

Madison East-West Bus Rapid Transit (BRT) Planning Study

Public Meeting 3

Working Locally Preferred Alternative

Madison Senior Center | August 29, 2019 | 6:00-7:30 PM

MADISON DEPARTMENT



OF TRANSPORTATION



AECOM



INTRODUCTIONS + AGENDA

City Staff

+ **City of Madison**

- Tom Lynch, Director of Transportation
- David Trowbridge, Project Manager
- Mike Cechvala, Planner

+ **Metro Transit**

- Drew Beck, Planning Supervisor
- Tim Sobota, Metro Planner

+ **Madison Area Transportation Planning Board (MATPB)**

- Bill Schaefer, Transportation Planning Manager
- Zia Brucaya, Transportation Planner

Consultant Team

TranSmart

SA STRAND
ASSOCIATES®

UrbanAssets

AECOM

CAMBRIDGE
SYSTEMATICS

Toole DesignGroup

FOURSQUARE ITP
INTEGRATED TRANSPORTATION PLANNING



Tonight's Agenda

1. Welcome, Presentation and Q+A (**40 minutes**)

- Transportation planning context
- Project overview and public engagement to date
- Route options and working locally preferred alternative
- Next steps and schedule

2. Upstairs Open House (**50 minutes**)

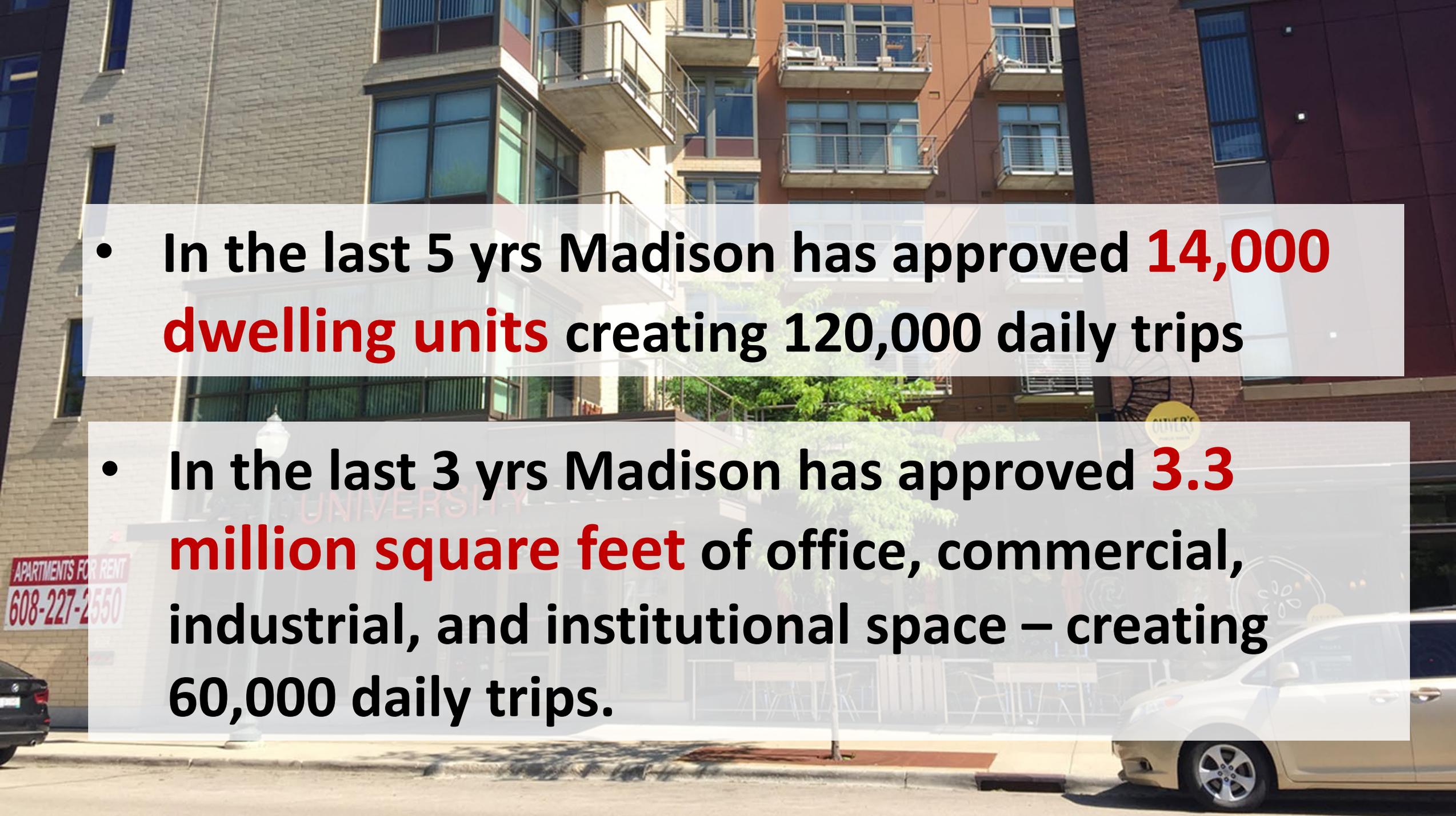
- 3 rooms: west, central, east

+ **Please fill out the worksheet with your comments!**

Ground Rules

- + Ask **clarifying questions** as we go (explain a term or repeat a statement).
- + Save **other questions** for the Q&A – we may be planning to answer them!
- + Share your speaking time with others.

BRT PLANNING CONTEXT

- 
- In the last 5 yrs Madison has approved **14,000 dwelling units** creating 120,000 daily trips

- In the last 3 yrs Madison has approved **3.3 million square feet** of office, commercial, industrial, and institutional space – creating 60,000 daily trips.

