with buses during the peak periods, particularly westbound in the afternoon and BRT cannot be added without removing some local service. In order to manage transit volumes and delay on State Street, regional and commuter bus routes such as Routes 12, 14, 15, 29, 37, 47, 56, 57, 70, 71, and 72 would be rerouted from State Street to Broom/Bassett Street and West Washington Avenue. This change would result in a very high level of transit service on State with a bus every few minutes, but it would be much more consistent and there would no longer be three or more buses queued at signals idling. Further, some of the diesel buses would be replaced by electric BRT buses, which would improve the pedestrian and dining experience on State Street. The following graphic illustrates the bus traffic on State Street with the rerouted bus routes, and the added BRT routes. The net result is about a 50 percent reduction in State Street buses.

## **Existing Westbound Bus Service on State Street, Afternoon Peak**



## Alternative 1 and 1A Westbound Bus Service on State Street, Afternoon Peak

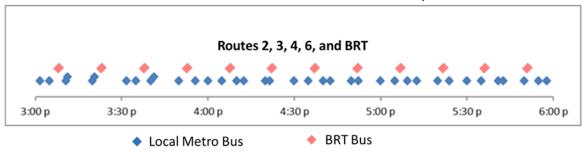


Figure 3-3 Bus Pulses (Occurrences) On State Street

West Washington Avenue would be restriped from its current configuration to one travel lane each way, plus a bus/bike/right turn lane in one direction and a bike lane in the other direction. The bus lane would be westbound from Fairchild to Broom, and eastbound from Bedford to Broom. This change would be needed to accommodate shifting bus service away from State Street.

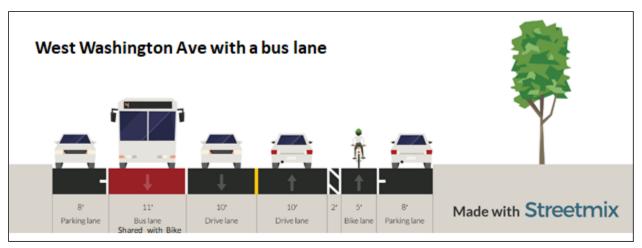


Figure 3-4 West Washington Avenue with a Bus Lane and Bike Lane

## B. Alternative 1A: Outer Loop

Alternative 1A has the same route at Alternative 1 except that instead of using the outer loop detour only for special events, it would use it all the time. Parking would be removed from the right side of Webster, Doty, Dayton, and Fairchild Streets in order to add a new bus, bike, and right turn lane.

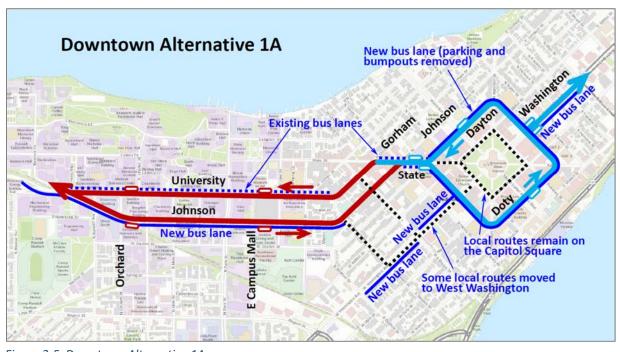


Figure 3-5 Downtown Alternative 1A

Routing BRT away from other local service will cause BRT to compete with the local service. Downtown riders would need to decide to take BRT and navigate to those stations or walk to the Capitol Square and use local routes. For example, a westbound rider may be happy using Route 2, 14, 15, 71, or 72 which stop on the Square, or BRT which stops on the Loop; since there will be more buses overall that they can catch on the Square, which is a shorter walk and is a nicer waiting environment, they will likely continue to use local service. This could suppress BRT ridership and increase waiting times, reducing the effectiveness of the city's investment in BRT. In contrast, with Alternative 1, the local and BRT routes would all be in one place and they could take whichever comes first.

With this option the complementing stations at MLK Jr Boulevard and Wisconsin Avenue are almost 0.4 miles apart walking – beyond the typical block or less between station pairs, and even beyond the normal 1/4 mile bus stop spacing limit for local buses. Very few if any transit lines are designed with this great of a distance between complementing stations.

Alternative 1A has significantly fewer detour events than Alternative 1 as it can operate normally during the Dane County Farmer's Market, Concerts on the Square, and other Capitol Square events. It is detoured when events close State Street, which is about 3 percent of the time.

## C. <u>Alternative 2: Broom/Henry and Wilson/Doty</u>

Alternative 2 uses a series of one-way couplets (Broom/Henry Streets, Wilson/Doty Streets, and Webster/Butler Streets) to pass through downtown south of the Capitol Square. While less central to the downtown and Isthmus, this route was designed to minimize the number and severity of special event detours while serving the high demand employment area near MLK Jr Boulevard.



Figure 3-6 Downtown Alternative 2

Alternative 2 takes longer to travel than Alternative 1, adding at least a minute or two to every trip. Its stations are not as central and visible. For example, the stations near State Street are at Broom and Gorham westbound and Henry and Dayton eastbound – these station locations provide adequate service to the area but would be less prominent and more difficult to find.

Similar to Alternative 1A, routing BRT away from most local service on the Capitol Square will cause BRT to compete with the local service. Riders downtown would need to decide to take BRT and navigate to those stations or walk to the Capitol Square and use local routes. This may suppress BRT ridership and reduce the effectiveness of the city's investment.

Several roadway changes would be made in order to provide fast, reliable service on the Alternative 2 route.

- On Broom Street, parking would be removed between Main Street and Gorham Street to provide a bus, bike, and right turn lane.
- At Gorham Street, buses would use a new transit activated phase to make a left turn from the right lane.

- Parking would be removed on Doty and South Webster Streets around the Capitol Loop to provide a new bus lane; the bike lane would remain.
- The future cross section of Wilson Street is being studied independently of the BRT project and will include new bicycle facilities. If BRT is routed on Wilson Street, two travel lanes would be required, with one likely being bus and right turn only. This would require removing parking on the north side of Wilson Street.
- A new traffic signal would be installed on West Washington Avenue and Henry Street so that eastbound buses can make the through movement from North to South Henry Street, which would occur in mixed traffic.

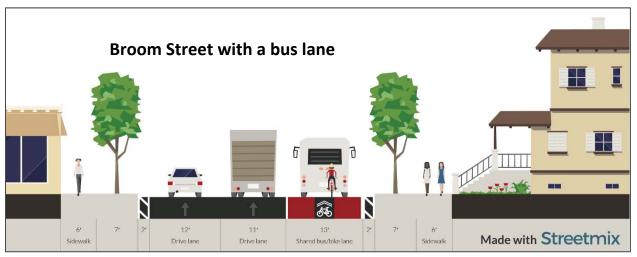


Figure 3-7 Broom Street with a Bus Lane

One advantage of Alternative 2 (and Alternative 3) is the provision of an additional station pair serving the Bassett neighborhood. This high-demand neighborhood would benefit from fast, frequent, all-day service. The blocks between Broom and Henry Street are long (1/8 mile) and Broom and Henry Streets are not a logical pair as Broom and Bassett Streets are, so this station pair may cause some confusion.

