

Madison Beltline PEL Policy Advisory Committee

10/14/15 Strand Associates



Agenda

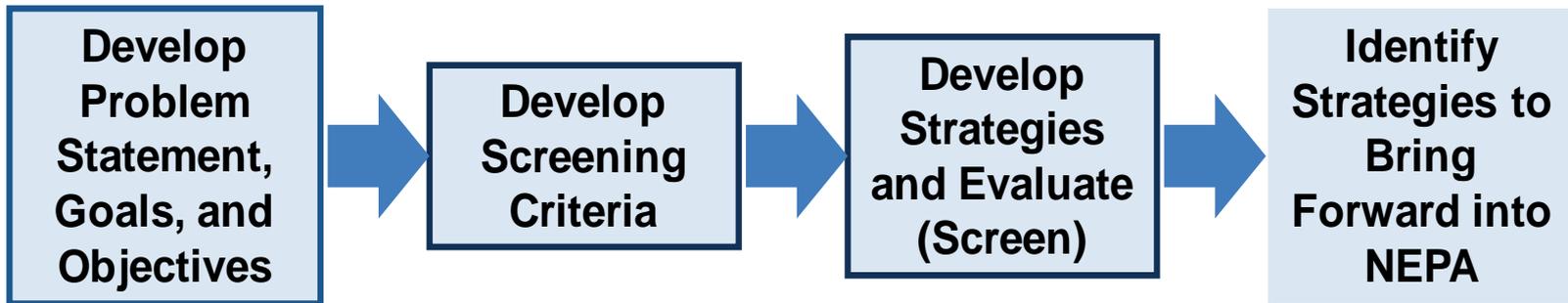
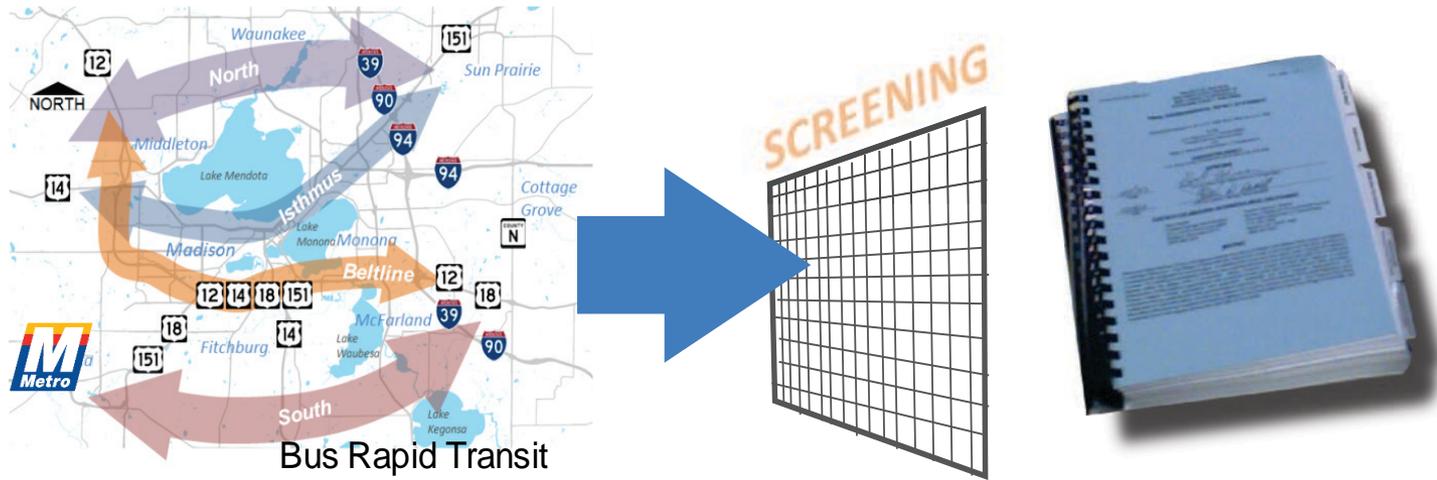
- ▶ PEL Screening from Work Plan
- ▶ Summary of Component Screening SurveyMonkey
- ▶ Introduce Strategy Packages
- ▶ Next Steps
- ▶ Upcoming PIMs



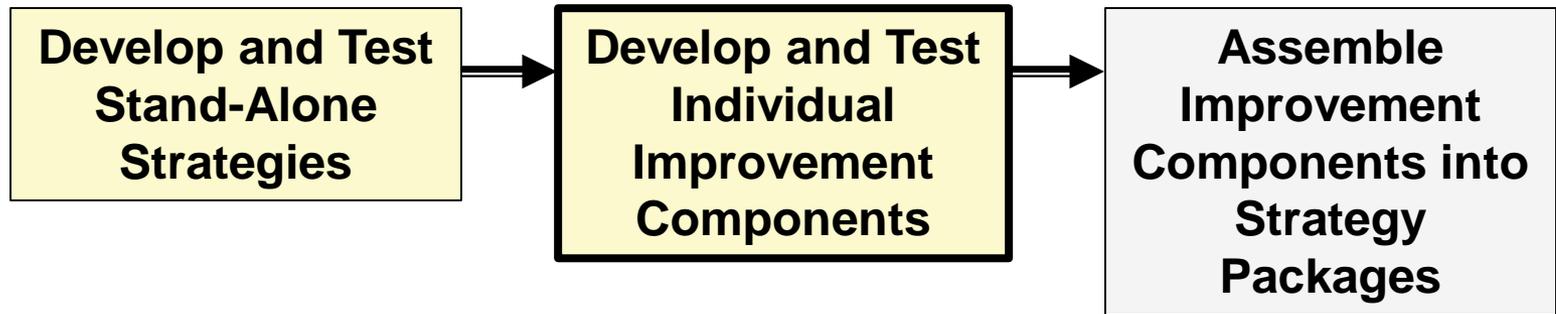
PEL Screening from Work Plan



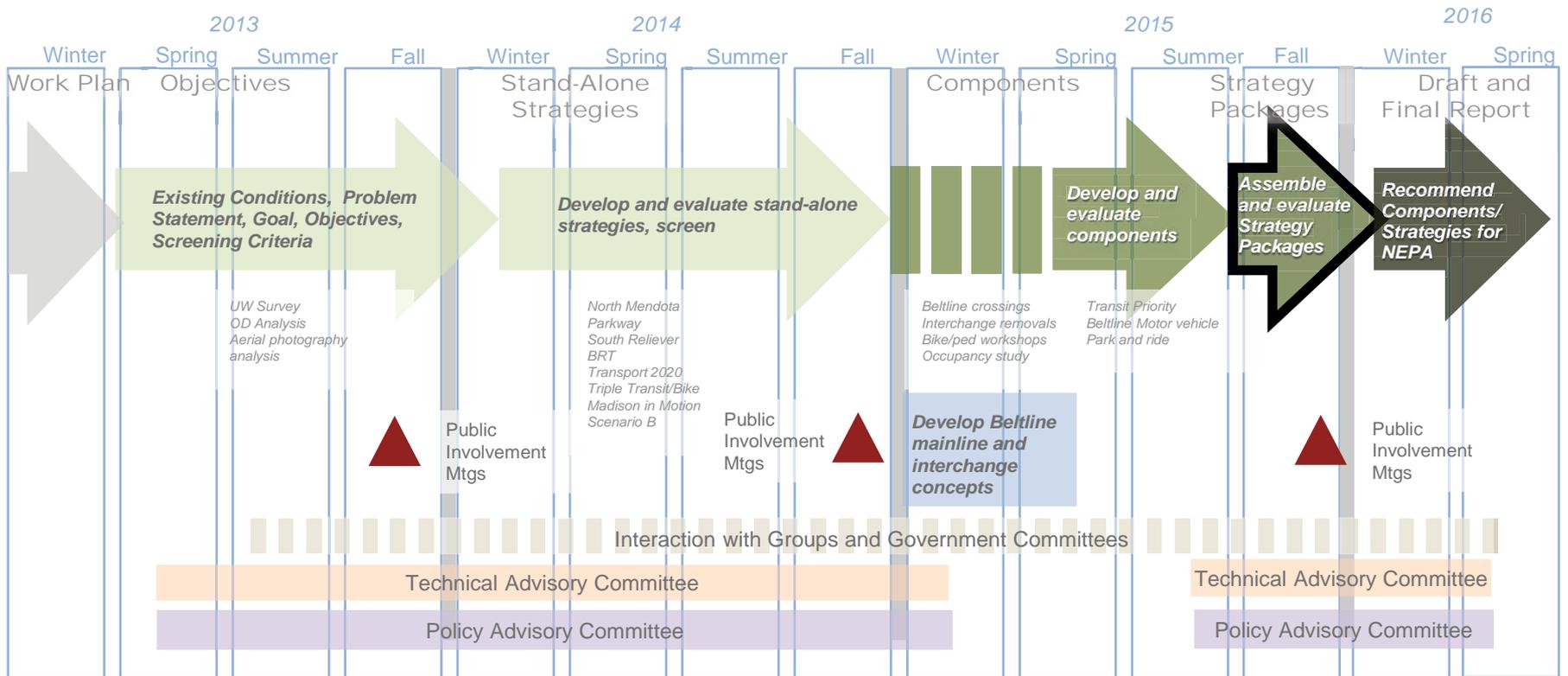
PEL Process



Strategy Development Process



Beltline PEL Work Plan



Date Revised: 9/16/15



Example Broad Strategy Organization

11-13-2013

Example Motor vehicle

MV 1 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.

MV 2 Beltline capacity expansion

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.

Example Bike ped

BP 1 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-alignment highway alternatives

BP 3 New connections

This could create new dedicated path links in areas where bicycle/pedestrian connectivity limited. Examples could include new paths and/or grade separations.

BP 4 Intersection crossing treatments

This could provide improved bicycle and pedestrian crossing of high traffic volume intersections adjacent to the Beltline. Examples could include special crossing treatments and/or grade separations.

Example Local system

LS 1 BASE

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

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 isthmus.

Example Transit

T 1 BASE Transit

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

T 2 Bus Rapid Transit

This could:

- Implement the 2012 BRT report recommendations
- 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:

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

T 6 Modal centers (Park and Ride w/ Transit)

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

Example TDM

TDM 1 BASE - Voluntary TDM

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

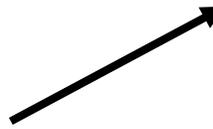
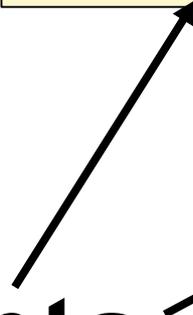
- Ridesharing
- Guaranteed Ride Home
- Sponsored Bus Passes
- Shifted work hours etc.

TDM 2 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.