180,000 Daily Trips have been added in the last 3-5 years



Madison

2017 255,200

2050 292,500

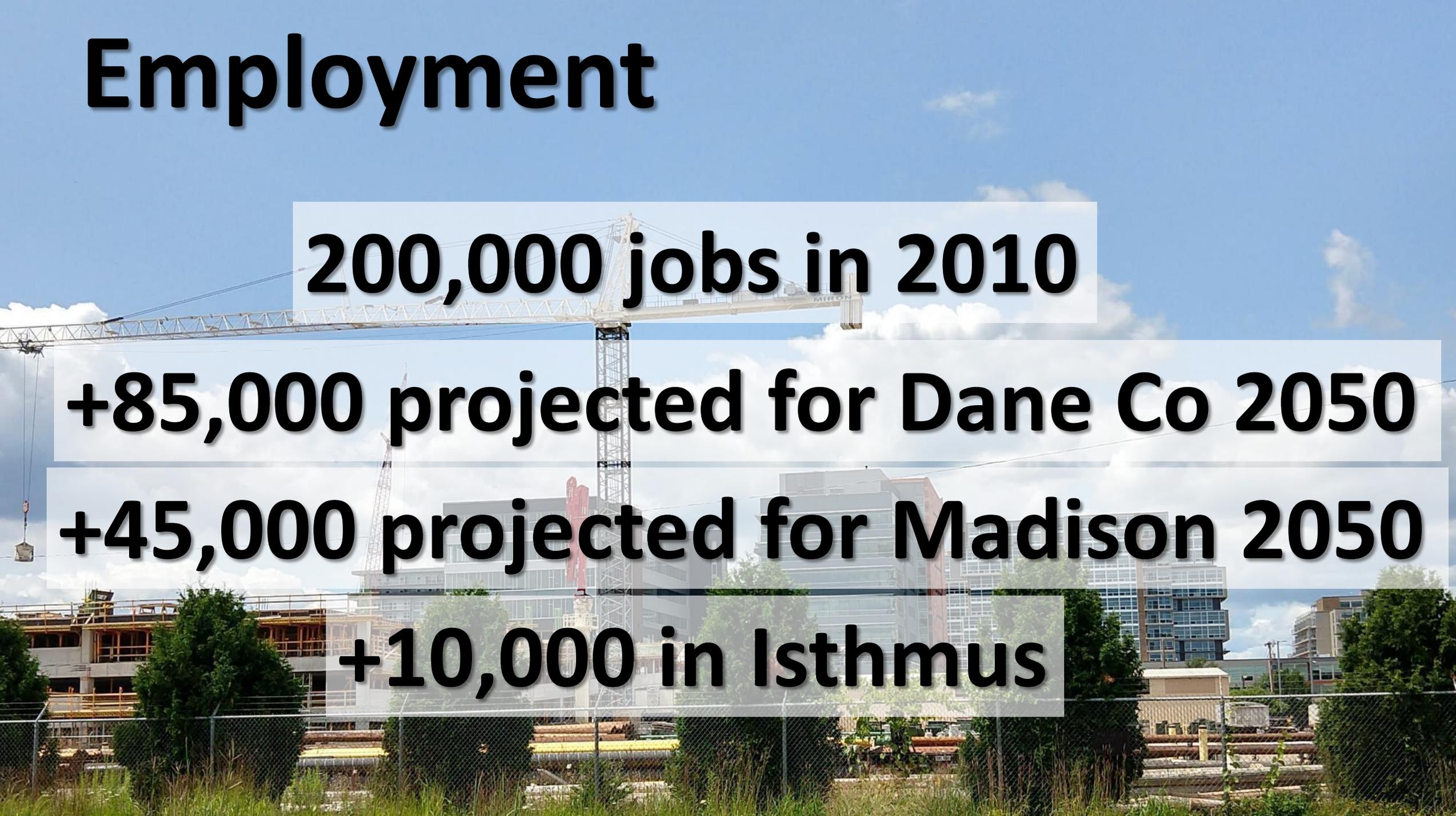
Dane Co

536,000

638,000



Employment

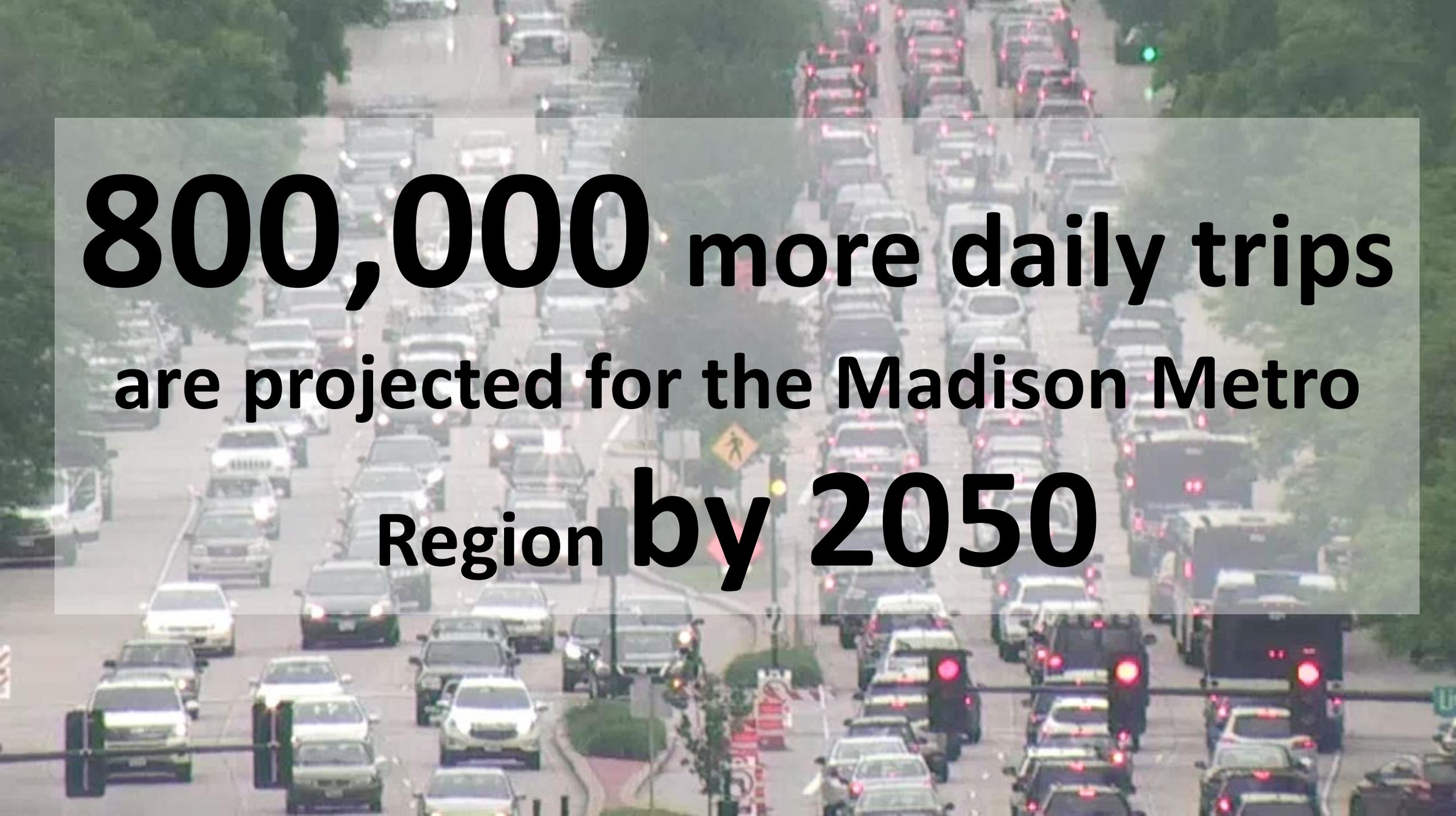
The background of the slide is a photograph of a construction site. A large tower crane is visible in the upper left, extending across the top. Below it, several multi-story buildings are under construction, with visible concrete frames and scaffolding. The foreground is dominated by a chain-link fence and some green grass and weeds. The sky is blue with scattered white clouds.

200,000 jobs in 2010

+85,000 projected for Dane Co 2050

+45,000 projected for Madison 2050

+10,000 in Isthmus



800,000 more daily trips
are projected for the Madison Metro
Region **by 2050**

This would require adding 2 more lanes in each direction for most of our major roadways



East Washington Ave

on 3 buses



**Transit
is
efficient**

<http://i.imgur.com/kw8DaST.gif>

What is Bus Rapid Transit?

BRT has:

- Very **high level** service, similar to but one step down from light rail.
- Typically over 50 percent of the route will have **dedicated bus lanes**, giving buses an advantage in congestion.
- **10-15 minute** service levels - 6 am to 12 midnight.



Cleveland's Health Line BRT



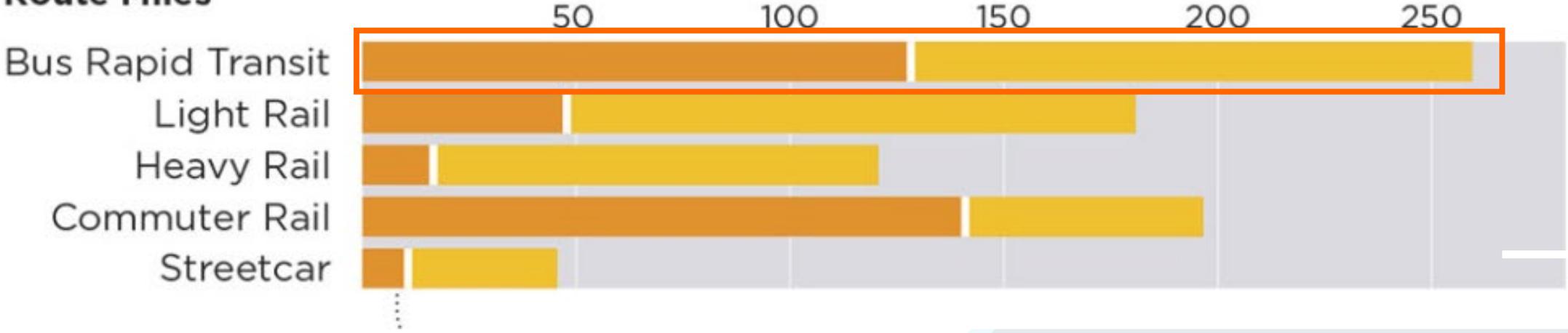
Example of dedicated bus lanes

In 2018 the Federal Transit Administration funded more miles of bus rapid transit than any other type of transit improvement.

North American Transit Construction 2018

Most miles built

Route Miles



A photograph of a city street at dusk. On the left, there are multi-story historic buildings with many windows. A street lamp is visible. In the foreground, there is a BRT station with a glass and metal structure. The sky is a deep blue. The overall scene is urban and well-lit.

\$9.5 billion in economic development along BRT corridor in Cleveland

The HealthLine has been credited with having the highest return-on-investment of any public transit project in the nation, leveraging \$190 for every transit dollar invested.

Benefits

For every \$1
communities invest in public
transportation,
approximately \$4
is generated in economic returns APTA

BRT is Just A Part of an Overall Transit Initiative

Transit Initiative

- Access – Low Income/school passes
- Safety - Rehabilitate E Washington Avenue Bus Garage
- Expanded Service - Satellite Bus Garage
- Bus Rapid Transit
- Service to Outlying Communities
- Improve Peripheral Bus Service
- Expand and Add Park and Ride Lots
- No-emission Buses