### D. Alternative 3: Two-way Broom and Wilson/Doty

Alternative 3 is identical to Alternative 2 except that eastbound buses would use a new contraflow bus lane on Broom Street between Johnson Street and Main Street, rather than using Henry Street. While this reconfiguration of Broom Street would pose some challenges, it would locate the opposing stations closer to each other making the system easier to use and avoid potential operational issues on Henry Street.



Figure 3-8 Downtown Alternative 3

To add the southbound contraflow lane on Broom Street, parking would be removed and the street would be restriped with a northbound bike lane, two northbound travel lanes, and one southbound bus-only lane. The bus lane would need to be well signed and marked with accompanying enforcement because buses will not have the ability to pass parked cars. At the northbound approach to Johnson Street, Broom Street would be widened by one lane to account for one through lane dedicated to the left turn at Gorham Street, one through lane toward Gilman Street, and one dedicated right turn lane to Johnson Street.

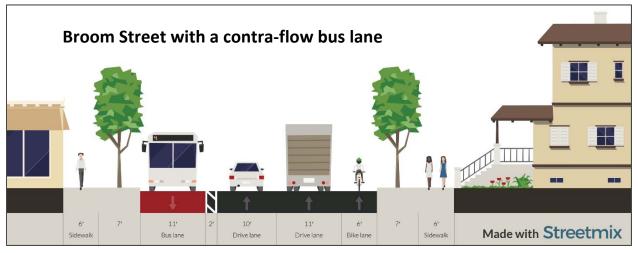


Figure 3-9 Broom Street with Contra Flow Bus Lane

## E. Dismissed Alternatives

Many alternative routes were developed with the very general goals of being fast and reliable, avoiding frequent detours, and serving major downtown destinations. The route options below were dismissed from further analysis in order to focus on more likely routes.



Figure 3-10 Dismissed Alternatives

Tunnel from East Washington and Blair to West Washington and Henry or underneath University Avenue A tunnel through downtown would eliminate congestion for BRT. It would be fast and free from detours. However, the cost would easily exceed \$1 billion and therefore is unfeasible.

## Johnson and Gorham Streets to Wisconsin and Blair Streets

Routing on the north side of the Capitol would provide inadequate service to employment areas on the south side of the Capitol Square.

## **Bassett Street**

A Broom and Bassett Street couplet is logical for BRT because it avoids the unreliable State Street and Capitol Square area; however, it was dismissed from consideration because the eastbound route does not get close enough to State Street and the Capitol Square to effectively serve it.

## **West Washington Avenue**

A BRT route on West Washington Avenue would eliminate detours and the unreliability of service on State Street but would be slower and would still rely on the Capitol Square and its many detours.

## **Two-way Wilson Street**

A contraflow eastbound bus and bike lane on Wilson Street is attractive because it provides a two-way path around the south side of the Capitol Square free from most event detours. However, Wilson Street has a constrained cross section and a shared lane conflicts with the need for a high quality two-way bike facility.

## **Contraflow Main or Doty Street**

A contraflow lane on Main Street would put the BRT station, and possibly the BRT running way, on State property where the city does not have jurisdiction. A contraflow lane on Doty Street would not fit within the cross section and would present sight-line issues for traffic exiting garages.

## **John Nolen Drive**

John Nolen Drive was dismissed as a viable BRT corridor because it is frequently congested during peak periods and does not provide adequate service to the employment areas downtown.

### 4. **Evaluation**

### A. Ability to Serve Important Regional Destinations

Alternative 1 provides direct access to major cultural destinations along State Street and serves employment and events around the Capitol Square.

Alternative 1A provides direct access to major cultural destinations along State Street. It also serves employment and events around the Capitol Square, although the station pair serving the Capitol are 0.4 miles apart from each other.

Alternative 2 provides less direct access to major cultural destinations along State Street. State Street patrons would need to alight one to two blocks away. Alternative 2 does not directly serve the Capitol Square, but serves stations one to two blocks southeast of it. Alternative 2 also favors employment areas on the south side of the Square, with the north portion of the Square not being served directly.

Alternative 3 has similar characteristics as Alternative 2. However, the eastbound State Street station is one block farther away at Broom Street but the eastbound Bassett Neighborhood station at Broom and Main Streets, are more central to the neighborhood and closely spaced.

### В. **Station Pairs**

Many design manuals recommend locating bus stops/stations in pairs, typically with one stop on each side of the street along two-way route segments. This helps simplify planning of the return trip. Some often think of a station as one bus stop with two platforms. As with light rail, a passenger will board and alight at the same location. Center running BRT and LRT systems often have one station in the median that serves both directions. Side running BRT systems, which Madison's is likely to be, seek to have the same consistency. Where you get on the bus is close to where you got off the bus. Midwest BRT lines, such as Cleveland's Healthline, Indianapolis' IndyGo, and Grand Rapids Silver Line all have opposing stations that complement each other and generally are within 400 feet of each other.

All alternatives would have complementing stops on the University Ave and Johnson St one-way pair that are about 450 feet apart, or 0.1 miles. This is not ideal, yet is common with transit stops that are in a grid or one-way pair system.

Around the Capitol Square the differences are more pronounced. Because of the State Capitol, complementing BRT stops cannot be closer than two blocks (0.2 miles) apart. Again, this is not ideal but has been part of Madison's transit system for over 100 years and is logical because of the one-way loop nature around the Capitol.

Alternative 1 would have stations on the Capitol loop at MLK Jr Boulevard and Wisconsin Avenue at or near Metro's highly used bus stops on Main and Mifflin Streets. For special events BRT as well as local buses would relocate to the outer loop, at Dayton and Wisconsin and at Doty and MLK Jr Blvd. This places the complementing BRT stations about 0.4 miles from each other, but is unavoidable. This rerouting would occur about for about 10 percent of the time, generally falls on weekends in the summer, and has been Metro's custom for the last couple of decades.

Alternative 1A would have BRT run on the outer loop all of the time with stations at Dayton and Wisconsin and at Doty and MLK. While eliminating the need to detour BRT buses for special events, it places the complementing BRT stations 0.4 miles from each other 100 percent of the time. This long distance is not a typical arrangement for BRT station pairing.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> https://nacto.org/wp-content/uploads/2015/04/design and placement of transit stops kfh.pdf https://nacto.org/wp-content/uploads/2015/04/service design guidelines vta.pdf

<sup>&</sup>lt;sup>2</sup> This arrangement would result in additional 55,000 pedestrian miles traveled each year if applied to our existing bus system. This could be considered good or bad, depending on the value placed on activity vs convenience.