Components



Component Screening SurveyMonkey Results



Survey Results Provide Input

- ▶ Will be used in reviewing different components acceptance
- ▶ Screening will occur after further analysis and interaction with appropriate agencies



Motor Vehicle

XX% SurveyMonkey
Percent indicating
investigate further



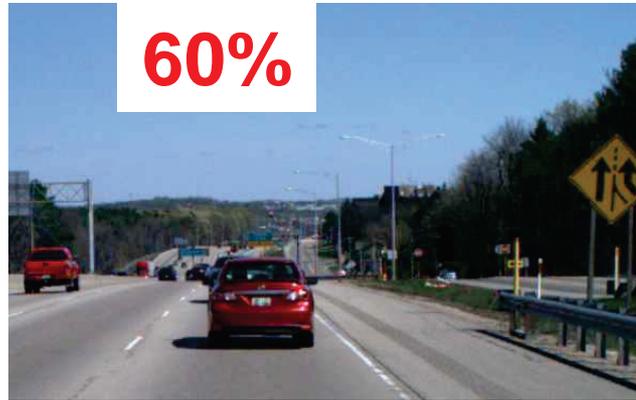
Hard Shoulder Running



Bus Shoulder Running



HOV/HOT Lane



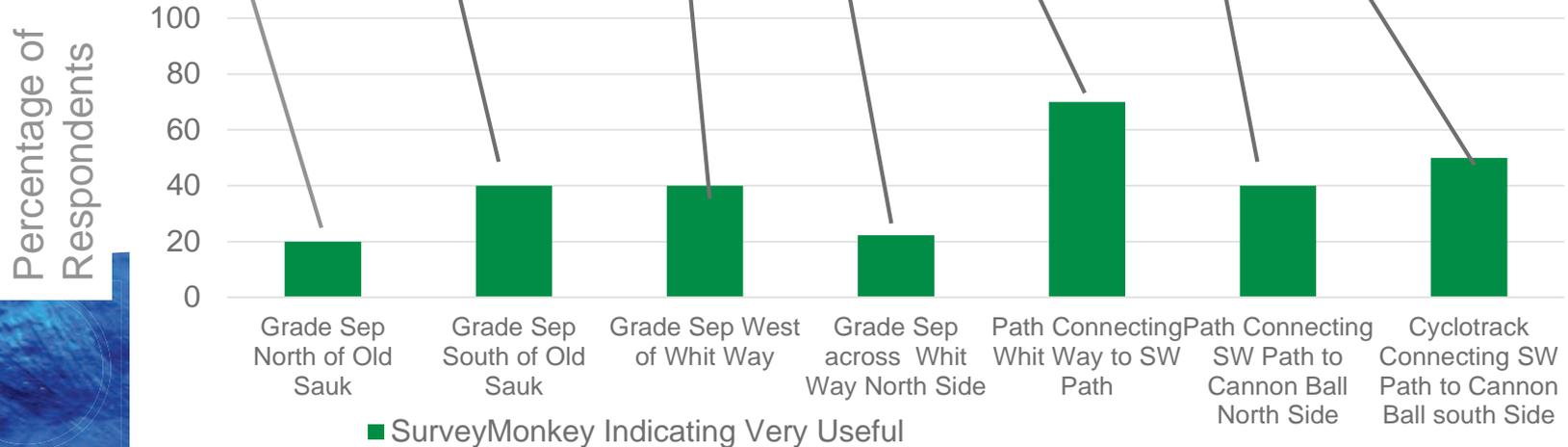
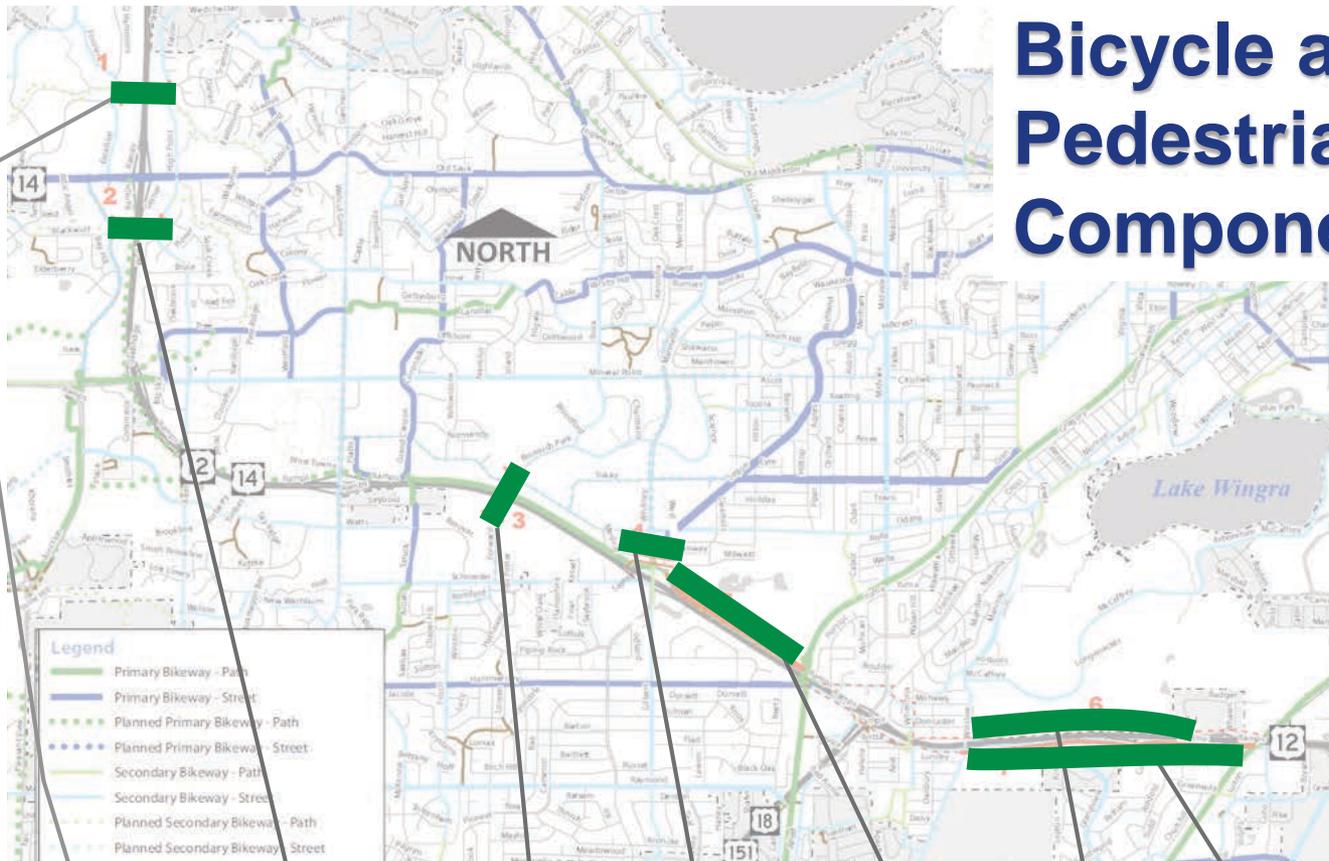
Conventional Freeway Lane



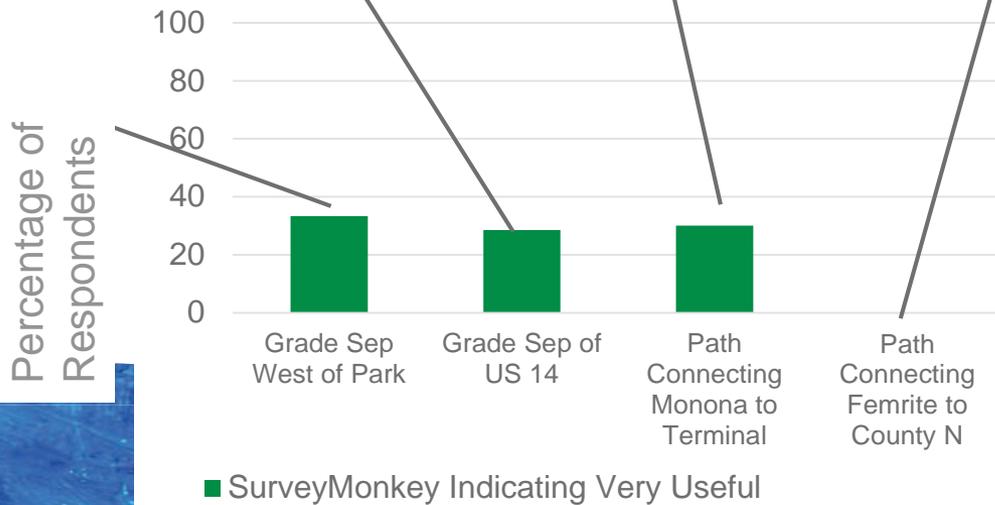
Bus Lane



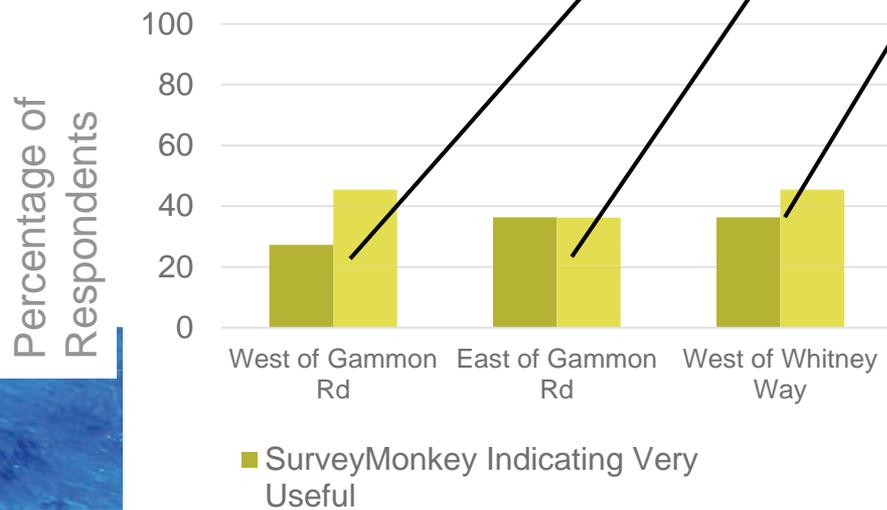
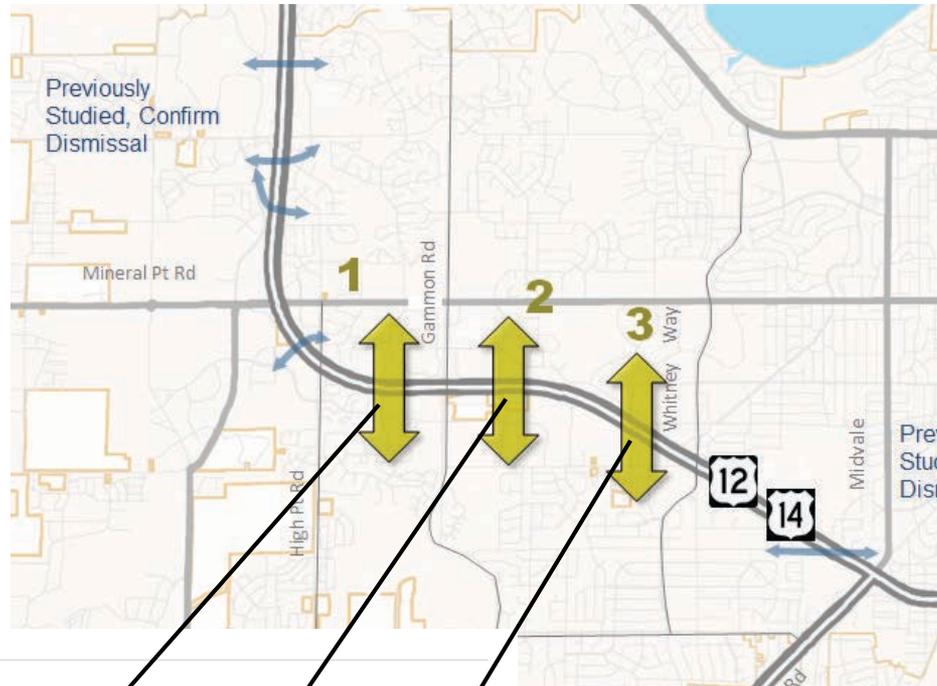
Bicycle and Pedestrian Components