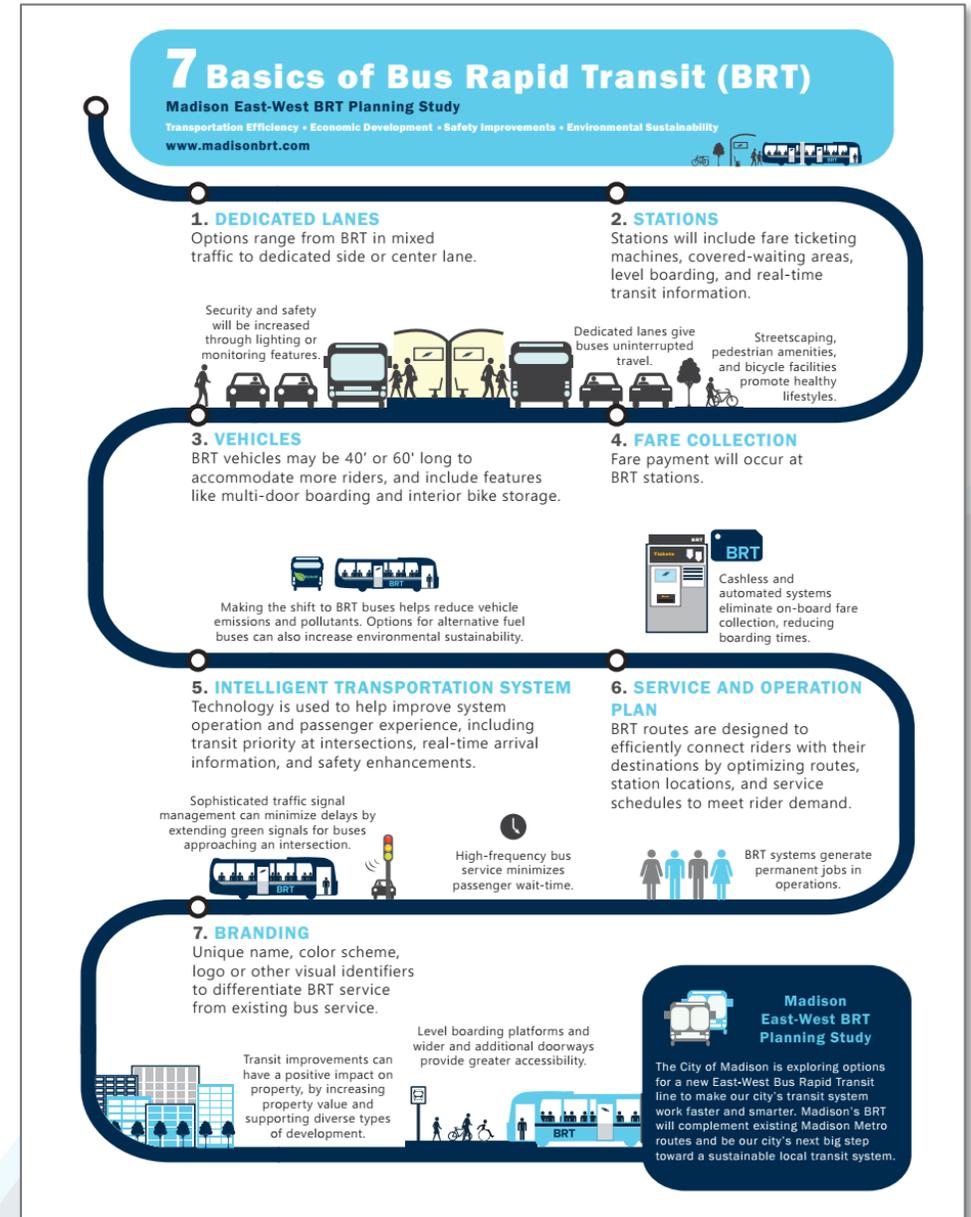


PROJECT OVERVIEW

Goals, Key Steps, Public Engagement
Process and Input To Date

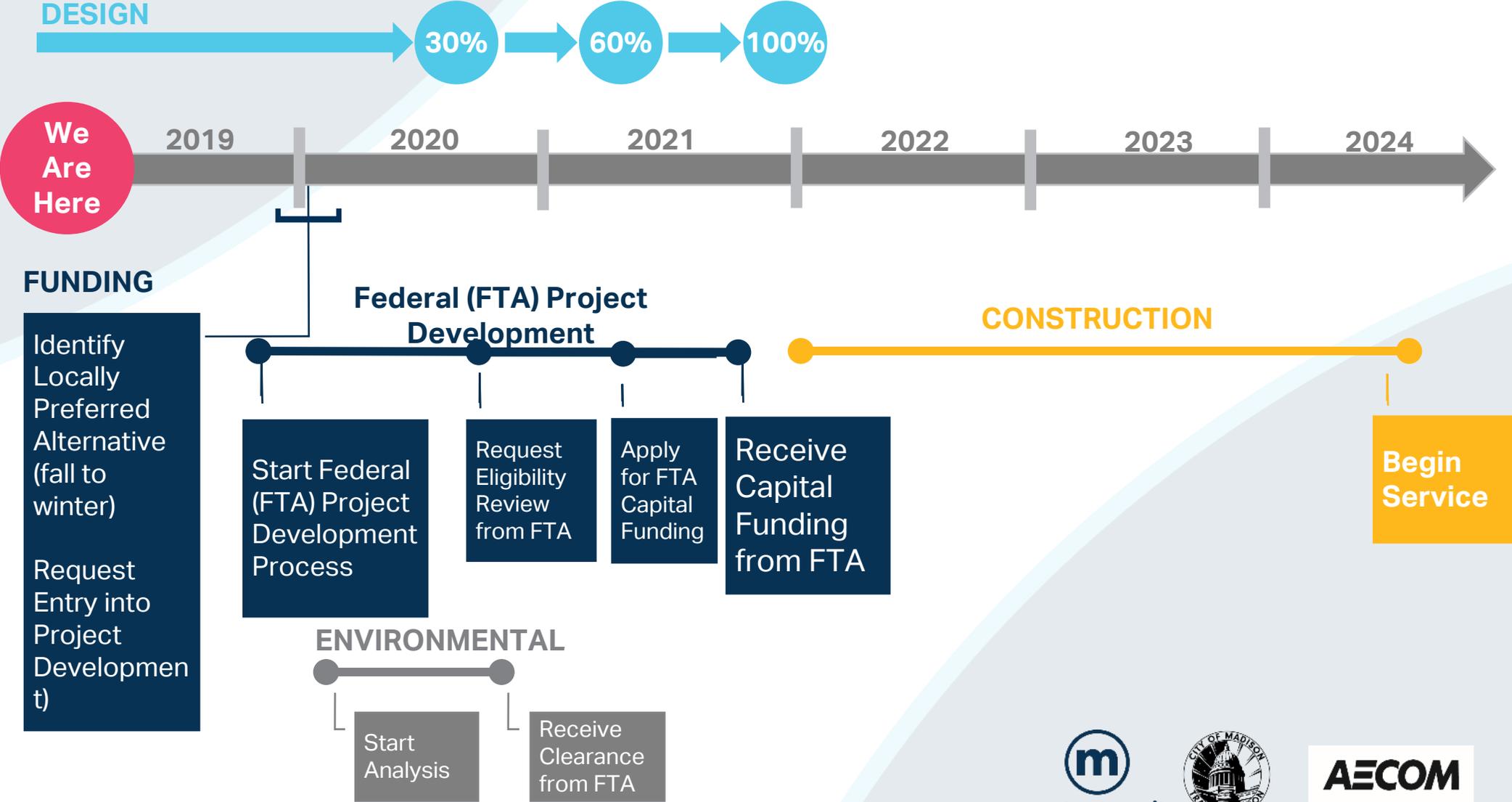
Benefits of BRT

- + Improved mobility
- + Future growth and development
- + Improved access to employment and education
- + Increased quality of life
- + More sustainable community



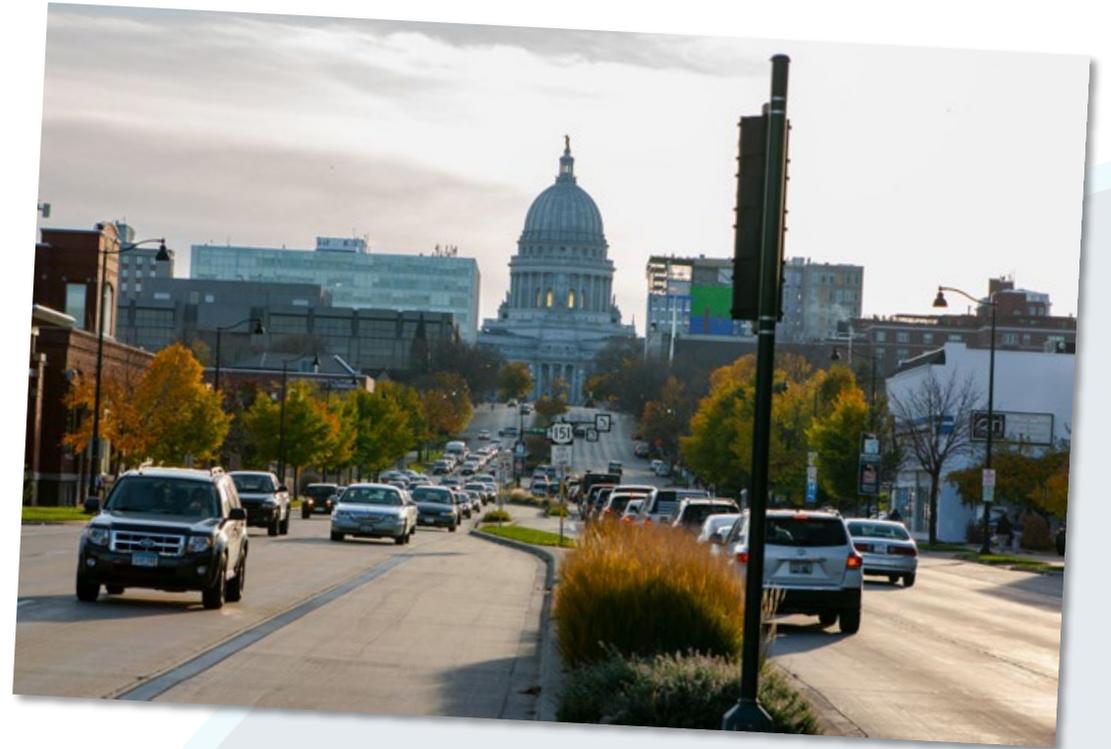
MADISON EAST-WEST BRT PLANNING STUDY

Project Development Process



Current Project Study Goals

- + Develop a plan for Madison's first BRT route
- + Build community support
- + Identify local funding sources
- + **Set the stage to apply for Federal funding**



Current Project Key Steps

We Are Here

Phase I

- Winter 2018-2019
- Develop Initial Options

Phase II

- Spring/Summer 2019
- Evaluate Options (public engagement, engineering)

Phase III

- Fall 2019
- Select Preliminary Locally Preferred Alternative (LPA)
- Refine Details

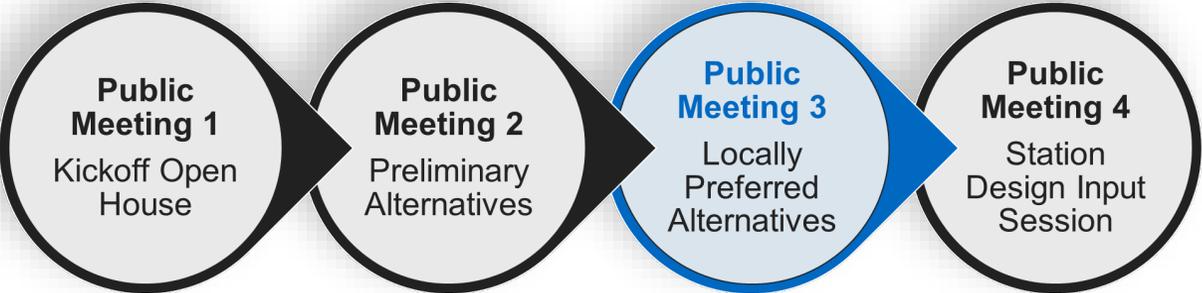
Federal Funding, Design, Construction

- 2020-2024
- Obtain Federal Capital Funding
- Finalize Local Funding
- Complete Design