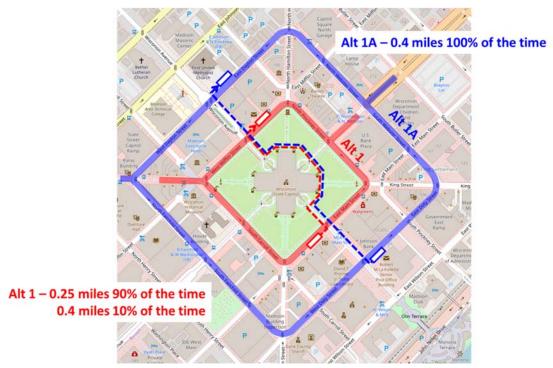


Figure 4-1 Station Pair Distance Alt 1 and Alt 1A

Alternative 2 has two station pairs that are not directly adjacent to each other. These include the two Broom and Henry Station pairs, one near State Street and one near Main Street. Both pairs would be about 0.2 miles apart and not intuitively connected because Broom and Henry Street are not a one-way couplet as say, University and Johnson or Mifflin and Main are. Regular users would learn and use these stations. Infrequent users or visitors could have difficulty finding where to board for the return trip. Alternative 3 solves this problem by placing both southbound stations on Broom Street.

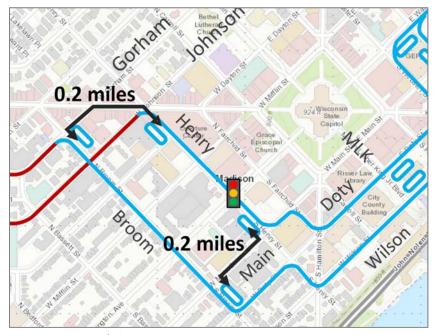


Figure 4-2 Station Pair Distance Alt 2

Alternatives 2 and 3 would also have bus stop pairs on Wilson and Doty Streets. While not on the same street, they would be one short block away, about 350 feet.

## C. Station Areas

A defining characteristic between the alternatives is the space available for station amenities. The station accommodations between the alternatives vary greatly. A high quality station with protection from the weather and space for many people to circulate, particularly during afternoon peak periods when workers are heading home for the day, is highly desirable. The adjacent photo illustrates a current bus stop on the Capitol Square while it is raining. The 10-foot by 25-foot shelter is providing shelter for 18 people waiting for the bus. Near downtown, BRT stations are likely to be highly used. Because of the raised boarding area, shelter, and off



Figure 4-3 Bus Shelter Capitol Square

board ticketing area, they will require more space. The minimum amount of space a <u>small</u> downtown BRT station would needs is 15 feet from face of curb to back of sidewalk, which allows a 5-foot boarding area, a 5-foot covered station area, and a 5-foot sidewalk.

Some locations may only be able to provide an overhang. These dimensions would provide minimum shelter and would be about the same width as Metro Transit's neighborhood bus shelters.

Larger stations characteristic of downtown areas generally require 20 feet or more. As mentioned, the current bus shelters on the square occupy about 20 feet including the boarding area in front and a 5-foot sidewalk behind. The following graphic illustrates BRT stations in four locations. Note that even the smallest station (Grand Rapids, MI) still requires a considerable amount of room. Figure 4-4 illustrates the room needed for different types of stations.



BRT Station - Cleveland Healthline



BRT Station - IndyGo - Indianapolis



BRT Station – Grand Rapids MI



BRT Station - Viva - York Ontario

Figure 4-4 Size of BRT Stations

This quality of the stations could affect ridership, but it is difficult to predict this affect in quantitative terms.

## 1. State Street Stations

Alternatives 1 and 1A would place a station pair on the 200 block of State Street, westbound near side Johnson Street and eastbound near side Fairchild Street. These stations are in a highly visible location that is easy to find. The sidewalks are wide and there is a high volume of pedestrian traffic. See Figure 4-5.

Alternative 2 would place an eastbound station at Henry Street and Dayton Street and the opposing westbound station on Broom Street just south of Gorham Street. These locations are one to two blocks from State Street. The station would be close to the central library, Overture Center, and



Figure 4-5 State Street Bus Stop, Alternatives 1 and 1A

other destinations on or near State Street. However, the station areas are less visible and less logical for people trying to find them. Henry Street in particular is a very low volume local street and may present security challenges. Additionally, the space available for a BRT station is limited, probably accommodating just an overhang type of shelter. Figure 4-6 illustrates the space constraints at Henry Street and the type of station that could be installed with this amount of space.



Figure 4-6 Possible Henry Street Station

Both Alternatives 2 and 3 would have a northbound station on Broom Street between Johnson and Gorham. This is a somewhat constrained location, with about 14.5 feet available for a BRT station. Figure 4-7 shows the location and probable station type at this location.

Alternative 3 would also have a southbound station on Broom Street just south of Johnson Street in the new contra flow lane and about two blocks south of State Street attractions. Depending on destination, State Street patrons would have none, one, or two high traffic volume streets to cross to access this station (Gorham and Johnson Streets). Although this location is on a higher trafficked street than Henry Street, it would have similar problems of being less visible and harder to find. Because of adjacent buildings, this location also has limited area for a station and could probably only accommodate an overhang type of shelter.



Figure 4-7 Possible Broom Street BRT Station

## 2. Capitol Square Stations

The Capitol Square stations will have the highest number of boardings and alightings, therefore larger stations and shelters are desirable. There is some advantage to BRT stations being proximate to the stops with local service in that a transit patron can go to one location to use either the BRT or the local Metro Transit Service. If located apart, then a rider will need to choose whether to use BRT or the local service, and then travel to that location.

All four alternatives would have stops at Martin Luther King Jr Boulevard. Two of the Alternatives (Alt 1 and 1A) would also have stops at Wisconsin Avenue.

Alternative 1 uses the existing Capitol Square. It would place BRT stations at the two existing prominent bus stops on the Capitol Square – Mifflin and Pinckney westbound, and Main and Carroll eastbound. These stops are already used by many bus routes. They are time points for all routes that serve them. They are both very large and visible, with wide sidewalks and low traffic volumes. The stations are two short blocks apart. During most Capitol Square detour events when BRT and other Metro bus routes are not able to use the Capitol Square, temporary stations will be opened on the Capitol Loop (Doty and Dayton Streets)



Figure 4-8 Possible Broom Street BRT Station

at MLK Jr Boulevard and Wisconsin Avenue. The temporary stations may not have all the BRT features like raised platforms, but they will have real-time information so that it will be easier for riders to be redirected during the detours.

Alternative 1A would use the outer loop all of the time. If possible, this alternative would place a station near the Madison Municipal Building at MLK Jr Boulevard, and near the former Madison College campus at Wisconsin Avenue on the outer loop. There is probably sufficient space near the Municipal Building to install a quality stop.<sup>3</sup> The Wisconsin Avenue station would have greater challenges. Figure 4-5 shows Dayton Street near Wisconsin, there may be room near the Madison College sign, yet the driveway poses challenges.