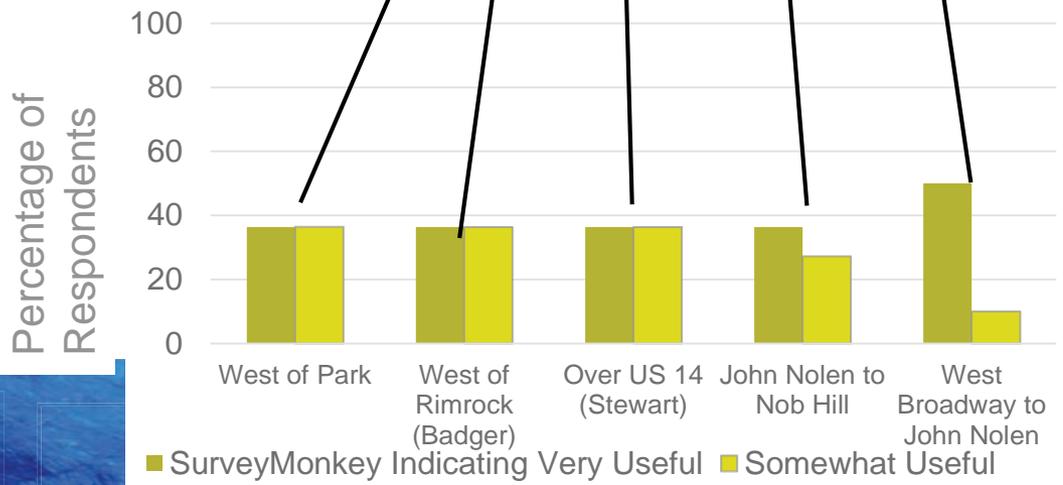
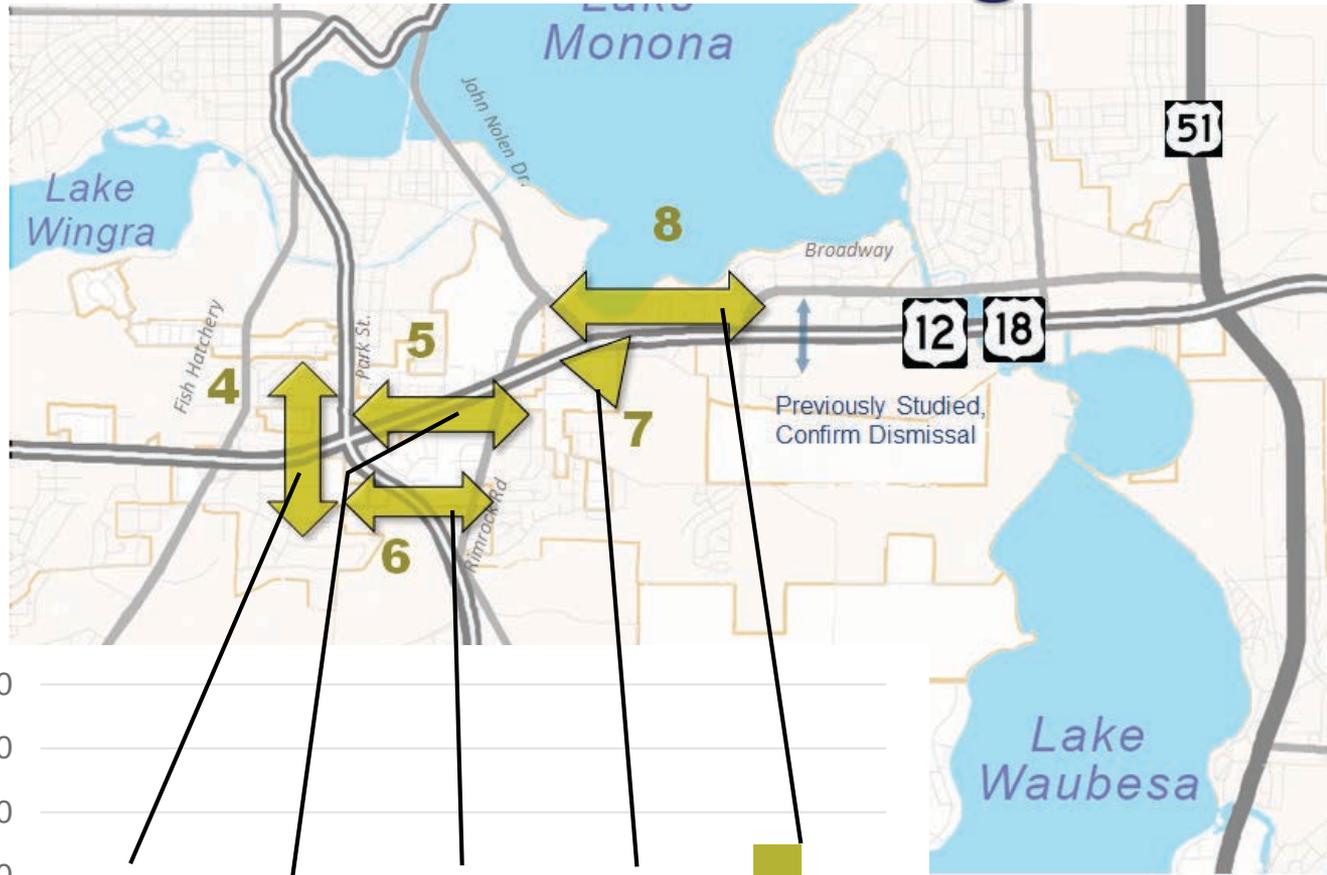
Bicycle and Pedestrian Components