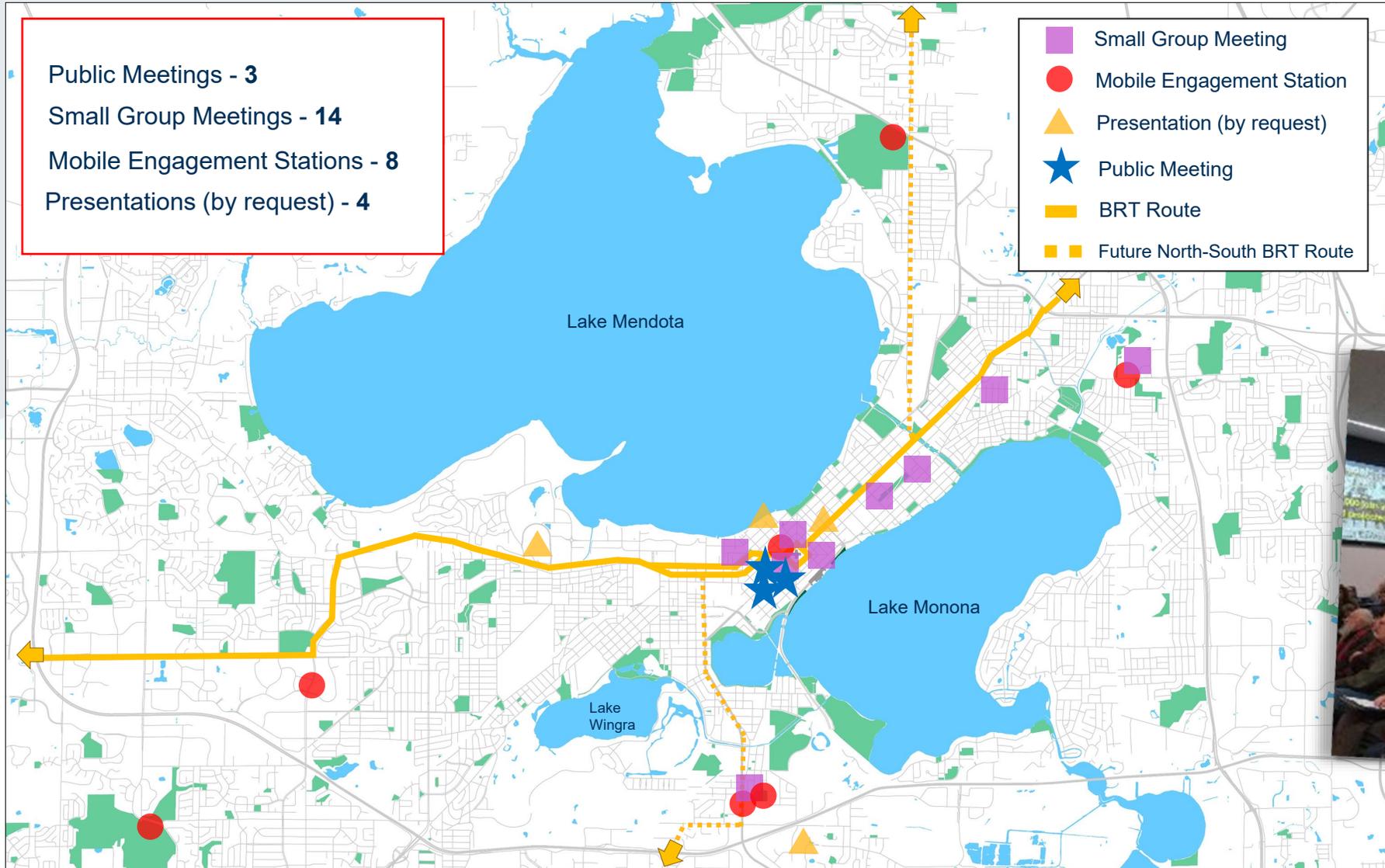
Opening Day Target: August 2024



Public Engagement to-Date



Public Engagement Outreach

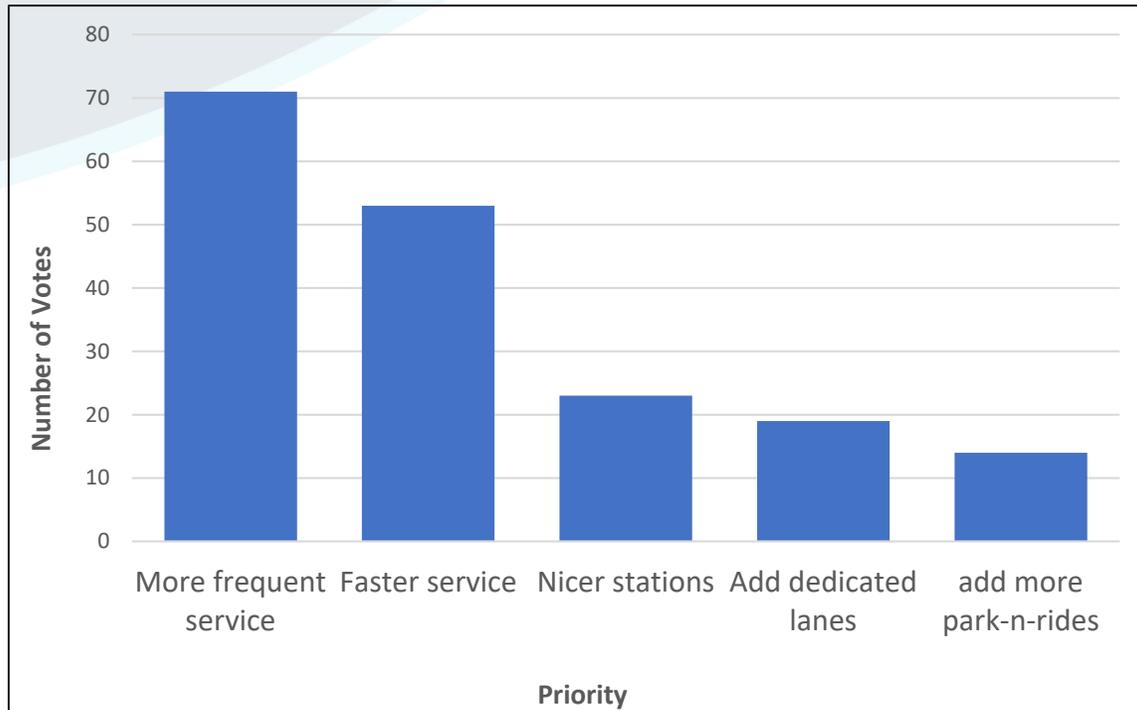


Public Meeting Results

PUBLIC MEETING 1

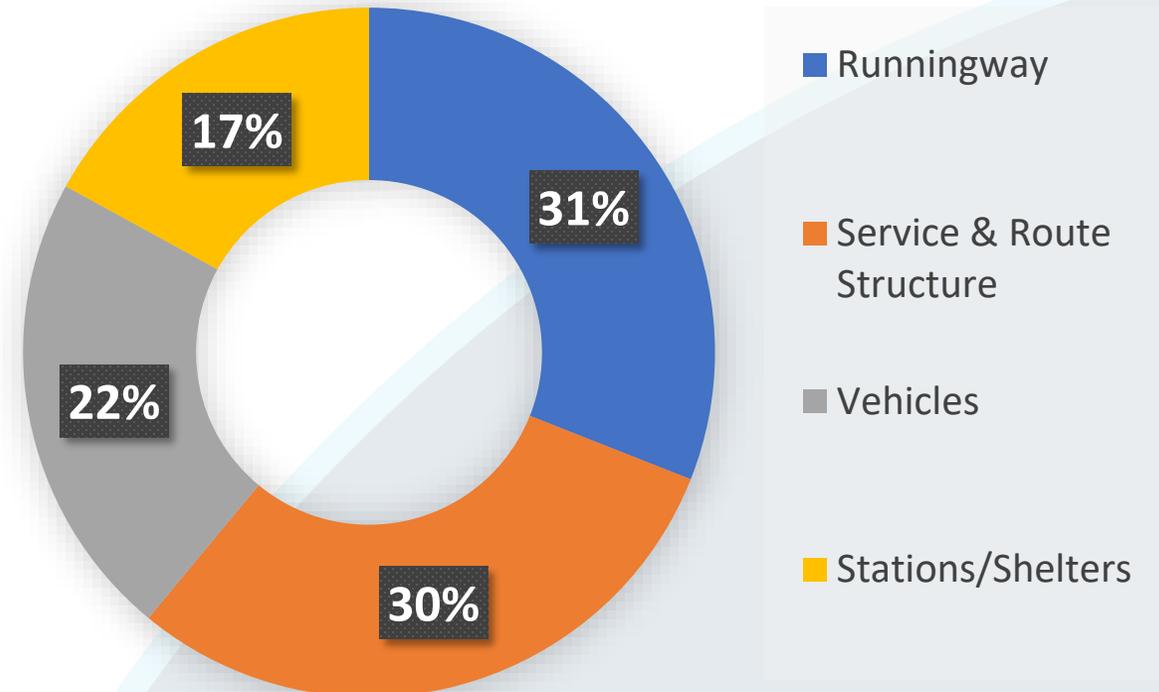
Public Meeting 1 Priorities

Each participant given 3 dots or "votes"