<sup>&</sup>lt;sup>3</sup> The Madison Municipal Building is on the National Register of Historic Places, and any change within its historic boundary needs approval by the State Historic Preservation Officer.

Alternatives 2 and 3 will have Capitol Square area stations at MLK Jr Boulevard on Doty and Wilson Streets. Because the Madison Municipal Building is on the National Register of Historic Places, these stations would be subject to the approval of the State Historic Preservation Officer. Figure 4-11 shows the station location on Doty Street, and a possible station type by the Madison Municipal Building, if approved by SHPO.

Most local buses will continue to use the Capitol Square stations on Main and Mifflin Streets. The MLK stations will effectively serve the government buildings (City County Building, Madison Municipal Building, Monona Terrace, and various state offices) on the south side of downtown. Businesses and offices on the Capitol Square are 0.1 to 0.3 miles away. As mentioned, because the BRT stations are separate from the

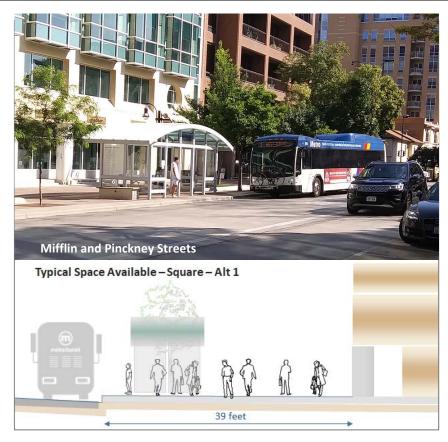


Figure 4-9 Mifflin and Pinckney Bus Stop

square's local bus stops, riders downtown will have to choose whether to walk to Doty and Wilson Streets or to walk to the square. This split may suppress ridership on BRT.



Figure 4-10 Possible Dayton St BRT Station



Figure 4-11 Outer Loop Doty MLK Jr Blvd BRT Station

### 3. Webster Street Station

In all alternatives, a station pair will be provided in the area of East Washington Avenue at Webster Street. Eastbound, all alternatives have an eastbound station eastbound far side of Webster Street. Westbound, Alternative 1 stops westbound far side of Webster, Alternative 1A stops near side of Webster, and Alternatives 2 and 3 stop southbound on Butler Street at Main Street. The station pair is particularly important for Alternative 1 westbound because many riders from government buildings on the south side of the square will use Webster Street over the Wisconsin Ave station. The Webster Street station also serves the GEF buildings, the First Settlement neighborhood, and other areas and destinations.

## 4. Bassett Neighborhood Station

Alternatives 1 and 1A do not serve the Bassett neighborhood. However they relocate many routes from State Street to West Washington Avenue, which will improve access to the Bassett neighborhood.

Alternatives 2 and 3 both provide an additional BRT station in the Bassett neighborhood. Both alternatives have a westbound station at Broom Street and Doty Street. This is an existing very high use bus stop served by Routes 1, 10, 19, and 38. The stop serves about 280 people per day, many of whom are UW students. Eastbound, Alternative 2 provides a station at Henry and Main Street one long block and one short block away. Alternative 3 moves this station to Broom and Main, where the station would closer to its opposing westbound station and more central to the neighborhood.

## D. Transfers and Local Route Integration

Transfers and access to the BRT are important in that it will be a couple of years before the north and south portions of the city will have the frequency and service levels of BRT. With Alternative 1, most transfers could occur on both the Capitol Square or on University Avenue and Johnson Street. This is illustrated in Figure 4-12.

For Alternatives 2 and 3, transfers to and from BRT would occur along University and Johnson Streets. Transfers are less likely to occur at the Capitol Square. This routing will generally mean employees boarding near the square will have to choose between going to a local route bus stop, or a BRT station.

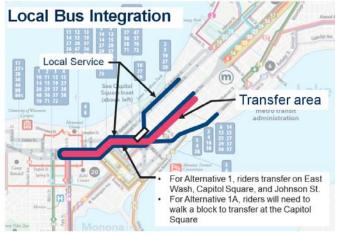


Figure 4-12 Local Bus Integration Alts 1 and 1A

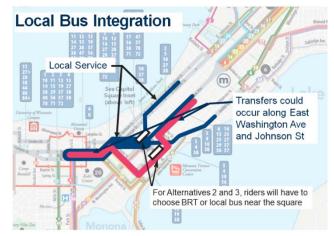


Figure 4-13 Local Bus Integration Alts 2 and 3

Table 4-1 provides a summary of station locations and characteristics.

Table 4-1 Comparison of BRT Station Pairs

	Alt 1	Alt 1A	Alt 2	Alt 3
Distance between Capitol Station Pair	0.25 miles	0.4 miles	0.1 miles	0.1 miles
Size of station serving State St	Moderate – 15 people	Moderate – 15 people	Small – 8 people	Small – 8 people
Size of station serving Capitol Square	Large – 30 people	Doty/MLK – Moderate 15 people Dayton/Wisc - Small 8 people	Doty/MLK – Moderate 15 people Wilson/MLK - Moderate 15 people	Doty/MLK – Moderate 15 people Wilson/MLK - Moderate 15 people
Integration with local routes	Easy	Difficult	Difficult	Difficult
Detours	10 percent	3 percent	3 percent	1 percent

### E. Travel Times of BRT

Travel times are difficult to model with software or other tools because of the unpredictable nature of downtown with traffic patterns, signal timing, bikes, turning maneuvers, buses, and other factors. To get a feel for the relative difference in travel times between the options, a bus test was completed on February 22, 2019. The bus drove Alternatives 1 and 3 in both directions without stopping for stations. The weather was fair and traffic patterns were normal. Times were recorded between Frances Street and Blair Street. This method does not take into account bus lanes and other operational improvements and it only records one sample run. Alternative 3 eastbound was not tried because it is not possible without the contraflow lane – but it would likely be slightly faster than Alternative 2 because Broom is a flatter, faster street with no stop signs. At the time, Alternatives 2 and 3 eastbound were assumed to be on West Washington rather than Main, so that route was driven, but the travel times between the West Washington route and the Main Street route should be about the same.

Table 4-2 BRT Route Travel Time

	Altern	ative 1	Alterna	itive 1A	Altern	ative 2	Altern	ative 3
	EB	WB	EB	WB	EB	WB	EB	WB
Bus test time	8:02	7:00	6:58	6:10	10:21	9:25	N/A	9:25
Distance (feet)	6,490	5,510	7,400	5,700	7,530	8,230	7,530	8,230
Turns	3	3	3	3	4	6	4	6
Traffic signals and stop signs	12	10	12	10	14	12	12	12
Stations	3	3	3	3	4	4	4	4

Alternative 1 is about two minutes faster than Alternatives 2 and 3 because it is shorter and has fewer turns, despite lower speed operations on State Street. Alternative 1A is the fastest, yet progressing signal timing around the square could make the two alternatives similar in travel time.