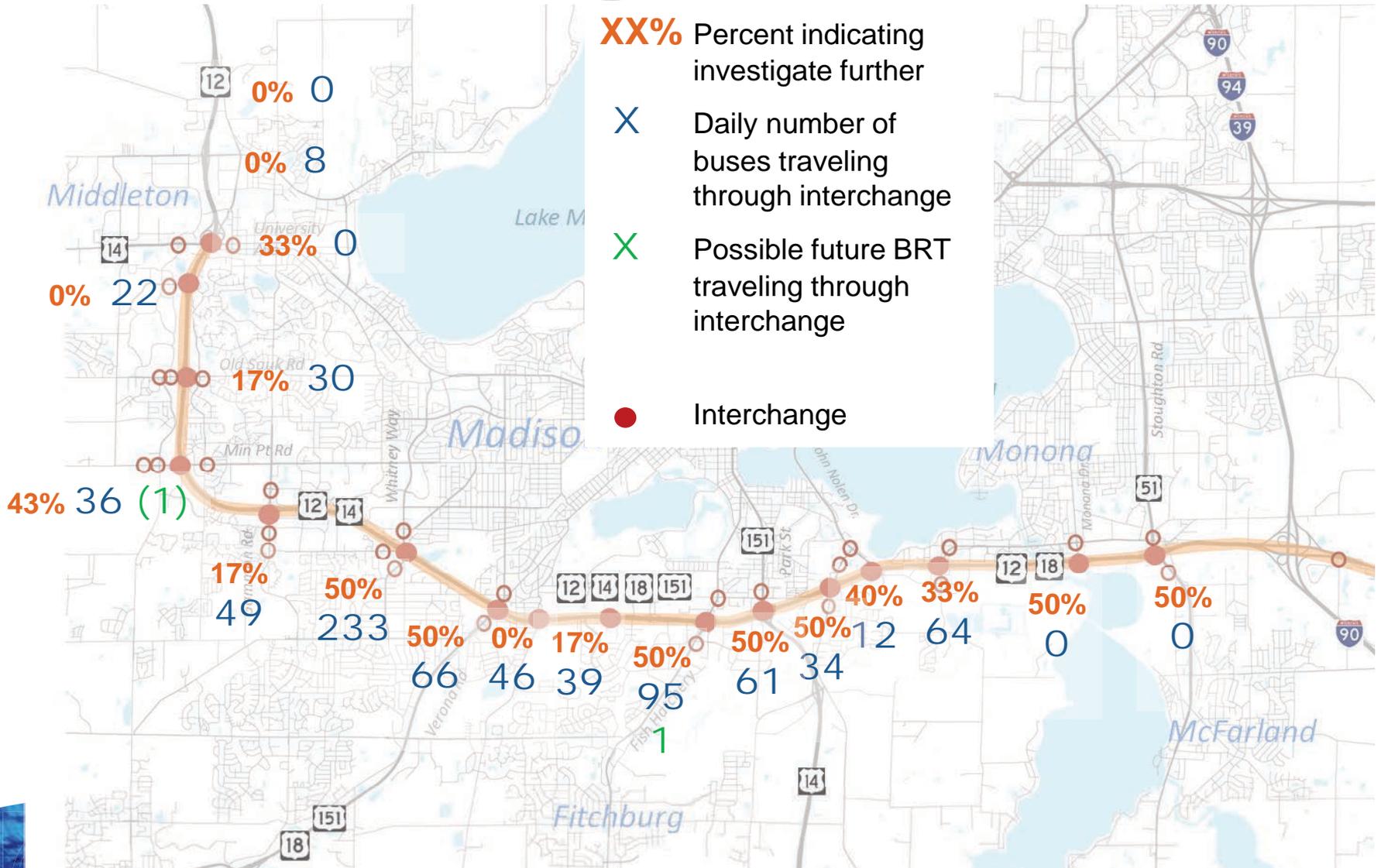
Connections and Crossings



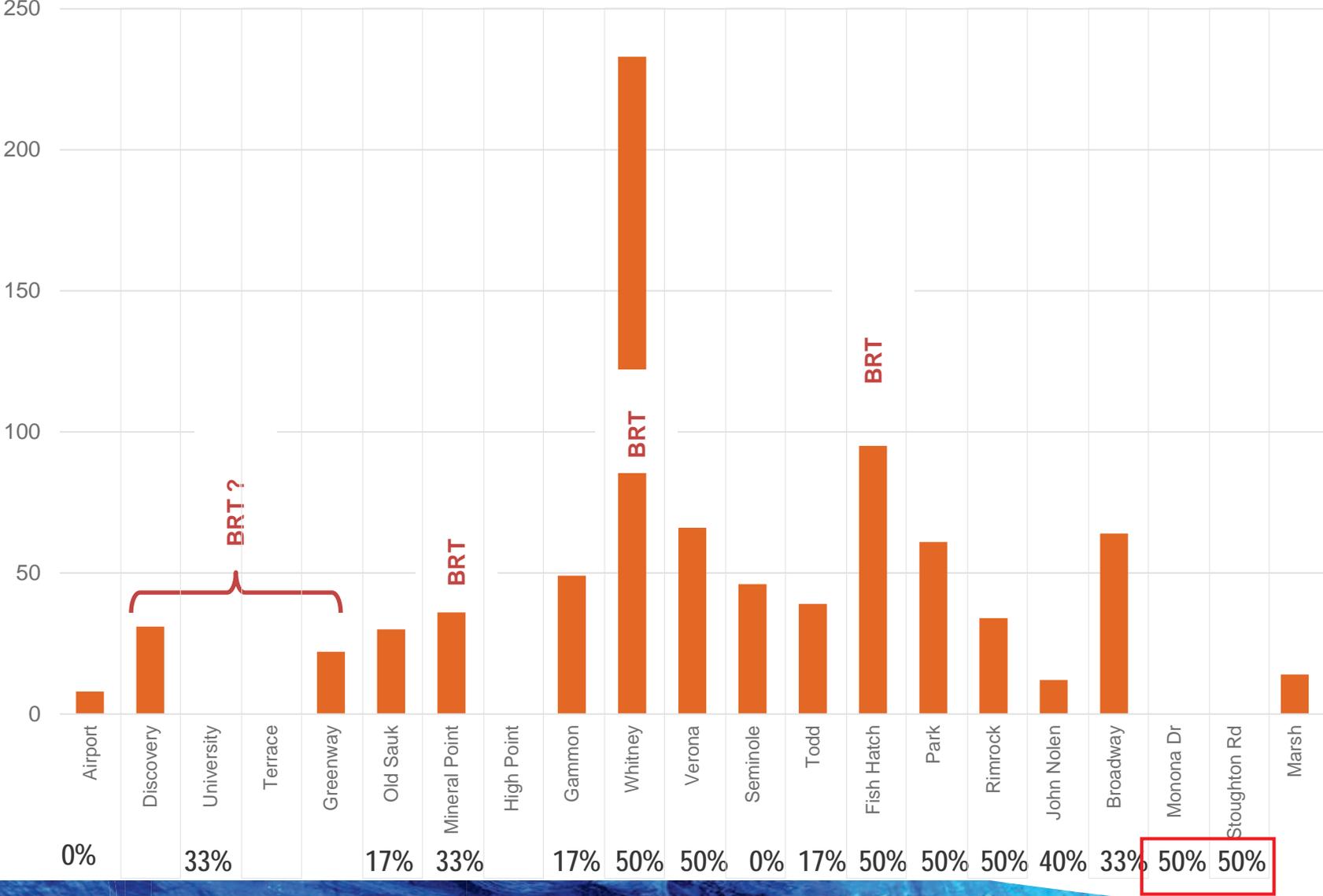
Connections and Crossings



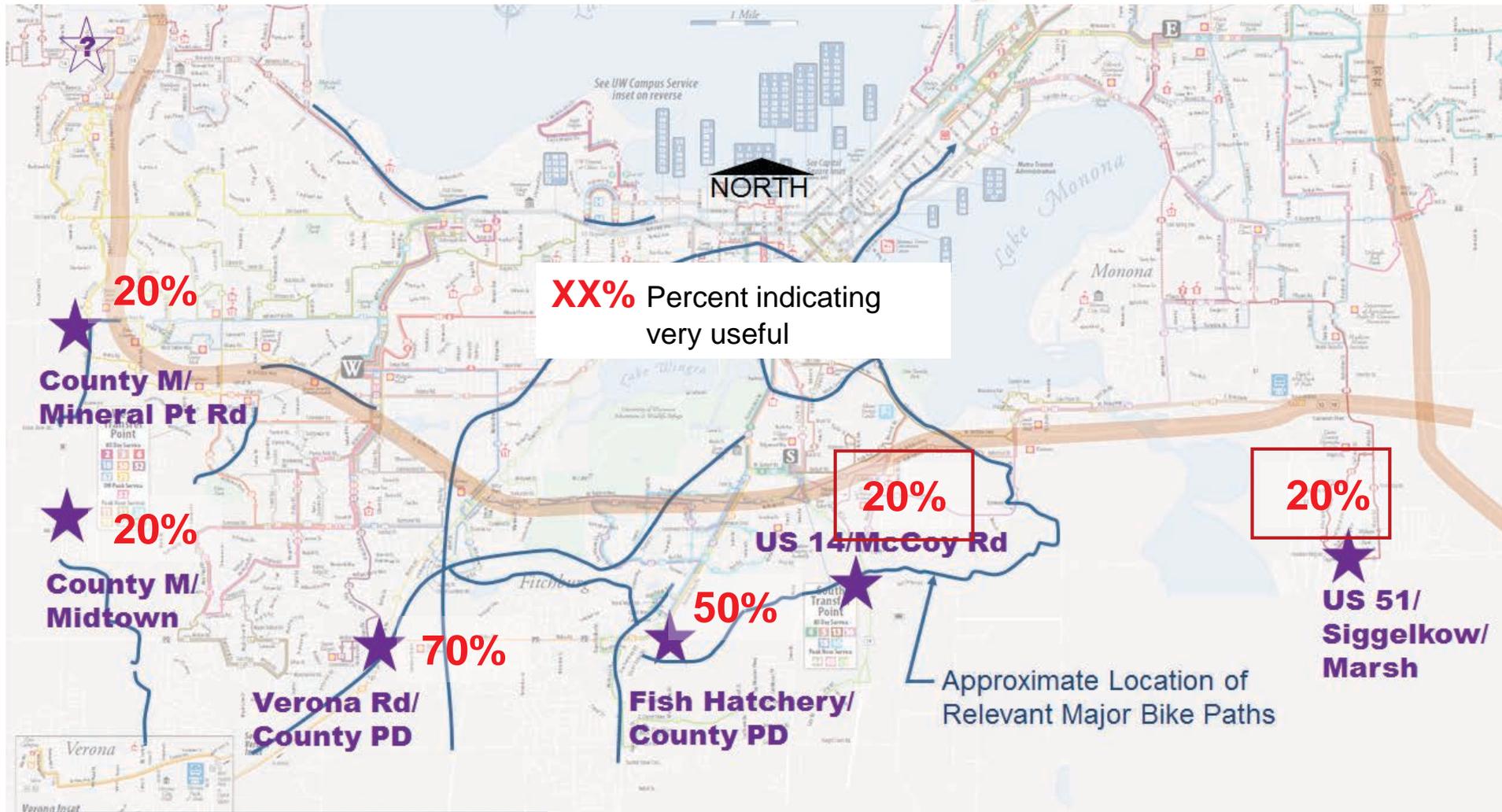
Transit Priority



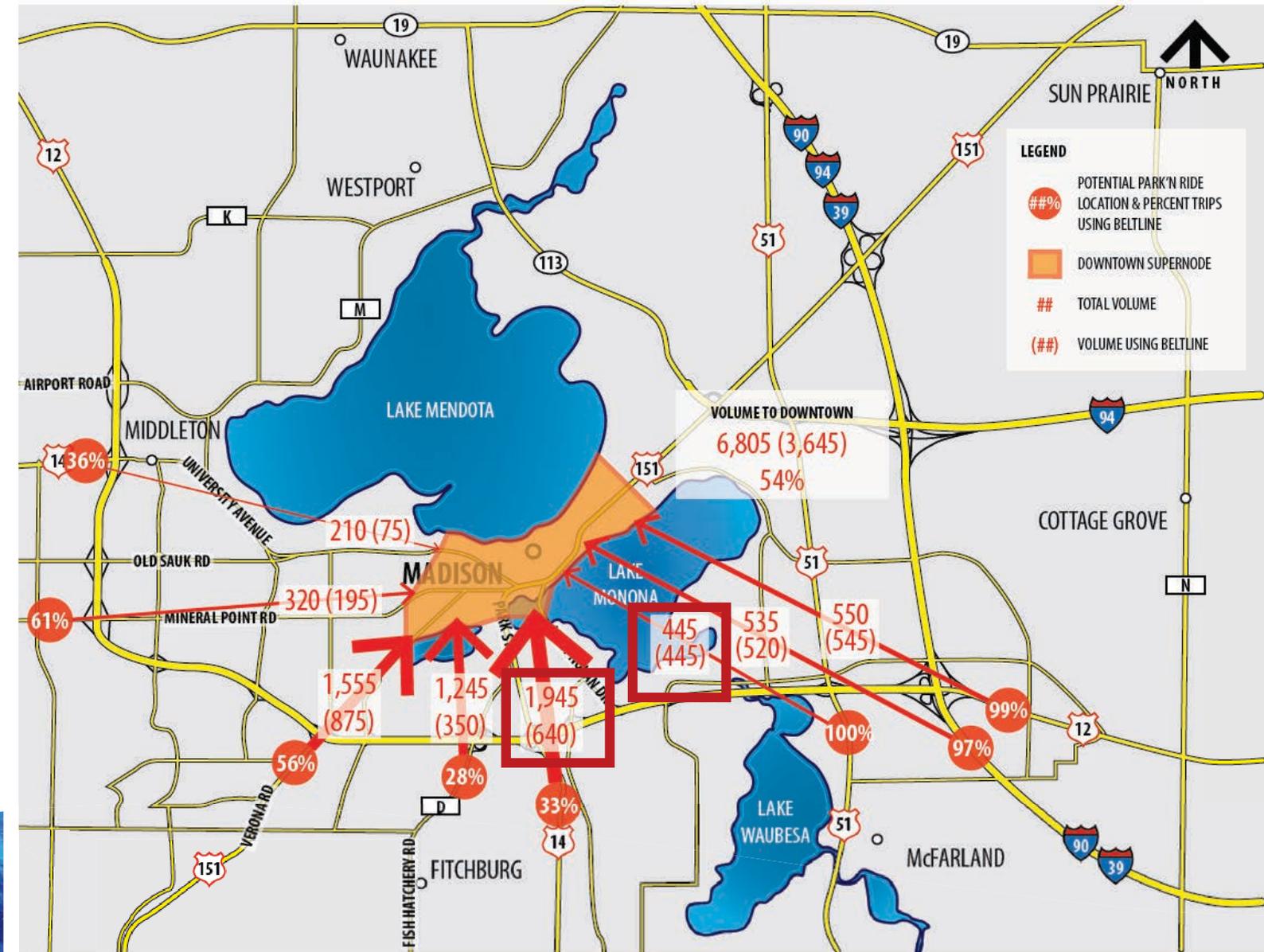
Est Daily Metro Route Beltline Crossings