PUBLIC MEETING 2

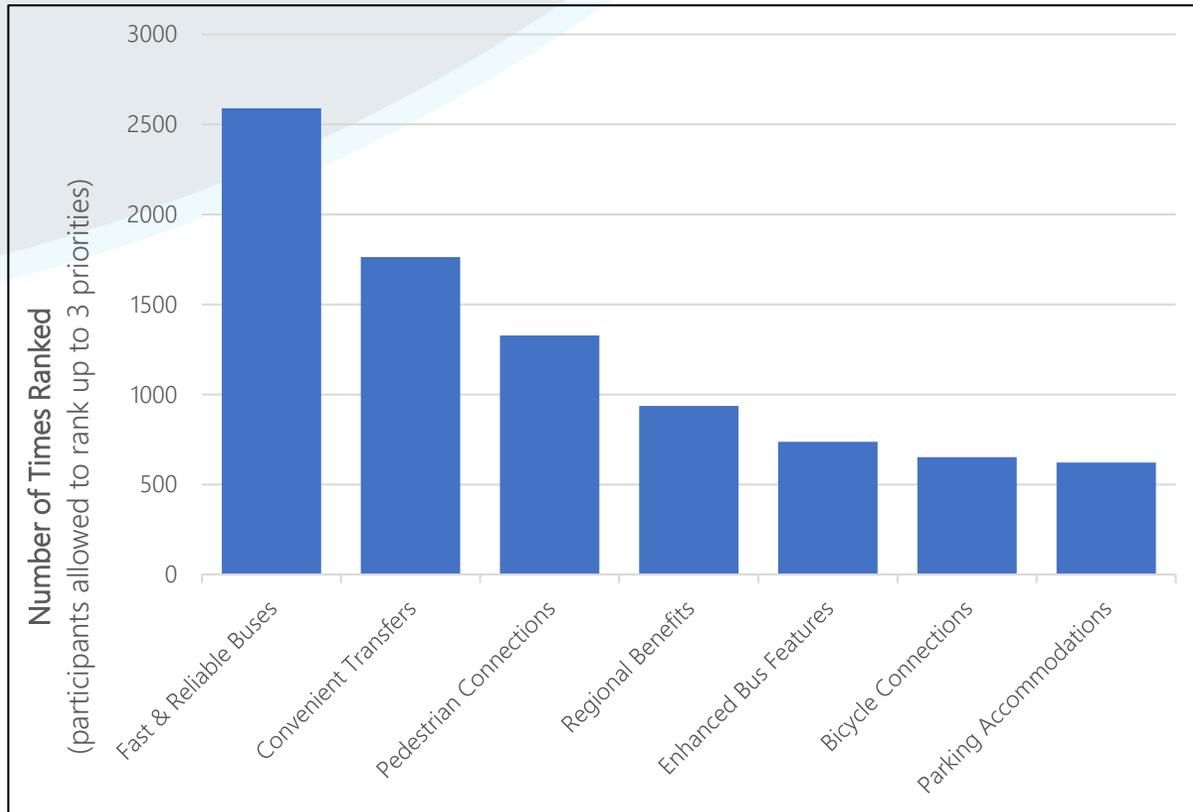
BRT Budget Allocation Priorities



Community Survey Results

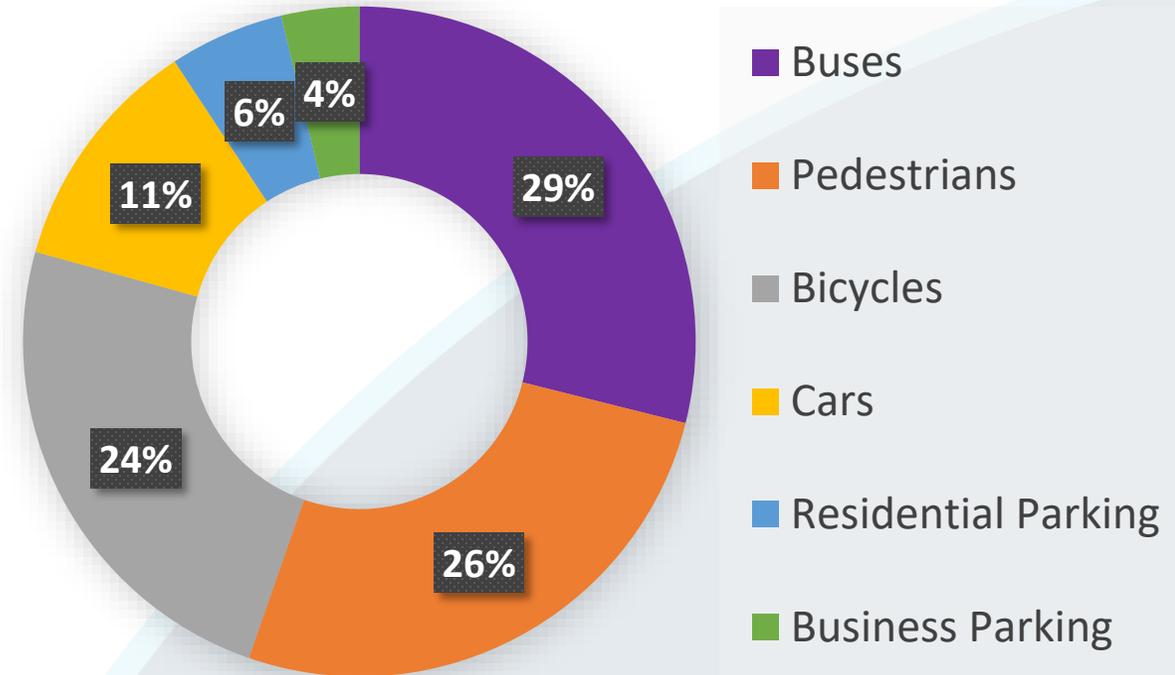
SURVEY 1

Survey 1 Priorities



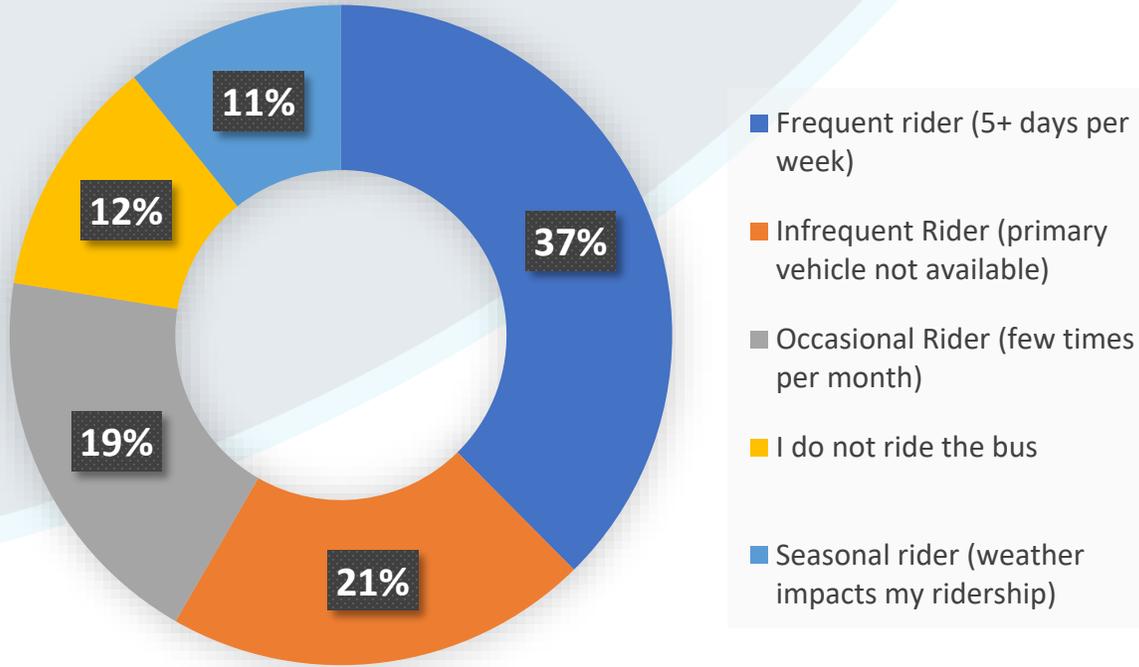
SURVEY 2

Right-of-way Space Priorities

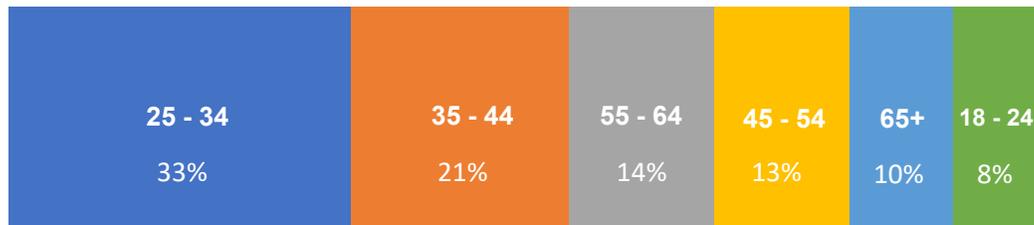


Who We Heard From - Survey 1&2

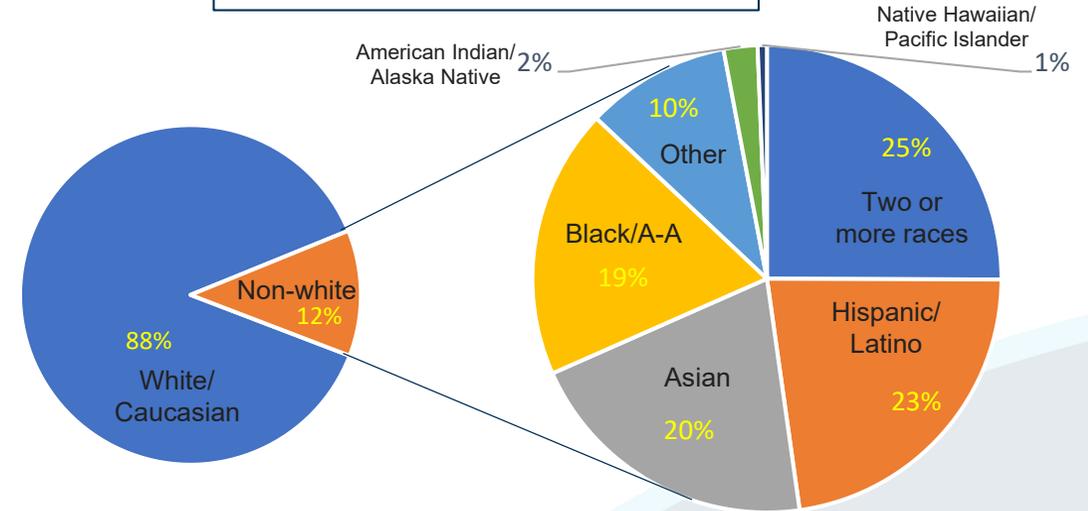
FREQUENCY OF RIDER