### F. **Traffic impacts**

Very few traffic impacts would be felt by any of the alternatives because no travel lanes are being removed between Bassett Street and the Capitol Square. On Webster Street, a third travel lane currently opens in the afternoon peak period when parking is removed. This lane would be a bus lane at all times for Alternatives 1A, 2, and 3; however, this lane has been closed for most of 2019 for construction and impacts are expected to be minimal.

All alternatives include the planned transit activated westbound left turn arrow at State and Gorham Streets, which will reduce the green time for Gorham Street when activated. However, because Alternative 1 moves many buses off of State Street during the afternoon peak, the left turn arrow may be called less often.

All alternatives include converting the eastbound right lane of East Washington Avenue to bus, bike, and right turn only between Webster Street and Blair Street. Staff are evaluating the operational impacts of this change. During the summer of 2019, the reconstruction of Johnson Street and Williamson Street caused major delays on East Washington Avenue so it was not possible to evaluate the effect of removing one lane in the field. Staff may pilot the closure of the lane on a trial basis and evaluate the length of the queueing.

## G. Parking impacts

Alternatives 2 and 3 remove about 100 parking spaces from the downtown area, while Alternative 1 has very minor parking impacts because it primarily uses existing bus lanes and bus stops. Estimating the impact to parking revenue is difficult because it is impossible to say in each scenario what the driver would have done if the on-street parking space was not available. If other metered spots were available, or if they would park in a ramp, there would be no impacts; but if they would have not made the trip or parked in an unmetered space or private lot, the city would lose that revenue. The revenue impacts below assume all revenue from that space is lost.

## 1. Alternative 1 (4 total spaces removed)

About four metered parking stalls would be removed eastbound on East Washington Avenue at the Webster Street approach. This improvement would allow buses and through traffic to bypass a vehicle making the eastbound left turn. The elimination of these four stall would reduce parking revenue by about \$8,000 on an annual basis.

## 1A. Alternative 1A (85 total spaces removed)

About 85 spaces, all of which are metered spaces, would be removed along Doty, Webster, Dayton, and Fairchild Streets. For comparison purposes, the current Government East ramp has 516 spaces. The elimination of the 85 spaces would decrease parking revenue by about \$170,000 each year.

## 2. Alternative 2 (110 total spaces removed)

22 metered parking spaces would be removed on North Broom Street and about 10 two-hour permit spaces would be removed on South Broom Street for a new northbound bus lane.

About 3 spaces would be removed on South Henry Street for the eastbound station at Henry and Main. About 39 metered spaces would be removed on Doty Street and South Webster Street for a new bus lane.

There are currently 36 parking and loading spaces on the right side of Wilson Street between Butler Street and Henry Street. Although BRT would not require any parking removal on Wilson Street in its current configuration, the assumption is that one travel lane will be removed for a new bike facility pending the outcome of the ongoing Wilson Street transportation study. In that case, these 36 spaces would be removed and replaced with a second westbound bus-only lane.

The removal of about 100 metered spaces would reduce parking revenue by \$200,000 on a yearly basis.

## 3. Alternative 3 (107 total spaces removed)

Alternative 3 would have the same impacts as Alternative 2 but would not remove any parking on Henry Street. As with Alternative 2, the revenue lost from the removal of 97 metered spaces would reduce parking revenue by about \$195,000 on a yearly basis.

Table 4-3 summarizes the parking impacts.

Table 4-3 Parking Comparison

	Alt 1	Alt 1A	Alt 2	Alt 3
Total Parking Spaces Removed	4	85	110	107
Total Metered Parking Spaces Removed	4	85	100	97
Total Parking Revenue Lost yearly	\$8,000	\$170,000	\$200,000	\$195,000

### F. Bike Network

Alternatives 1 and 1A largely uses existing facilities and would have little effect on bikes; however, it would require a new bus lane on West Washington Avenue to accommodate moving local service off of State Street. This facility would be make West Washington better than it is today, but would not make it possible to have parking and protected bike lanes in both directions. Alternative 2 represents a degradation to bicycle facilities on Broom Street, but both Alternatives 2 and 3 allow the possibility of a potentially better bicycle facility on West Washington Avenue.

### 1. Alternatives 1 and 1A

State Street would remain unchanged with the existing bus, bike, and authorized vehicle restrictions. The more consistent bus service throughout the day may help reduce conflicts between buses and bikes compared to today, where several buses are sometimes going through at once and bikes often attempt to pass many at once in the oncoming lane.

The Capitol Square would remain unchanged with its shared bus, bike, and right turn lanes. The restricted lanes would be colored red which may be more effective at preventing through traffic from using them.

The Capitol Loop currently has bike lanes adjacent to parking on the entire loop, for the most part, with bikes mixing with right turns onto East Washington Avenue. In Alternative 1A, these lanes would be converted to bus, bike, and right turn lanes. The street width around the capitol loop is about 44 feet, which may leave room for a separate bike lane, but likely would not. Alternative 1 would have no impact on the Capitol Loop.

West Washington Avenue is currently one wide unchannelized travel lane between Bedford Street and Henry Street in each direction. It would be restriped with a shared bus, bike, and right turn lane westbound (downhill) and a new bike lane eastbound (uphill). This cross section would be an improvement over existing conditions. The shared lane would be in the downhill direction where bikes and buses are going about the same speed. Between Bedford Street and Broom Street, the cross section would be reversed with an eastbound bus lane and westbound bike lane.

East Washington Avenue would benefit from a new bus, bike and right turn lane eastbound (downhill) between Webster Street and Blair Street. While this shared lane is not the ideal bike facility, it would be an improvement over existing conditions. No improvements are planned with the BRT project in the westbound direction where bikes are currently in a traffic lane. The conditions on East Washington Avenue are the same for all four alternatives.

Currently there are plans to consider providing enhanced or protected bike facilities on Broom, Wilson, and Main Street. All alternatives would continue to allow the consideration of these enhanced or protected bike facilities, except that for Alternatives 2 and 3, protected bike lanes on Broom Street would not work north of Main Street. Figure 4-14 illustrates these effects.

### 2. Alternatives 2 and 3

Broom Street has an existing bike lane between Doty Street and Gorham Street between the travel lanes and parking lane, with a one gap where bikes share the lane with vehicles turning right on Johnson Street. In Alternative 2, the right lane would be a shared bus, bike, and right turn lane. This would likely be a lower quality bike facility compared to the existing lane. For Alternative 3, Broom Street would be restriped for a southbound bus lane and two northbound travel lanes, and a northbound bike lane between the northbound travel lanes and curb, with lanes slightly narrower than today. Southbound bikes would not be allowed in the southbound bus lane because buses would have no way to pass them.