PEL Park and Ride Study Locations



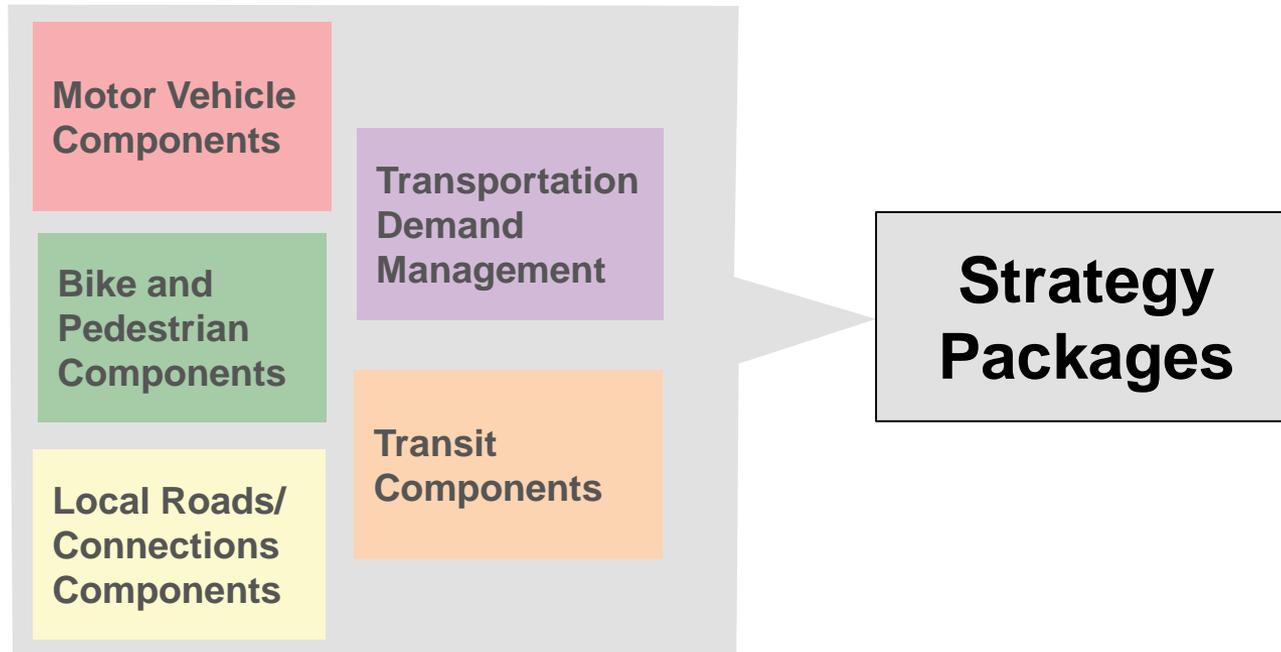
Park and Ride Capture



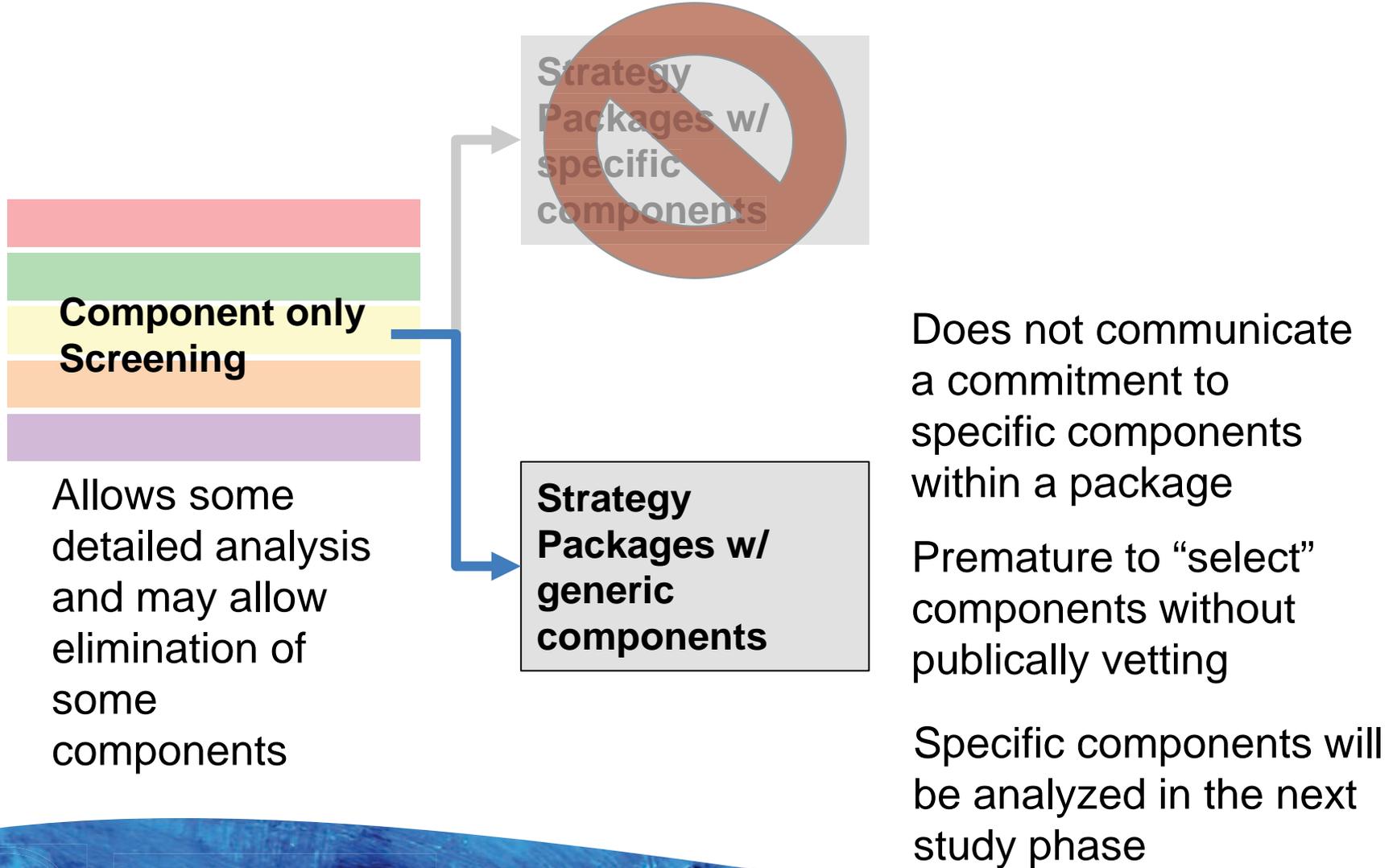
Introduce Strategy Packages



Assemble individual components into Strategy Packages



Two ways to develop packages



Strategy modal components

Develop and Test Individual Modal Improvement Components

Beltline lane arrangements/additions
Interchange Alterations

Grade separated crossings
Local road enhancements

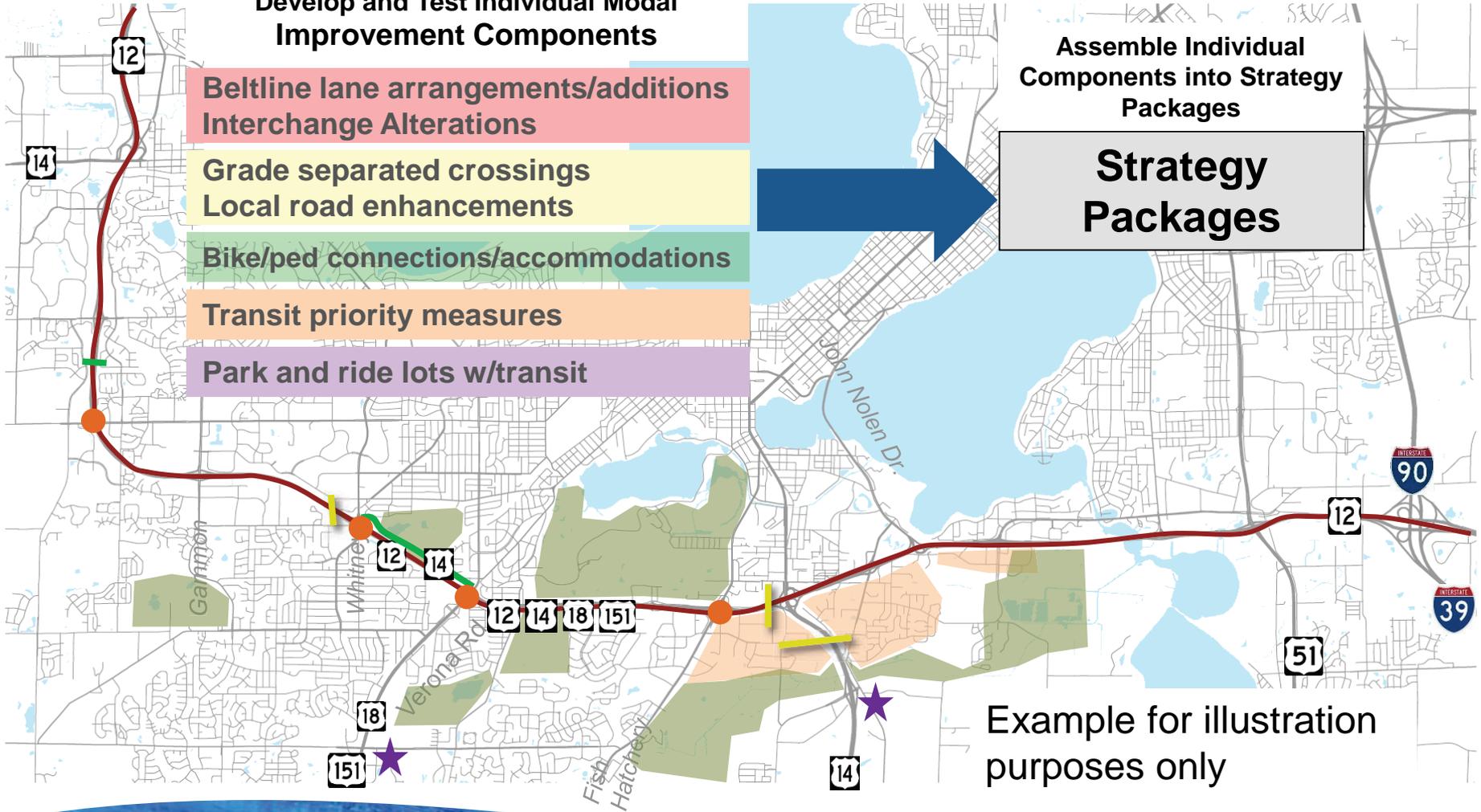
Bike/ped connections/accommodations

Transit priority measures

Park and ride lots w/transit

Assemble Individual Components into Strategy Packages

Strategy Packages



Example for illustration purposes only



5 Strategy Packages

Preserve with Mode Enhancements

Mainline Expansion

Balanced Package 1

Balanced Package 2

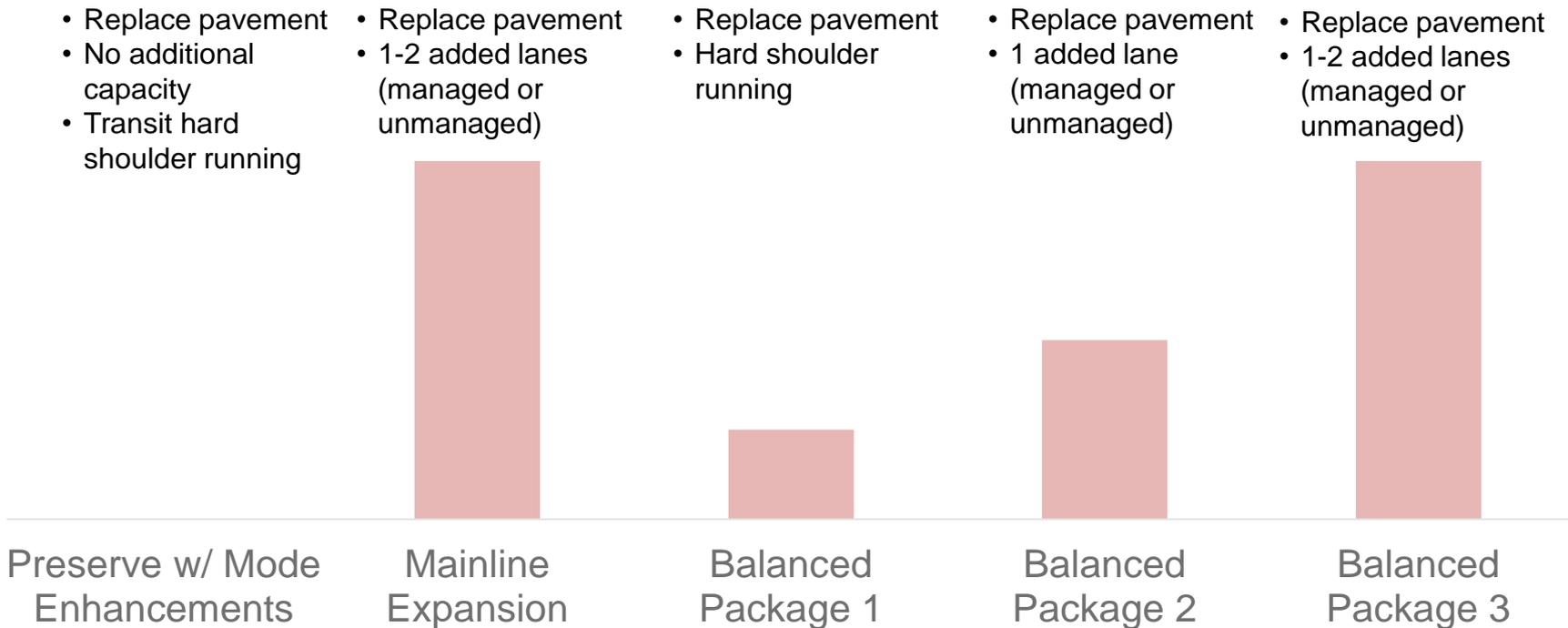
Balanced Package 3

TDM	TDM	TDM	TDM	TDM
Transit	Transit	Transit	Transit	Transit
Local System				
Bike Ped				
Motor vehicle				



Motor Vehicle