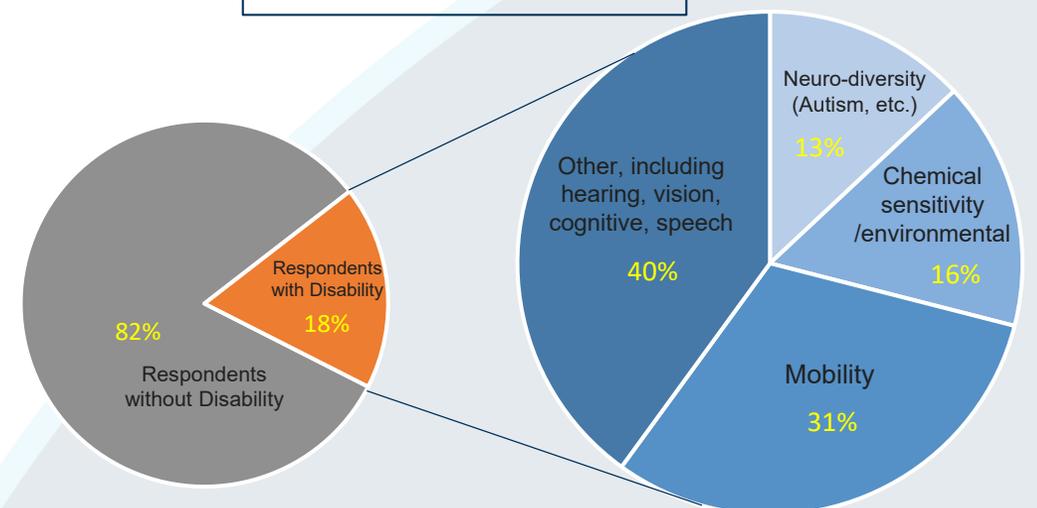
AGE OF RESPONDENTS



RACE OF RESPONDENTS



DISABILITY





MADISON EAST-WEST BRT

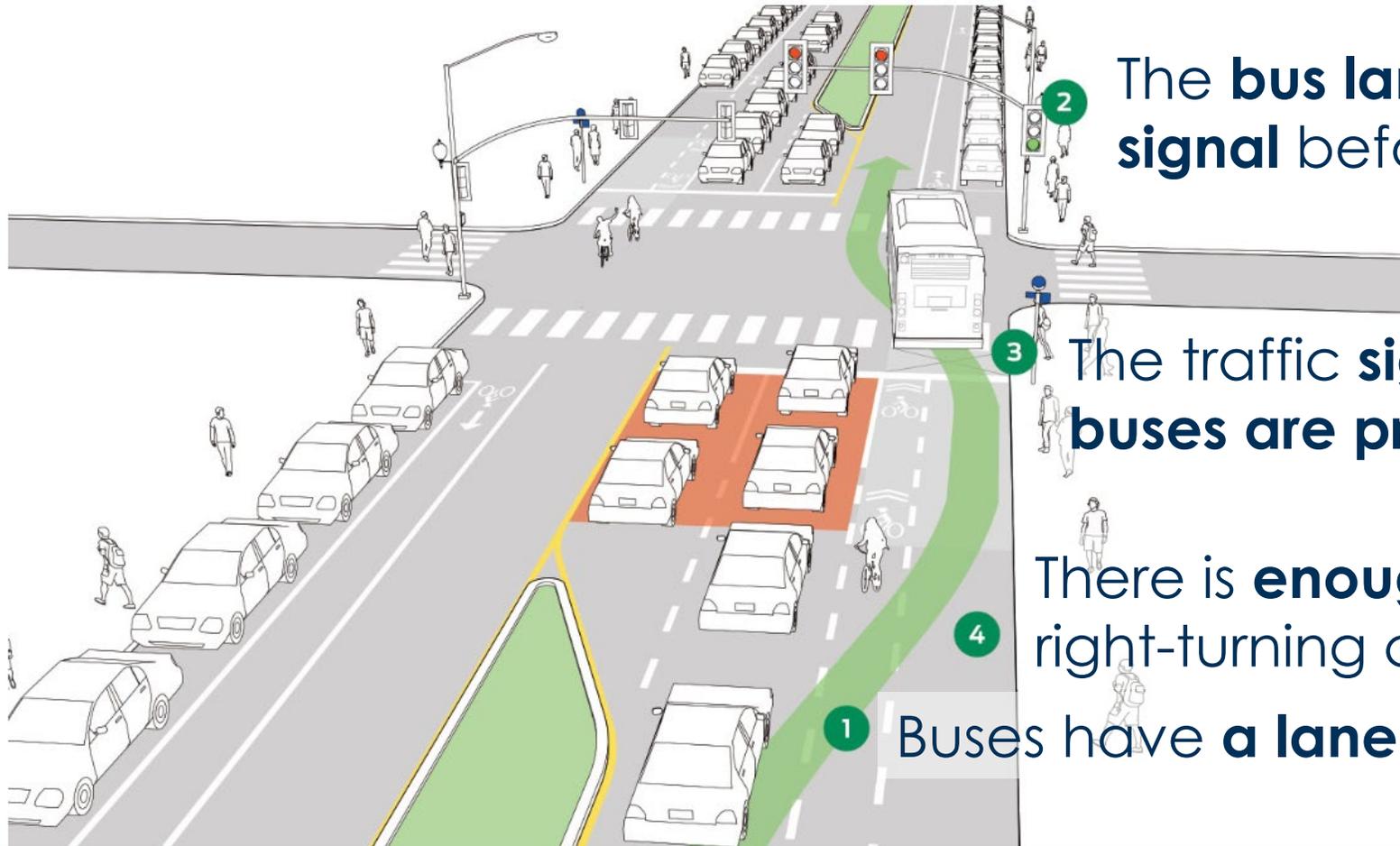
Running Way Options

BRT Runningway Options



Curbside Dedicated BRT Lanes: remove one lane of traffic or parking

BRT Runningway Options



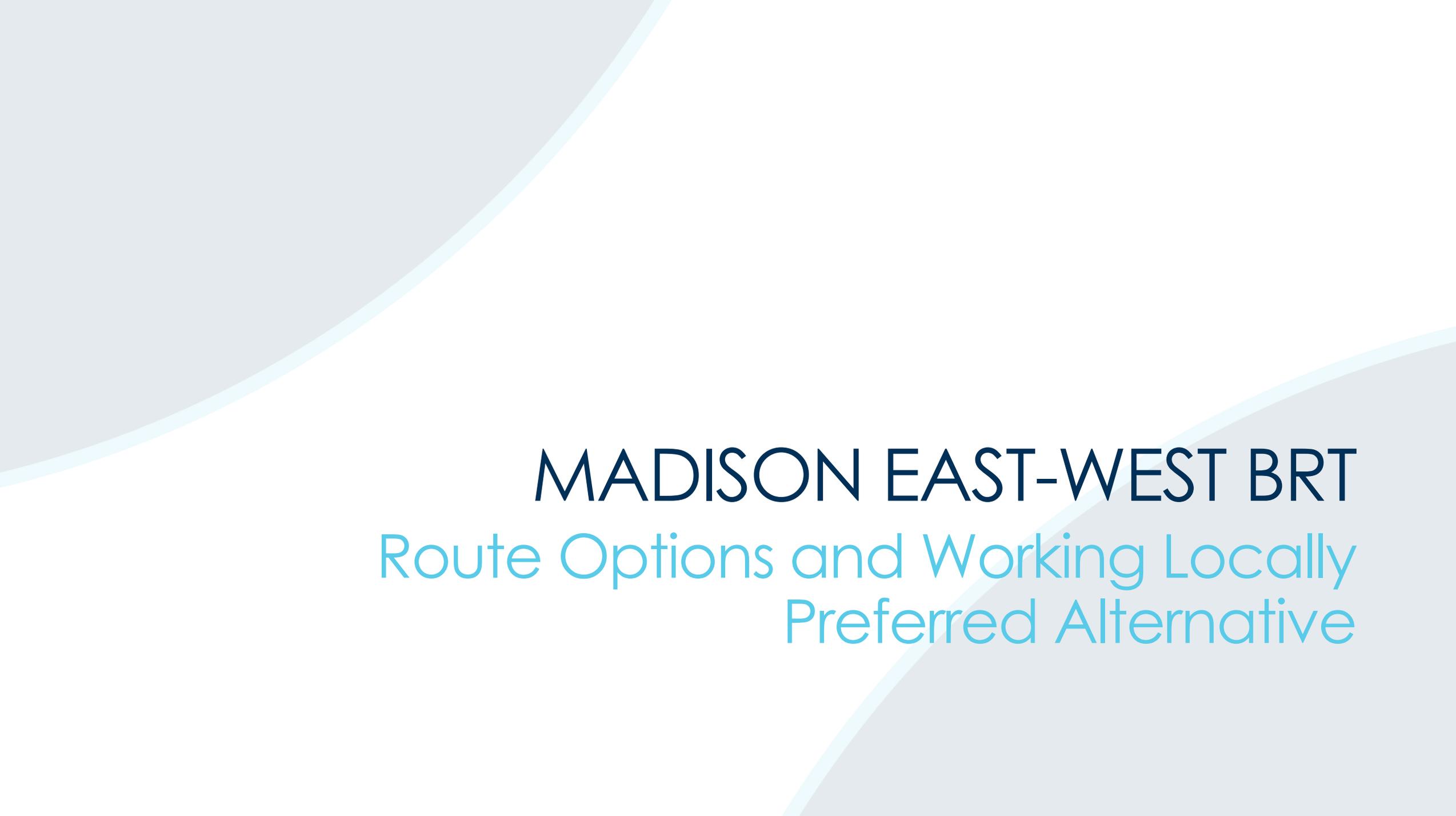
2 The **bus lane gets its own green signal** before other vehicles.