Doty Street has an existing floating bike lane – most of the time, the bike lane is between the travel lanes and a parking lane, but during peak periods when parking is restricted, the lane is between the travel lanes and the curb. The parking restrictions would be permanent and there would be permanent bike lane between the bus lane and curb. Doty Street does not have regular bus service on it today, and bicyclists would have to pass buses at the BRT station at MLK Jr Blvd.

Wilson Street does not currently have bicycle facilities – bikes travel westbound with traffic in a shared lane and are restricted, like all traffic, from traveling eastbound. However, the need for better bicycle facilities on Wilson Street, including an eastbound bike lane, is understood, and the separate Wilson Street transportation plan will determine how to accommodate bikes on Wilson Street. Alternative 2 does not preclude the ability to have protected bike facilities on Wilson Street.

East Washington Avenue changes would be identical to Alternative 1 with a new eastbound bus, bike, and right turn lane between Webster Street and Blair Street.



Figure 4-14 Bike Accommodations

Table 4-4 Summarizes the effects of all the alternatives.

Table 4-4 Effect Summary

ltem	Alt 1	Alt 1A	Alt 2	Alt 3
Access to major destinations	State Street – Good	State Street – Good	State Street – Fair	State Street – Fair
	Capitol Square – Good	Capitol Square – Fair	Capitol Square – Fair	Capitol Square – Fair
Maximum distance between Station Pairs	0.2 miles	0.4 miles	0.2 miles	0.2 miles
Size of station serving State St	Moderate – 15 riders	Moderate – 15 riders	Small – 8 riders	Small – 8 riders
Number of buses on State Street	~50% fewer	~50% fewer	Same as existing	Same as existing
Size of station serving Capitol Square	Large – 30 riders	Doty/MLK – Moderate 15 riders Dayton/Wisc - Small 8 riders	Doty/MLK – Moderate 15 riders Wilson/MLK - Moderate 15 riders	Doty/MLK – Moderate 15 riders Wilson/MLK - Moderate 15 riders
Safety/visibility	Stations are in highly trafficked visible areas	Stations are in highly trafficked areas	Henry St station in area with low visibility and traffic	Stations in moderately trafficked areas
Transfers and Local Route Integration	Good	Fair Local routes could compete with BRT	Fair Local routes could compete with BRT	Fair Local routes could compete with BRT
Detours	10 percent	3 percent	3 percent	1 percent
Travel Times	EB – 8:02* WB – 7:00*	EB – 6:58 WB – 6:10	EB – 10:21 WB – 9:25	EB – NA WB – 9:25
Traffic Impacts	None (no travel lanes removed)	None (no travel lanes removed)	None (no travel lanes removed)	None (no travel lanes removed)
Bike Routing	West Wash does not have protected bike lanes.	Bike lanes may be discontinued around a portion of the outer loop West Wash does not have protected bike lanes.	Broom St bike lanes converted to shared bus/bike lane. (Precludes protected bike lane.)	Precludes protected bike facilities for a portion of Broom St.
Total Parking Spaces Removed	4	85	110	107
Total Metered Parking Spaces Removed	4	85	100	97
Total Parking Revenue Lost yearly	\$8,000	\$170,000	\$200,000	\$195,000
* Could be improved with signal progression				

## 5. Observations

The following paragraphs discuss what appear to be the most advantageous BRT routing alternatives, and the specific benefits associated with the alternative listed.

Alternative 1 appears to provide the greatest number of advantages for BRT routing.

- It provides the most direct access to key destinations on State Street and the Capitol Square.
- Eastbound and westbound stations are within a block or two of each other new and occasional users downtown will easily be able to find the correct station.
- There is generous space for stations providing more shelter and better pedestrian circulation. Because of its routing, Alternative 1 also highlights BRT as prominent feature and transportation mode in the community.
- It provides the easiest way to transfer to and from local Metro Transit routes and avoids competition between BRT and local routes.
- Alternative 1 does not reduce parking revenue. Parking revenue is an important source of funding for Transportation initiatives.
- It reduces the number of buses on State Street during the PM peak and replaces some with electric buses.

With Alternative 1, BRT would be rerouted for events on the square. While inconvenient, it occurs mostly during weekend and off-peak hours. The majority of riders who use the system on weekdays will not be inconvenienced with the detours. Metro has used the outer loop detour for more than 30 years, and most Madison patrons are familiar with it.

If Alternative 1 was adopted, better communication through electronic message boards and other means should be implemented during event detours. The improved level of signage and communication would make it easier for people to find out where to go compared to today, where only one or two detour signs are placed on the shelter several days in advance and can easily be missed or misinterpreted.

Alternative 1 will also remove several regular (diesel bus) routes from the square and about twelve (diesel bus) routes from traveling down State Street, helping to address these concerns. These changes will make the bus volumes more consistent throughout the day and have a positive effect on the dining experience on upper State Street. During the afternoon peak period when people are walking or sitting outside, instead of having three or more westbound buses stack up at the Johnson and Gorham Street intersections filling much of the block and idling, there will normally be one bus that comes through at a time that serves the bus stop and goes.

If policy makers desire not to have BRT on the Capitol Square, then **Alternative 3** provides the next greatest number of advantageous. This alternative includes adding a southbound contraflow bus-only lane on Broom Street. Alternative 3 does not provide as many benefits as Alternative 1, but it does avoid the limitations of Alternatives 1A and 2. Primary benefits of Alternative 3 include:

- Complementing BRT station pairs are relatively close to each other, so finding the return trip station is somewhat more intuitive
- Buses are only detoured for a few days per year.

Some of the disadvantages of Alternative 3 that should be considered include:

- Access to State Street and capitol square destinations will not be as direct,
- BRT stations will be smaller, less prominent, and may be harder to find.
- Transfers between BRT and local bus routes will be less convenient. Local routes may compete with BRT.
- Travel times on BRT will be 1-2 minutes longer.
- Up to \$195,000 of parking revenue could be lost on an annual basis.

Alternative 2 has more disadvantages than Alternatives 1 and 3 yet is better than Alternative 1A.

- The 0.2 mile distance between two sets of paired stations on Broom and Henry is greater than desired. This distance also makes finding the boarding station vs the alighting station more difficult.
- Similar to Alternative 3, this routing has limited right of way, making the station size smaller particularly for the stations serving State Street.
- The Henry Street route has two drawbacks. The first is the limited traffic Henry Street experiences during non-peak hours, which could make security an issue. Additionally, event buses and loading trucks associated with the Overture Center that stage on Henry Street could cause regular substantial detours and delays for BRT. There are no alternative sites for loading at the Overture Center.
- Up to \$200,000 of parking revenue could be lost on an annual basis.