Capacity (Amount added)



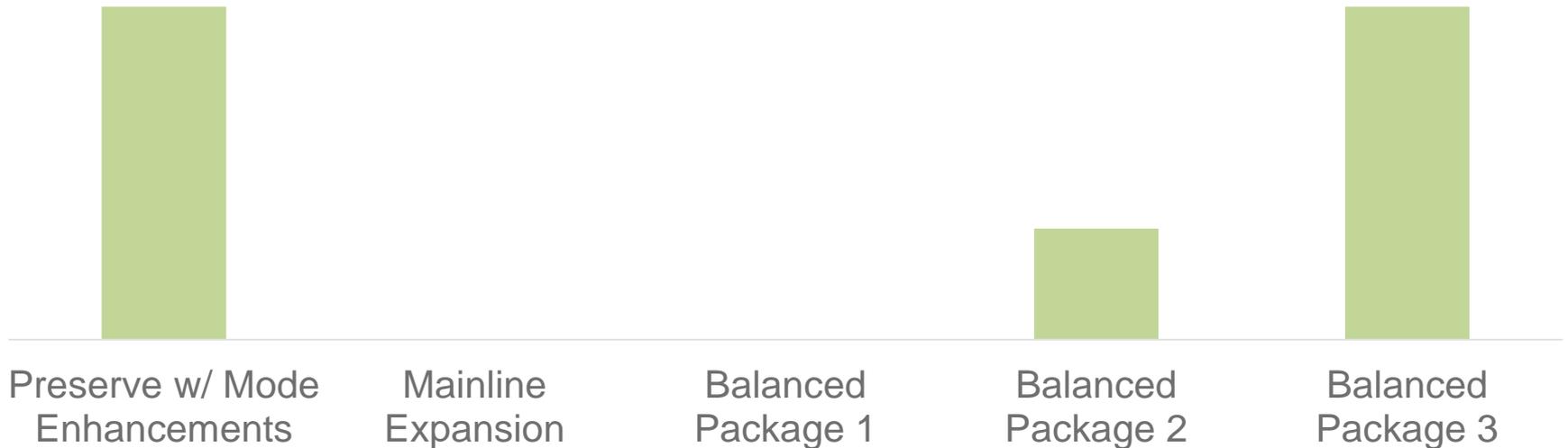
Strategy Package



Bike Ped

New Bike Ped Connections and Crossings (Quantity)

- | | | | | |
|--|--|--|--|--|
| <ul style="list-style-type: none"> • Accommodations every interchange • 4 new connections • 2 new crossings | <ul style="list-style-type: none"> • Accommodations every interchange | <ul style="list-style-type: none"> • Accommodations every interchange | <ul style="list-style-type: none"> • Accommodations every interchange • 1 new connection • 1 new crossing | <ul style="list-style-type: none"> • Accommodations every interchange • 4 new connections • 2 new crossings |
|--|--|--|--|--|



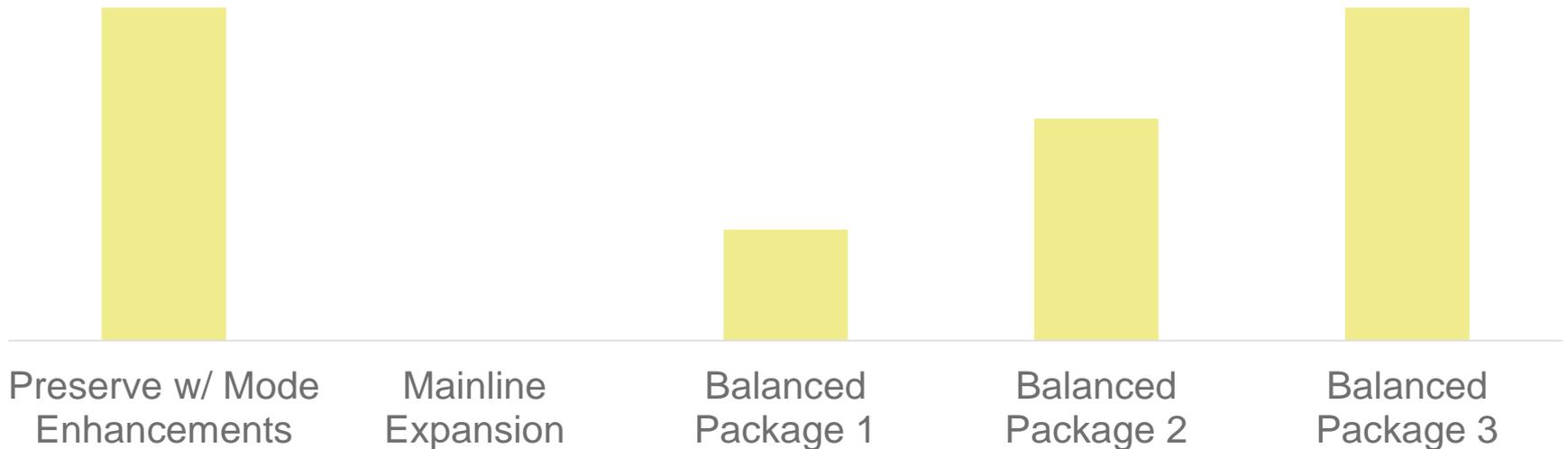
Strategy Package



Local Road

New Connections and Crossings (Quantity)

- 3 or more new connections
- No new connections
- 1 new connection
- 2-3 new connections
- 3 or more new connections

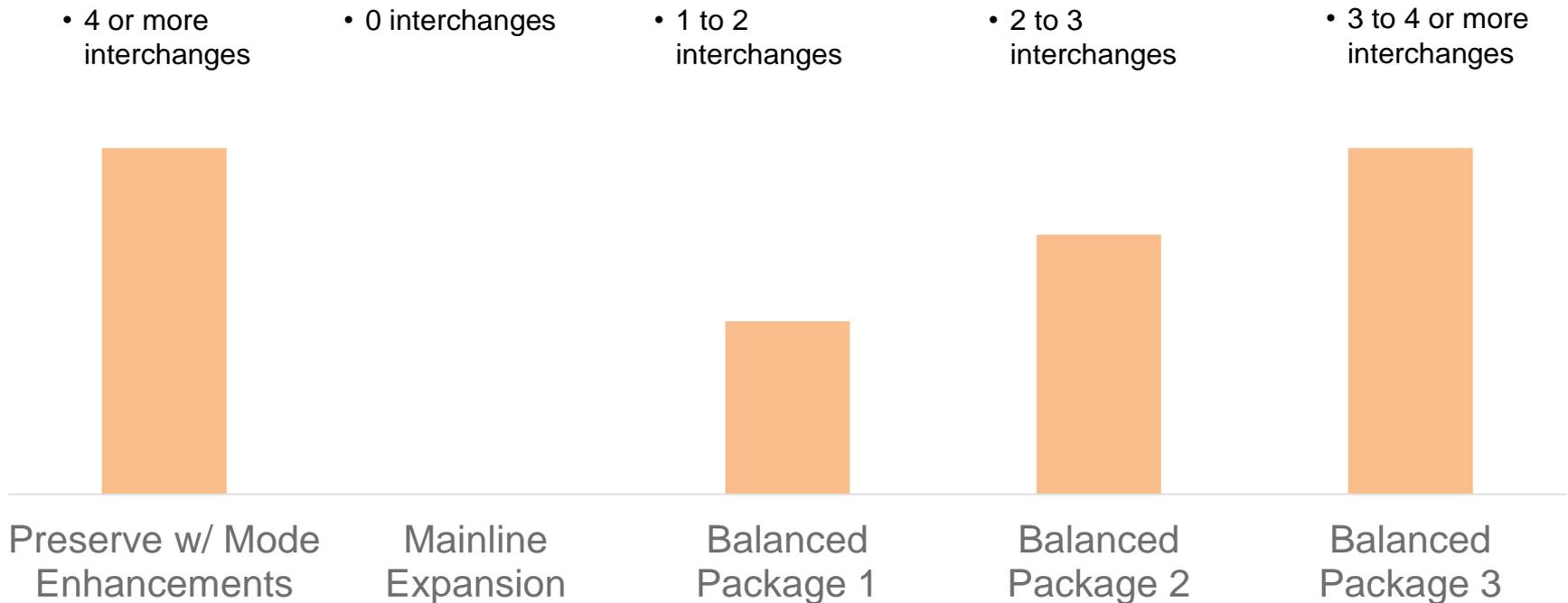


Strategy Package



Transit Priority

Transit Priority Through Interchanges (Quantity)