3 The traffic **signal detects when buses are present**.

4 There is **enough storage for buses and right-turning cars**.

1 Buses have **a lane to pass stopped cars**.

BRT Operates in Mixed Traffic: transit signal priority and queue jumps

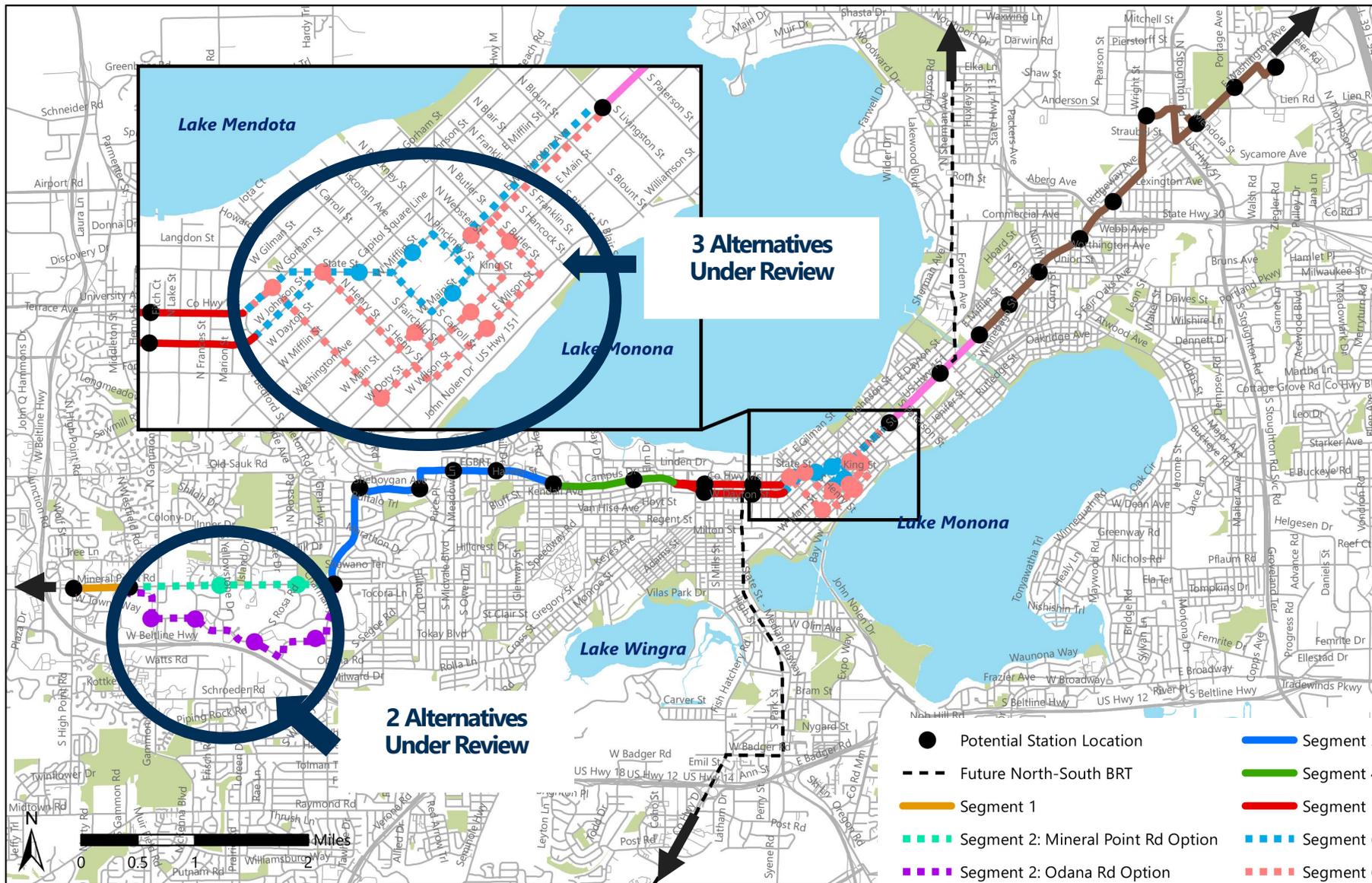


MADISON EAST-WEST BRT

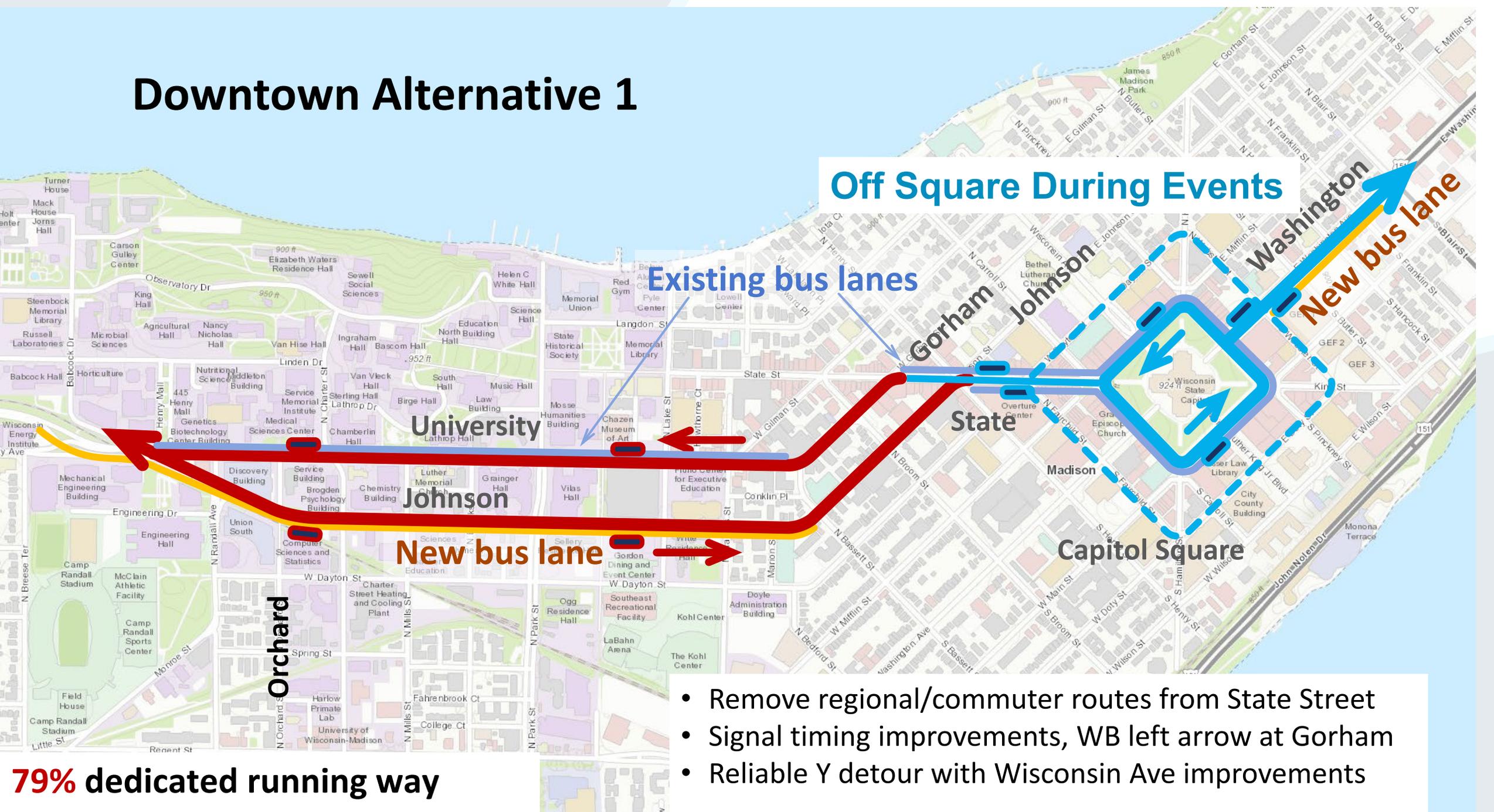
Route Options and Working Locally
Preferred Alternative

MADISON EAST-WEST BRT PLANNING STUDY

Working Locally Preferred Alternative Route



Downtown Alternative 1



Off Square During Events

Existing bus lanes

Washington
New bus lane

University

State

Johnson

New bus lane

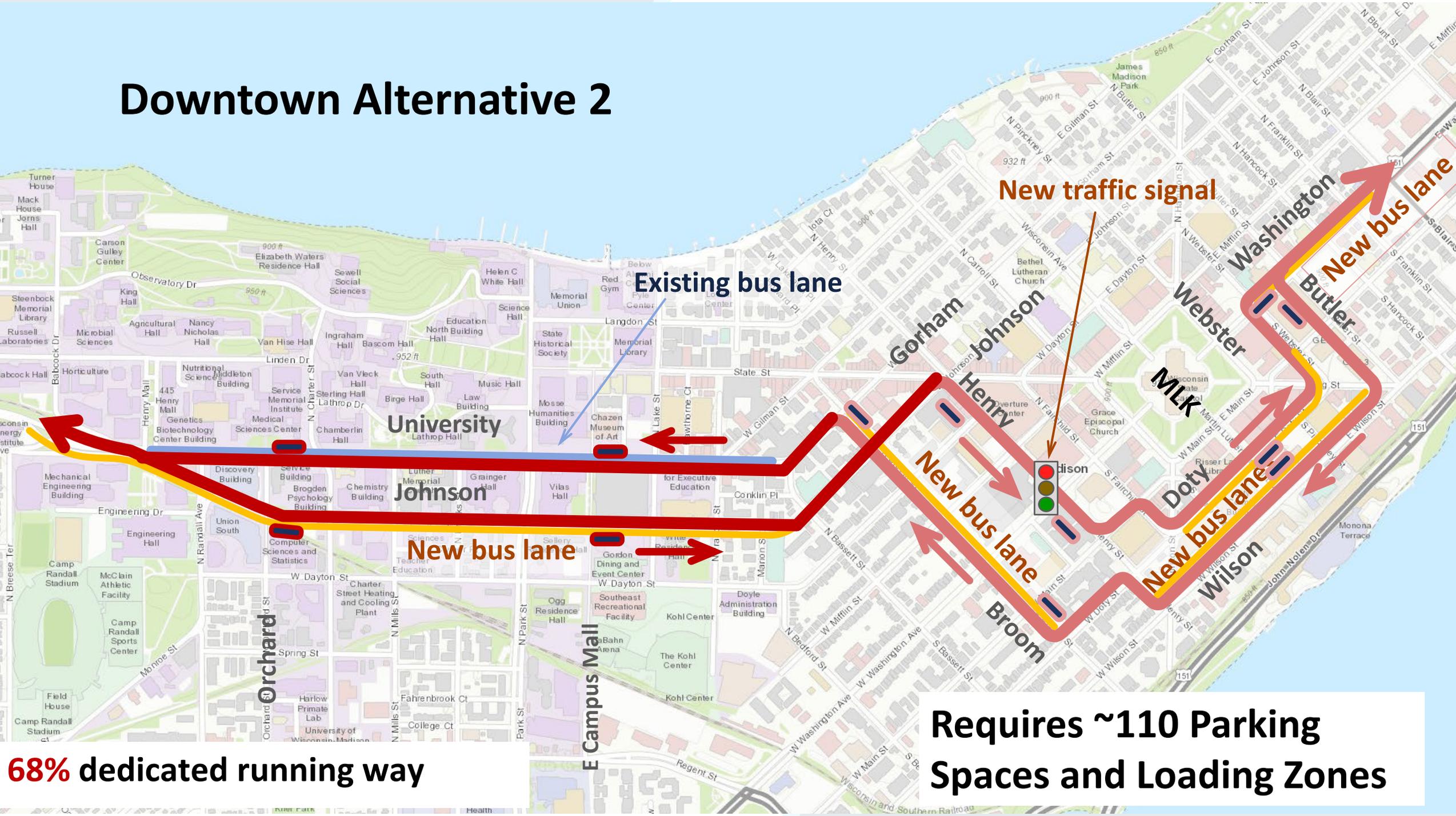
Capitol Square

Orchard

- Remove regional/commuter routes from State Street
- Signal timing improvements, WB left arrow at Gorham
- Reliable Y detour with Wisconsin Ave improvements