**Alternative 1A** has several disadvantages compared to Alternatives 1, 2 and 3.

- While detours are the often cited reason for preferring the outer loop for BRT route, it adds a substantial distance between the boarding and alighting locations. This:
  - The majority of People who use BRT (perhaps up to 95 percent) would have to walk 0.2 miles further (50 percent more distance) solely because the BRT route would have to be detoured 10 percent of the time. This is a disproportionate impact to the regular users of transit.
  - The added distance is not insignificant. For example, if this added distance was applied to existing Metro boardings on the square, it would amount to 55,000 miles of additional pedestrian travel per year.
  - The 0.4 miles between bus stop or BRT station pairs is much greater than the distance recommended in transit documents, or the actual distance observed with other BRT systems. Few to no BRT or rail stations exist more than a block or so apart because of the difficulty of using the system.
  - o Because of the distance between stations, it may be difficult for first-time and occasional users to find the stations.
  - O With BRT on the outer loop and local buses on the square, riders will have to choose whether to go to the square or loop. Many will continue to go to the square and use local service because the walk is shorter, facilities are better, and overall service levels are higher. As a result, BRT will compete, rather than compliment local service, and this will lead to longer wait times and lower use of the BRT system.
- The amount of space for BRT stations is more limited. Therefore, the system's most highly used stops may have smaller shelters and platform areas.
- Up to \$170,000 of parking revenue could be lost on an annual basis.

A public meeting was held on October 30, 2019 to discuss downtown BRT route options. General input from the meeting are summarized in the bullets below.

- There was support for Alternative 1A. Some people liked the fact that it would be detoured less than Alternative 1.
- There was support for Alternative 1. Some stated that they would prefer better signage and use of technology to disseminate detour information.
- There was little support stated for Alternatives 2 and 3.

## MATPB (MPO) Agenda Cover Sheet December 4, 2019

Item No. 10

## Re:

Brief Update on Rebranding Project for MATPB and the Rideshare Etc. Program

## **Staff Comments on Item:**

Staff presented on the MATPB and Rideshare Etc. rebranding project at the September meeting. The MATPB rebranding was a recommendation of the <u>Public Participation Evaluation</u> that was done following the completion of the last regional transportation plan in 2017. The Rideshare Etc. rebranding was added to the scope.

An RFP was issued in September. We received nine proposals and interviewed three firms. Staff ultimately decided to hire Distillery for the project. Their proposal is attached along with a supplement with information on their staff and some related projects they have done. The timeline for the project will be revised due to the later than initially anticipated start date. The budget is \$25,000.

We are currently planning to have the consultant make an initial presentation to the board and solicit feedback at the January 8 meeting.

## **Materials Presented on Item:**

1. RFP Proposal by Distillery with Supplement

## **Staff Recommendation/Rationale:**

For informational purposes only.

brnellis@thisisdistillery.com 608-255-0092 thisisdistillery.com

## Distillery

## PROPOSAL MADISON AREA TRANSPORTATION PLANNING BOARD

Agency and program rebranding

Date 10/4/19
Client MATPB

**Contact** Zia Brucaya

brnellis@thisisdistillery.com 608-255-0092 thisisdistillery.com

## Distillery

Thank you for considering Distillery for the Madison Area Transportation Planning Board (MATPB) rebranding. With over 22 years of experience branding, marketing, and design, we would be an ideal choice for the rebranding and strategy rollout of your agency and Rideshare, Etc. program.

Enclosed you will find the project scope, process and estimate. Please don't hesitate to contact us with any additional questions you might have.

Thank you again for the opportunity, and we look forward to hearing from you.

## **CONTENTS**

PROJECT SCOPE

**PROCESS** 

**TIMELINE** 

BUDGET

BUNUL

**Brad Nellis** Owner

## **PROJECT SCOPE**

To develop an impactful identity based on community and organization needs for the Madison Area Transportation Planning Board and its Rideshare, Etc. program including new logos, supported messaging, and marketing recommendations.

## **PROCESS**

## **PHASE 1 - AUDIT**

## Internal Review Nov. 4 - Jan. 31

Distillery to assess current branding, marketing, and customer demographics. Development of questions and discussion topics to gain insight from stakeholders. Interviews, surveys, and focus groups with key stakeholders including MATPB policy board, staff, partner organizations, and community organizations. Distillery to summarize and share findings with MATPB.

## External Review Nov. 4 - Jan. 31

External evaluation of market landscape and community sentiment.

## Deliverables Jan. 31

Distillery to provide recommendations for name, positioning, and supporting messaging for each key audience. Additional recommendations will be provided for website and social media updates.

## Feedback Feb. 14

MATPB to provide feedback on recommendations.

## Selection Feb. 21

Final name and messaging.

NOVEMBER 2019										
s	М	т	W	Т	F	s				
					1	2				
3	4	5	6	7	8	9				
10	11	12	13	14	15	16				
17	18	19	20	21	22	23				
24	25	26	27	28	29	30				

DECEMBER 2019									
s	М	т	W	Т	F	s			
1	2	3	4	5	6	7			
8	9	10	11	12	13	14			
15	16	17	18	19	20	21			
22	23	24	25	26	27	28			
29	30	31							

JANUARY 2020									
s	М	Т	W	Т	F	s			
			1	2	3	4			
5	6	7	8	9	10	11			
12	13	14	15	16	17	18			
19	20	21	22	23	24	25			
26	27	28	29	30	31				

FEBRUARY 2020											
s	М	Т	W	Т	F	s					
						1					
2	3	4	5	6	7	8					
9	10	11	12	13	14	15					
16	17	18	19	20	21	22					
23	24	25	26	27	28	29					

Holiday

Key date

## PROCESS CONT.

## **PHASE 2 - BRANDING EXPLORATION**

## Design Feb 21 - March 20

Development of three initial visual systems for MATPB and subsequent Rideshare, Etc. program based on chosen names and messaging.

## **Presentation March 20**

Proposal of three different directions. Each one will consist an agency logo, corresponding Rideshare, Etc. logo, and one or two subpages to showcase the look and feel in multiple formats.

## Refinement March 20-April 17

Once a direction is selected, we will have two refinement passes as needed to address client concerns.

## **PHASE 3 - ROLLOUT**

## Strategy April 24

Distillery to provide rollout strategy guides for each rebrand implementation. Strategy will include summary of established goals, messaging and target audience and outline recommended marketing opportunities with suggested tools and channels.

## **DELIVERABLES MAY 15**

Distillery to provide style guides and templates for collateral based on final logo selections. Distillery to discuss with MATPB about additional deliverables including website redesign, e-newsletter, and print materials.