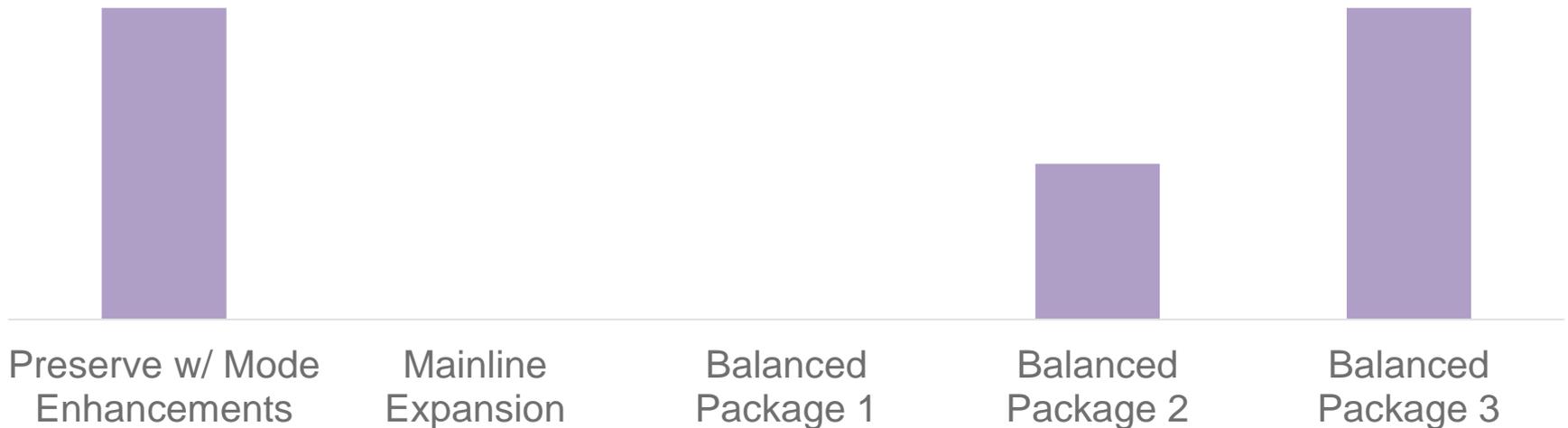
Strategy Package



TDM - Park and Rides

Park and Rides (Quantity)

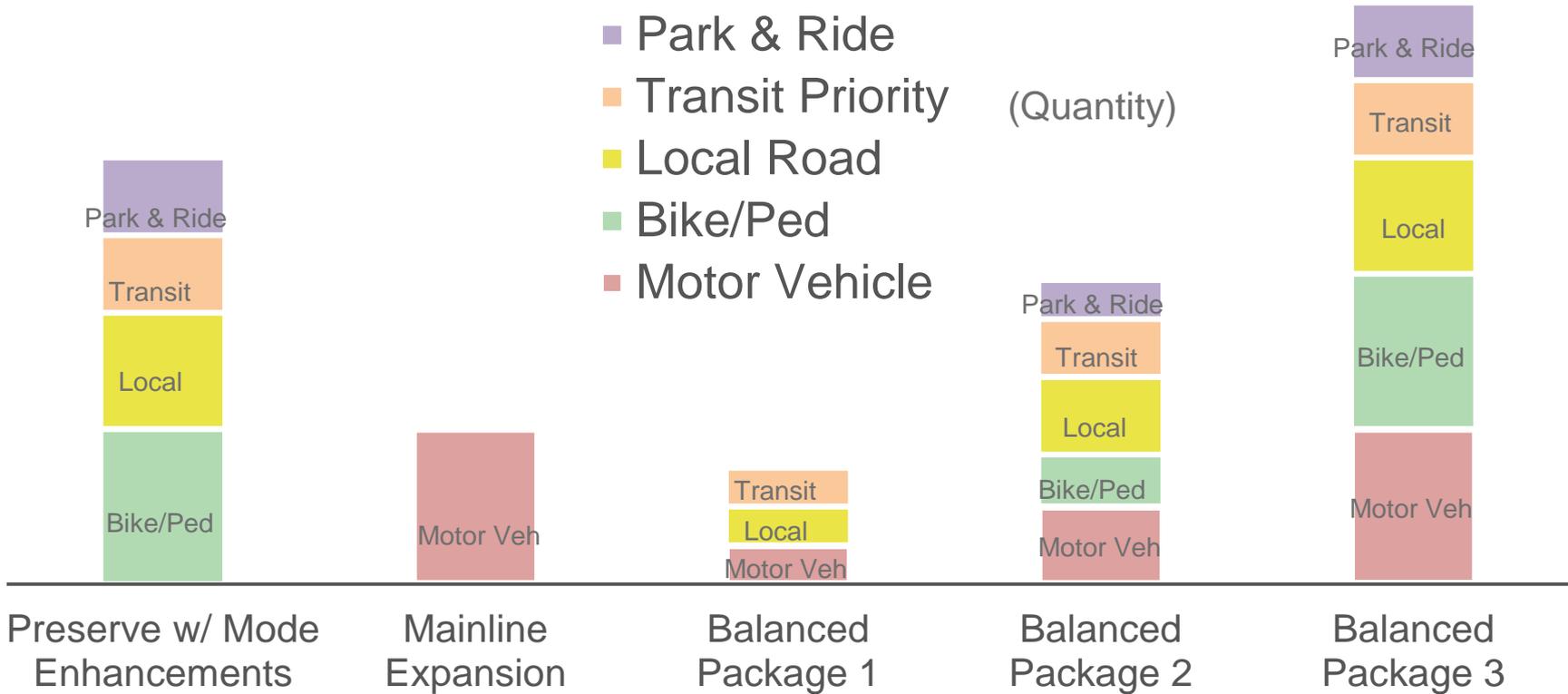
- Park & Rides in SWR P&R Study
 - **2 additional Park & Rides closer to Beltline**
- Park & Rides in SWR P&R Study
- Park & Rides in SWR P&R Study
- Park & Rides in SWR P&R Study
 - **1-2 additional Park & Rides closer to Beltline**
- Park & Rides in SWR P&R Study
 - **2 or more additional Park & Rides closer to Beltline**



Strategy Package



Strategy Package Assembly



Strategy Package



Package Screening Matrix

DRAFT 10/01/2015

Strategy Package Screening Results

Component Type	Preserve w/ Mode Enhancements	Mainline Expansion	Strategy Package Name		
			Balanced Package 1	Balanced Package 2	Balanced Package 3
Motor Vehicle	<ul style="list-style-type: none"> No additional mainline motor vehicle capacity; designation of existing lane for HOV or Bus only and/or hard shoulder running implemented. No major interchange reconstructions¹. Conventional interchange reconstruction at 2 to 4 or more locations; if needed to improve alternate mode accommodations. 	<ul style="list-style-type: none"> Reconstruct Beltline with 1 to 2 additional mainline Beltline lanes in each direction. 2 major interchange reconstructions. Conventional capacity expansion of the existing configuration through 6 to 10 additional interchanges. 	<ul style="list-style-type: none"> Reconstruct Beltline with additional mainline capacity through shoulder running only and/or Managed Lane² applications. 1 major interchange reconstruction. Conventional capacity expansion of the existing configuration through 2 to 4 other interchanges. 	<ul style="list-style-type: none"> Reconstruct Beltline with 1 to 2 additional mainline Beltline lanes and/or shoulder running in each direction with or without Managed Lane applications. 1 major interchange reconstruction. Conventional capacity expansion of the existing configuration through 4 to 6 other interchanges. 	<ul style="list-style-type: none"> Reconstruct Beltline with 1 to 2 additional mainline Beltline lanes in each direction with or without Managed Lane applications. 2 major interchange reconstructions. Conventional capacity expansion of the existing configuration through 6 to 8 or more other interchanges.
Transit Priority³	<ul style="list-style-type: none"> Transit priority through 4 or more interchanges. 	<ul style="list-style-type: none"> Transit priority through 0 interchanges. 	<ul style="list-style-type: none"> Transit priority through 0 to 2 interchanges. 	<ul style="list-style-type: none"> Transit priority through 2 to 3 interchanges. 	<ul style="list-style-type: none"> Transit priority through 2 to 4 or more interchanges.
Bike and Pedestrian	<ul style="list-style-type: none"> Bike/ped facilities through all interchanges. 4 or more bike/ped path connections. 2 or more additional bike/ped grade sep crossings. 	<ul style="list-style-type: none"> Bike/ped facilities through all interchanges. No bike/ped path connections. No bike/ped grade sep crossings. 	<ul style="list-style-type: none"> Bike/ped facilities through all interchanges. No bike/ped path connections. No bike/ped grade sep crossings. 	<ul style="list-style-type: none"> Bike/ped facilities through all interchanges. 1 bike/ped path connection. 1 bike/ped grade sep crossings. 	<ul style="list-style-type: none"> Bike/ped facilities through all interchanges. 4 or more bike/ped path connections. 2 or more bike/ped grade sep crossing.
Crossings and Connections	<ul style="list-style-type: none"> 3 or more additional local road connections. Local intersection improvements if directly adjacent to an interchange that is reconstructed or expanded or if needed due to new local road connections. 	<ul style="list-style-type: none"> No additional local road connections/crossings. Local intersection improvements if directly adjacent to an interchange that is reconstructed or expanded. 	<ul style="list-style-type: none"> 1 additional local road connection/crossing. Local intersection improvements if directly adjacent to an interchange that is reconstructed or expanded or if needed due to new local road connections. 	<ul style="list-style-type: none"> 2 to 3 additional local road connections/crossings. Local intersection improvements if directly adjacent to an interchange that is reconstructed or expanded or if needed due to new local road connections. 	<ul style="list-style-type: none"> 3 or more additional local road connections/crossings. Local intersection improvements if directly adjacent to an interchange that is reconstructed or expanded or if needed due to new local road connections.
Park and Ride	<ul style="list-style-type: none"> Evaluate Dane County Park and Ride locations recommended in the 2015 SW Region Park and Ride Study for possible inclusion in roadway projects, plus 2 or more additional generally closer to the Beltline corridor. 	<ul style="list-style-type: none"> Evaluate Dane County Park and Ride locations recommended in the 2015 SW Region Park and Ride Study for possible inclusion in roadway projects. 	<ul style="list-style-type: none"> Evaluate Dane County Park and Ride locations recommended in the 2015 SW Region Park and Ride Study for possible inclusion in roadway projects. 	<ul style="list-style-type: none"> Evaluate Dane County Park and Ride locations recommended in the 2015 SW Region Park and Ride Study for possible inclusion in roadway projects plus 1 to 2 additional generally closer to the Beltline. 	<ul style="list-style-type: none"> Evaluate Dane County Park and Ride locations recommended in the 2015 SW Region Park and Ride Study for possible inclusion in roadway projects plus 2 or more additional generally closer to the Beltline.

STRATEGY PACKAGE SCREENING RESULTS SUMMARY - Notes:

- Individual modal components within a given strategy package would typically be implemented based on their effectiveness, cost, and impacts. This will be determined in the next stage of the study (National Environment Policy Act, or NEPA, documentation).
- A Preserve the Existing Facilities (No Build) option will also be considered in the next stage of the study. This is a requirement of the NEPA documentation stage.
- The number or ranges of individual components included within a given package are an estimate at this time, and may be adjusted in the next stage of the study.
- The screening terminology "Somewhat" indicates that the Strategy Package partially meets the objective.