79% dedicated running way

Downtown Alternative 2



Existing bus lane

New traffic signal

University

Johnson

New bus lane

New bus lane

MLK

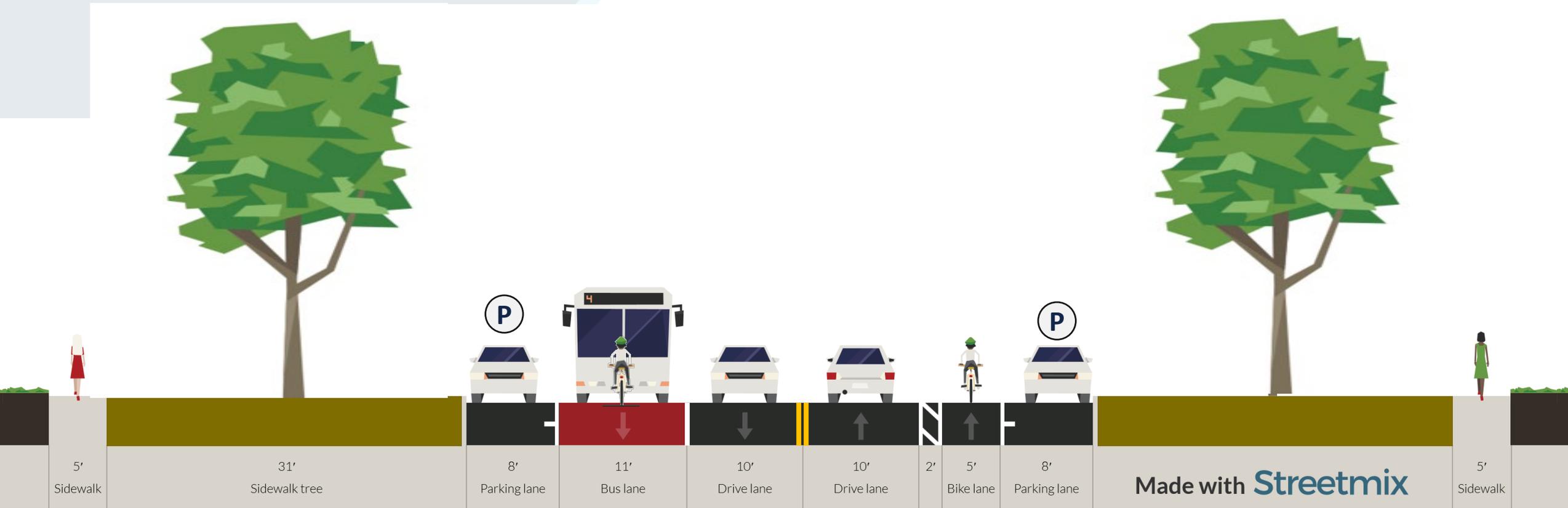
New bus lane

New bus lane

68% dedicated running way

Requires ~110 Parking Spaces and Loading Zones

West Washington Changes with Alt 1

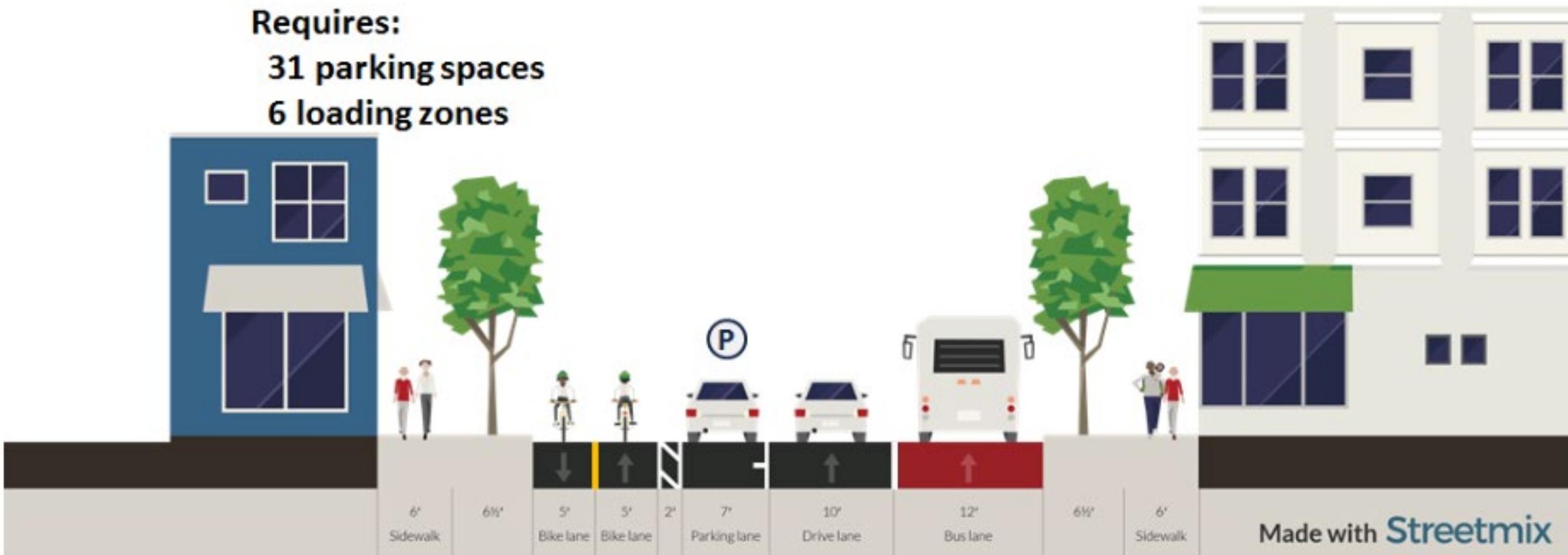


Wilson Street – Two-way Cycle Track

Requires:

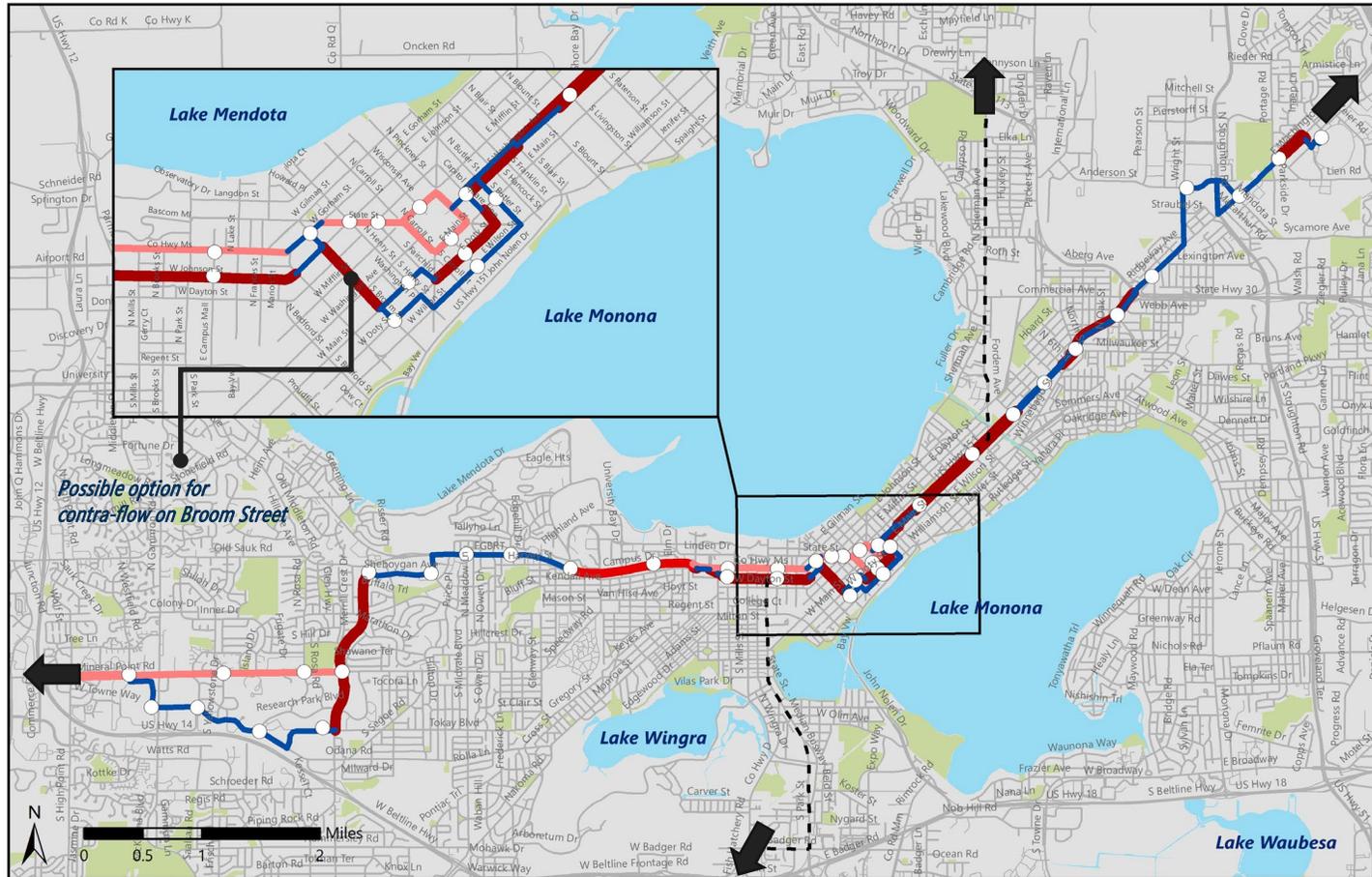
31 parking spaces

6 loading zones



MADISON EAST-WEST BRT PLANNING STUDY

Location of Dedicated Lanes for Working LPA



Between 45% and 55% Dedicated Running Way

Madison East-West BRT Planning Study

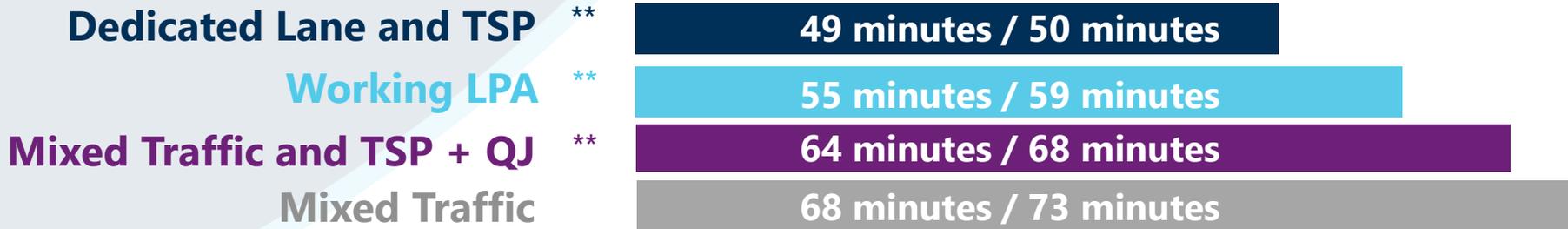
- East-West BRT Proposed Station
- Future North-South BRT
- ← Future BRT Extensions
- Dedicated Lanes**
- Dedicated Bus Lane (BRT vehicle in new bus lane)
- Bus-only Shoulder (Bus uses during congestion)
- Existing Bus Lane (BRT vehicle utilizes existing bus lanes)
- Mixed Traffic (BRT vehicle shares lane with other vehicles)

MADISON EAST-WEST BRT PLANNING STUDY

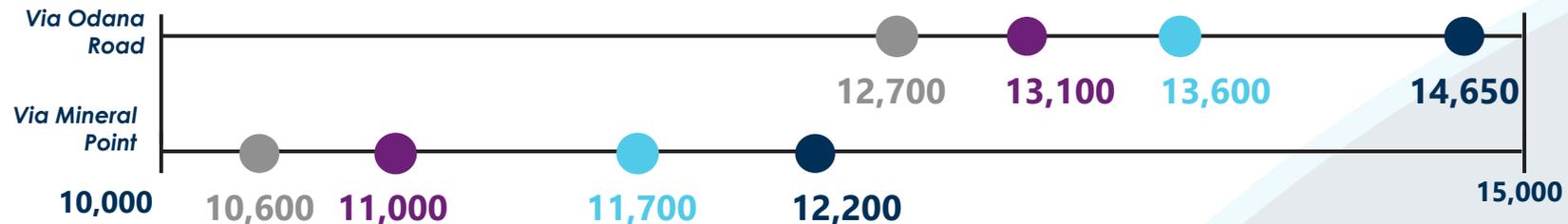
BRT Travel Time, Ridership, Capital Costs*

Travel Times (End-to-End)

Mineral Point / Odana Road



Daily Ridership



Capital Costs



*All data reflects the Broom/Wilson downtown option

**LPA = Locally Preferred Alternative, TSP = Transit Signal Priority, QJ = Queue Jump

MADISON EAST-WEST BRT PLANNING STUDY
 Capital Costs for Working LPA
 Odana and Broom/Wilson Options

Cost Categories	Working LPA Cost (\$2019 in millions)
Dedicated Lane Marker (Paint)	\$2
Stations and Shelters	\$24
Maintenance Facility	\$7
Roadway Improvements	\$19
Transit Signals and Intersection Improvements	\$22
Right-of-Way Acquisition	\$1
Electric Buses	\$30
Engineering, Environmental, and Construction Design	\$17
Contingencies	\$4
Total	\$120-\$130 million
Federal Contribution	(up to) \$100 million
Local (Non-Federal) Contribution	\$20-\$30 million

MADISON EAST-WEST BRT PLANNING STUDY

Working LPA Segment Roll Plots – Break Out Rooms Upstairs

Staff will be available to answer questions and listen to feedback!



metro transit



AECOM

Next Steps

- + **Fall 2019:** PIM #4/Station Design Input Session
West and Central Routing Input Session
- + **Fall 2019-Winter 2020:** Apply for entry into federal funding process
- + **2020:** Continued planning, community engagement and system design

What we want to hear from you:

- + **Questions, concerns, preferences regarding:**
 - West side routing alternatives (Odana or Mineral Point Road)
 - Downtown routing (three alternatives)
 - Capital costs
- + **Please fill out the worksheet with your comments!**

Thank You!

+ www.madisonbrt.com

+ @cityofmadison

+ @mymetrobus

+ Project Contacts:

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