## FEBRUARY 2020 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

MARCH 2020											
S	M	Т	W	Т	F	S					
1	2	3	4	5	6	7					
8	9	10	11	12	13	14					
15	16	17	18	19	20	21					
22	23	24	25	26	27	28					
29	30	31									

APRIL 2020										
S	М	т	W	Т	F	S				
			1	2	3	4				
5	6	7	8	9	10	11				
12	13	14	15	16	17	18				
19	20	21	22	23	24	25				
26	27	28	29	30						

MAY 2020						
s	M	Т	W	Т	F	s
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Holiday

Key date

## **COST ESTIMATE**

AUDIT \$8,000

Brand audit

Interviews, surveys, focus groups

Landscape analysis

Project management

BRANDING \$8,000

Initial logo concepts

Refinement

Messaging /positioning

DELIVERABLES \$9,000

Marketing strategy guide

Style guides

Stationary update

**Templates** 

Website recommendations

Social media recommendations

## **TOTAL COSTS:** \$25,000

TERMS: (1) This proposal may be amended prior to contractual agreement at the discretion of Distillery. (2) All expenses incurred in the development of this project shall be the responsibility of the client. (3) Upon receipt of payment Distillery grants the client unlimited use of final design work, unless specified otherwise. (4) All costs are estimates only. Any alterations of project specifications may result in a price change. Additional costs that exceed the original estimate will be quoted to the client before expenses are incurred. (5) Third party vendors and expenses handled by Distillery shall be billed at cost plus 15%. (6) Payment not received within established timeframe will be subject to an interest rate of 1.5% per month or a fraction thereof from date of invoice. Client subject to reasonable collection fees. (7) Termination: Should either WYSO or Distillery elect to terminate this contract, Distillery reserves the right to collect payment for services provided up to that point and will allow WYSO thirtu days to remit payment in the amount disclosed on final invoice that will be provided to WYSO by Distillery within fifteen days of contract termination. (8) The terms and conditions of this agreement are valid within thirty (30) days.

## **THANK YOU**

## PROPOSAL SUPPLEMENT MADISON AREA TRANSPORTATION PLANNING BOARD Agency and program rebranding

Enclosed you will find information about our team, client references and testimonials, and samples of our work.

All work for the MATPB rebranding will be billed at our standard nonprofit hourly rate of \$100.

Please don't hesitate to contact us with any additional questions you might have. Thank you for the opportunity, we look forward to hearing from you.



**TELL YOUR STORY HERE** 

## **TEAM**

Brad founded Distillery over two decades ago. Under his leadership, Distillery developed a loyal and diverse client base including organizations in the arts, education, and hospitality sectors. He has been key in the branding of venues and businesses for clients such as Chazen Museum of Art, Overture Center for the Arts, Purina, Wisconsin Public Television, and numerous outreach initiatives for the American Library Association and the University of Wisconsin.

Marina came to Distillery from the world of advertising and public relations. She has been a key creative with Distillery for eleven years. Her design work has won awards and been featured in numerous design annuals. She has produced campaigns for clients such as Volunteers of America, FFA, University of Wisconsin, the University of Wisconsin Theatre, and World Dairy Expo.



**Brad Nellis**Partner / Head of
Creative



Marina Menendez

Art Director

## **TEAM (CONT.)**

Tim has been a partner at Distillery for 17 years. He leads the marketing charge for the American Ultimate Disc League and has crafted memorable marketing materials at Distillery for clients such as Wisconsin Humanities Council, Land O'Lakes and American Family Insurance. In his spare time, he manages the Madison Radicals ultimate team.



**Tim DeByl**Partner / Head of
Marketing & Development

Nadia has worked in public relations, communications, and marketing in nonprofit and corporate settings before joining Distillery. She has led dynamic and innovative marketing campaigns for clients such as such as Chazen Museum of Art, Broadway in Chicago, Dental Crafters Network, and Saco Foods.



Nadia Abudi
Director of Brand
Strategy



## **CLIENT REFERENCES**

## **TOM WALZER**

## **SACO Foods**

PRESIDENT twalzer@sacofoods.com (608) 662 2662

## STEVE HALL

## **American Ultimate Disc League**

COMMISSIONER sgordon@theaudl.com (312) 374 3766

## **ED PECK**

## **Filament Ag**

OWNER edpeck@filamentag.com (608) 310 5335 x 22

## IN THEIR WORDS...

"Distillery has been my "goto" design studio for several years now. I've given them many challenging design projects and they always come through with something amazingly creative. They're a joy to work with."

## **CARLA ASPELMEIER**

University of Wisconsin Press

"The unveiling of the annual theme art is a much anticipated event, and is due to the creative genius of the Distillery team.

They're responsive, reliable, reasonable and resultsoriented and are a valued extension of our staff."

### **LISA BEHNKE**

World Dairy Expo

"The marketing materials
Distillery makes for us are
completely head-turning!
Distillery never disappoints!"

## **SAMANTHA CROWNOVER**

Bach Dancing & Dynamite

"Oh my god... You know art is good when you want to lick it. That poster "I want to lick! The rest of the staff concurs: Distillery makes "tasty, tasty art"

## **ALISON T JONES CHAIM**

Wisconsin Book Festival

brnellis@thisisdistillery.com 608-255-0092 thisisdistillery.com

## Distillery

## WORK SAMPLES

MT HOREB CHAMBER OF COMMERCE

**DENTAL CRAFTERS NETWORK** 

**UW COLLEGES** 

Identity and templates





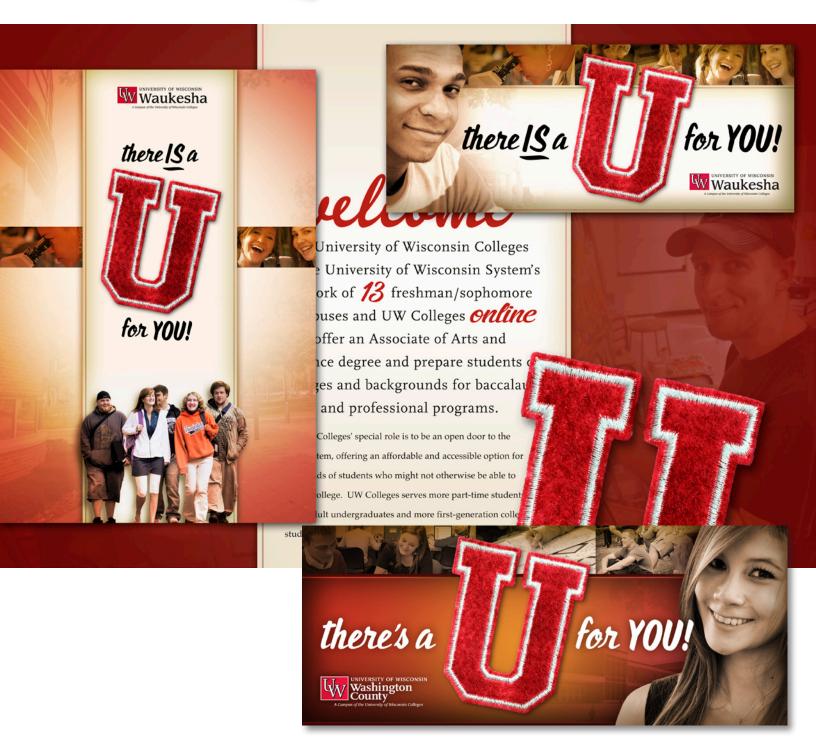








# there's a for YOU!



## **THANK YOU**