SCREENING QUESTIONS FOR ROOT OBJECTIVES						
1. Improve Safety for all modes						
A Bike	Does the package potentially decrease bicycle-motor vehicle crashes (or conflicts) near the alignment and Beltline Corridor?	Yes	No	Somewhat	Yes	Yes
B Ped	Does the package potentially decrease ped-motor vehicle crashes (or conflicts) near the alignment and Beltline Corridor?					
C Mtr veh	Can the package decrease crashes on the Beltline?	No	Yes	Somewhat	Yes	Yes
2. Address Beltline infrastructure condition and deficiencies.						
D	Does the package have the potential to address Beltline pavements, structures, and substandard elements?	Yes	Yes	Yes	Yes	Yes
3. Improve system mobility (congestion) for all modes						
E Ped	Does the package provide pedestrian facilities?	Yes	Somewhat	Somewhat	Somewhat	Yes
F	Does the package provide the opportunity to complete the pedestrian network near and across the Beltline Corridor?	Yes	No	No	Yes	Yes
G Bike	Does the package provide bicycle facilities?	Yes	Somewhat	Somewhat	Yes	Yes
H	Does the package have the potential to address bike network gaps (deficiencies) along and across the Beltline?	Yes	No	No	Somewhat	Yes
I	Can the package provide convenient bike mode transfers?	Yes	No	No	Somewhat	Yes
J Transit	Can the package improve routes for transit?	Yes	Somewhat	Somewhat	Somewhat	Yes
K	Does the package have the potential to provide measures that make transit more competitive with auto?	Yes	Somewhat	Somewhat	Somewhat	Yes

¹ Major interchange reconstruction may include reconfiguration of the ramps, upgrade(s) from service ramps to freeflow system ramps, alterations to access of the crossing arterial or other nearby streets, etc.

² Managed Lanes refers to numerous strategies that control things such as the types of vehicles that may use the lane, fixed or variable tolls, variable speed limits, and more using variable message boards, dynamic signage, and other technology.

³ Transit priority for the Beltline study refers to measures that allow buses to gain a time advantage over general motor vehicles and potentially improve service reliability most likely through advanced service at intersections on corridors that cross the Beltline.

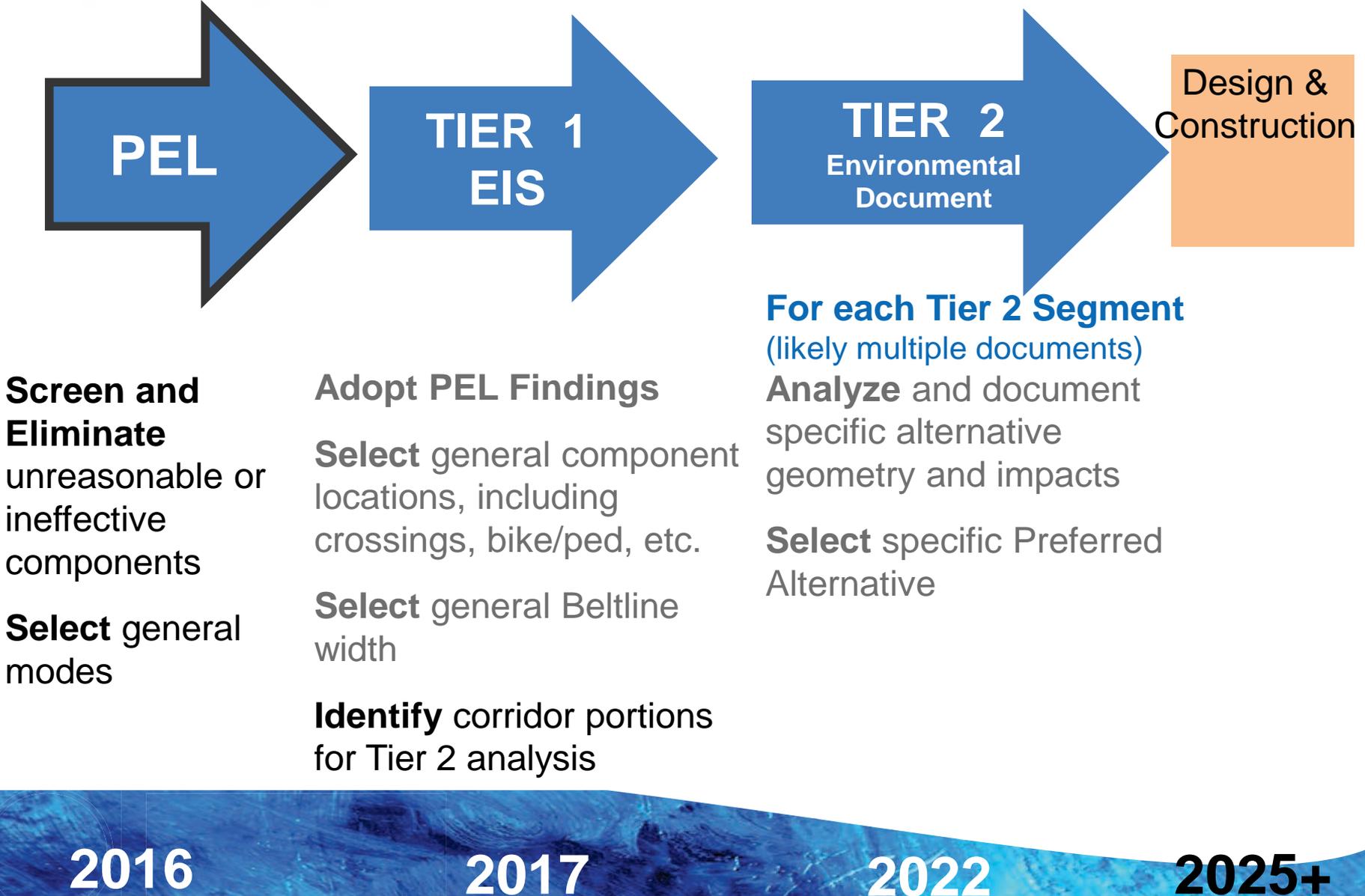
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Proposed Next Steps



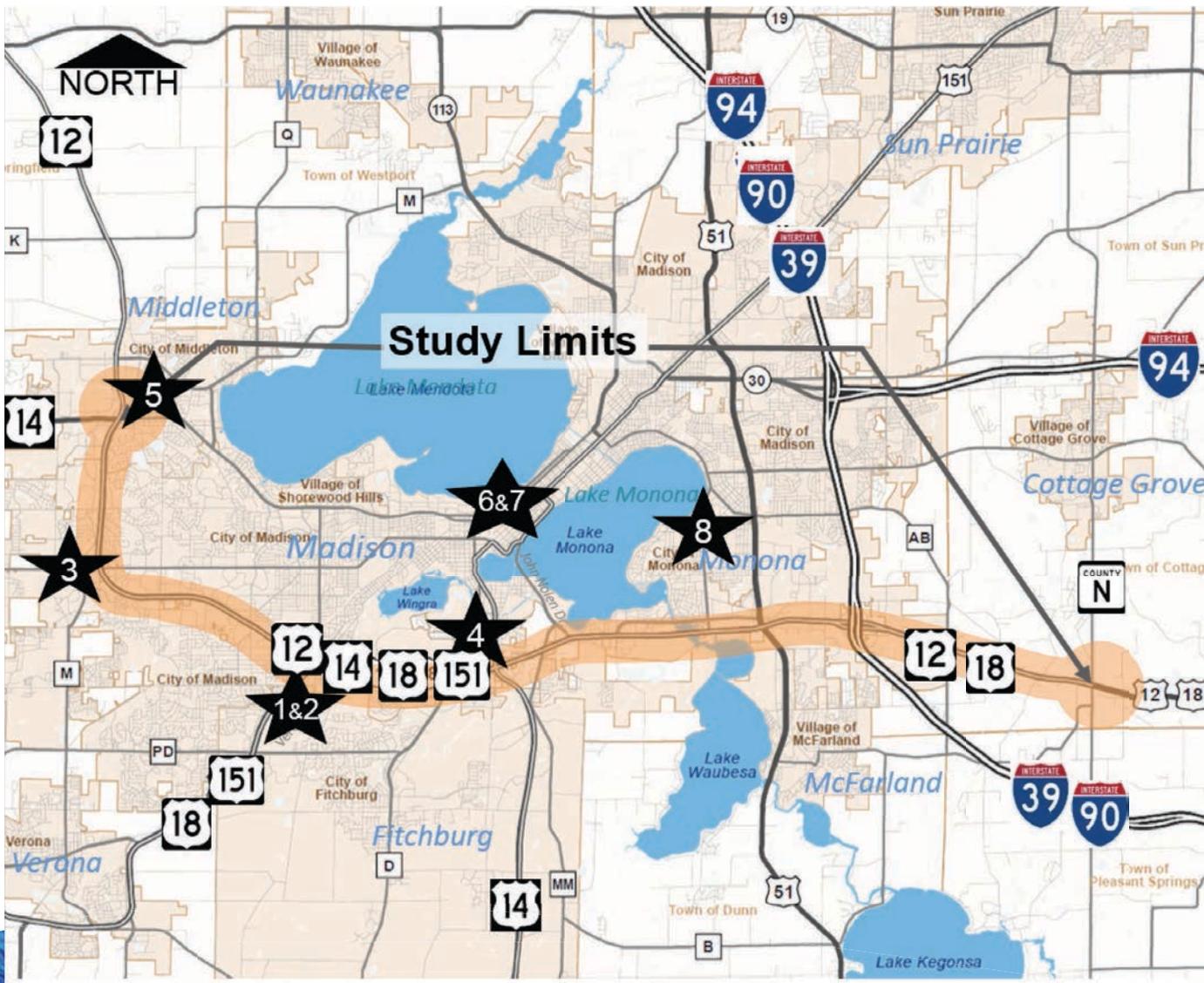
Planned timeline



Public Involvement Meetings



Public Involvement Meetings



- 1** **Monday, November 2, 2015**
 5:30 - 8 P.M., presentation at 6 P.M.
Boys & Girls Club Gym
 4619 Jenewein Road, Fitchburg
- 2** **Tuesday, November 3, 2015**
 7 - 9 A.M., presentation at 7:30 A.M.
Boys & Girls Club Gym
 4619 Jenewein Road, Fitchburg
- 3** **Wednesday, November 4, 2015**
 5:30 - 8 P.M., presentation at 6 P.M.
Wisconsin Bank & Trust (Community Rm.)
 119 Junction Road, Madison
- 4** **Tuesday, November 10, 2015**
 5:30 - 8 P.M., presentation at 6 P.M.
Centro Hispano
 810 W. Badger Road, Madison
- 5** **Thursday, November 12, 2015**
 5:30 - 8 P.M., presentation at 6 P.M.
Kromrey Middle School - Cafetorium
 7009 Donna Drive, Middleton
- 6&7** **Monday, November 16, 2015**
 Two meetings:
 11:30 A.M. - 1:30 P.M., presentation
 at 12:15 P.M.
 5:30 - 8 P.M., presentation at 6 P.M.
Madison Central Library, Room 302
 201 W. Mifflin Street, Madison
- 8** **Wednesday, November 18, 2015**
 5:30 - 8 P.M., presentation at 6 P.M.
Monona Community Center
 1011 Nichols Road, Monona

Ways to promote Public Involvement Meetings

- ▶ Add to community web site
- ▶ Add event story to community web site
- ▶ Distribute email invitation
- ▶ Like Facebook (share event)

Contact: Stephanie Thomsen

608-251-4843

Stephanie.thomsen@Strand.com



Madison Beltline PEL Policy Advisory Committee Meeting

10/14/15 Strand

