



# East-West Bus Rapid Transit

Common Council Executive Committee  
July 13, 2021

# Challenges

- 2017-2020 (4yrs) Madison approved **10,000 dwelling units** creating 80,000 daily trips
- 2017-2020 (4yrs) Madison approved **5 million square feet** of office, commercial, industrial, and institutional space – (15,000 parking spaces?)



# Employment

**200,000 jobs in 2010**

**+98,000 projected for Dane Co 2050**

**+46,000 projected for Madison 2050**

**+14 to 18,000 in Isthmus**

## Previous Rail/ High Capacity Transit Studies

- + 1980-81 Dane County Transit Technology Corridor Study (DCRPC)
- + 1985-86 Dane County Transit Priority Corridor Study (DCRPC)
- + 1990-92 Light Rail Transit Corridor Study (C. Madison)
- + 1996 Study to Evaluate Commuter Rail Implementation (Dane Co)
- + 1998 Dane County Commuter Rail Feasibility Study (Dane Co)
- + 1999-2003 Transport 2020 Commuter Rail Alternatives Analysis (City/C
- + 2005-2008 Transport 2020 Commuter Rail Preliminary Engineering/EIS

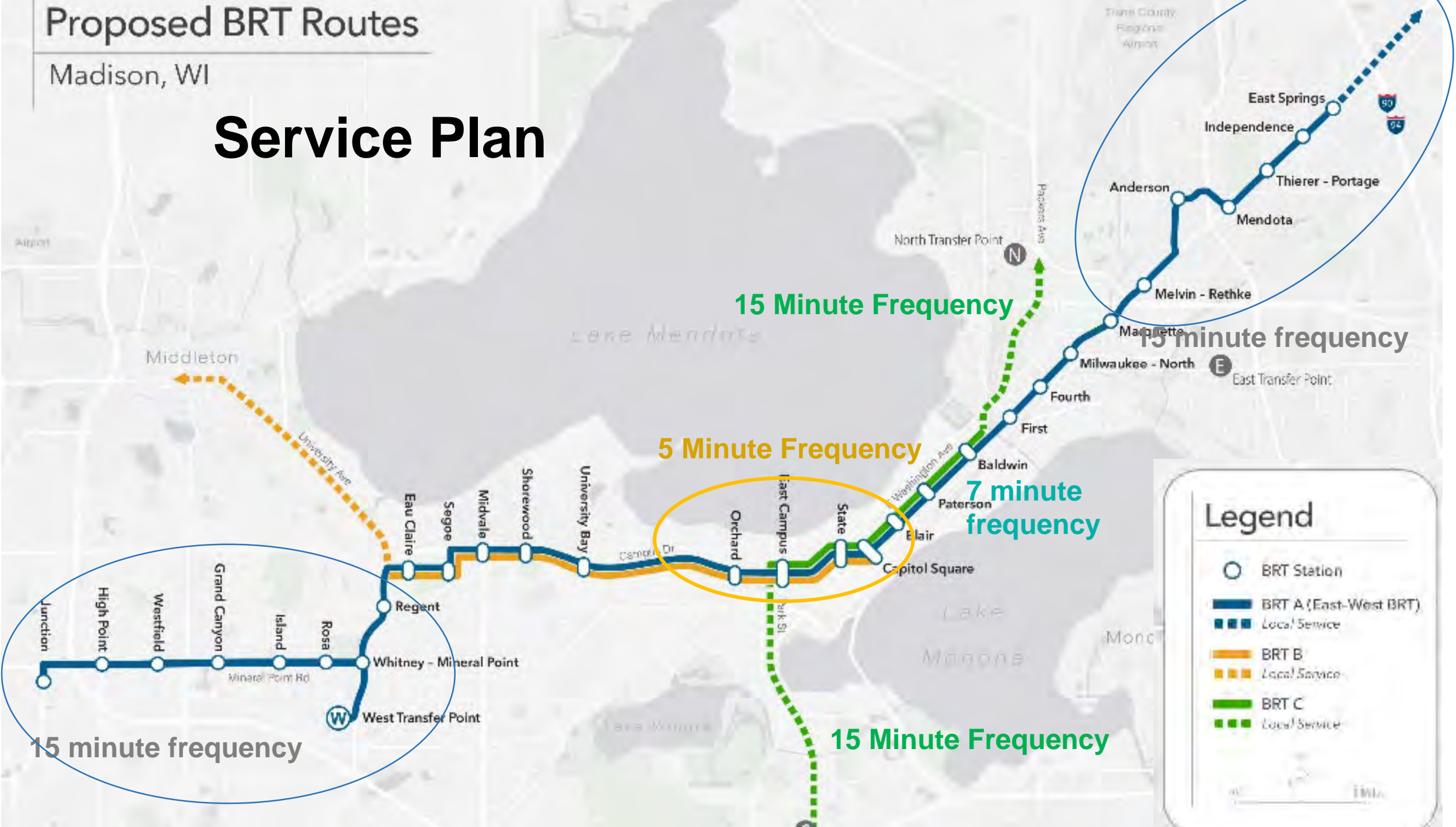
FTA told us to turn back  
We wouldn't qualify

- + 2011-13 Bus Rapid Transit Preliminary Feasibility Study (MATPB)
- + → 2018-19 Bus Rapid Transit East-West Planning Study (C. Madison)

# Proposed BRT Routes

Madison, WI

## Service Plan

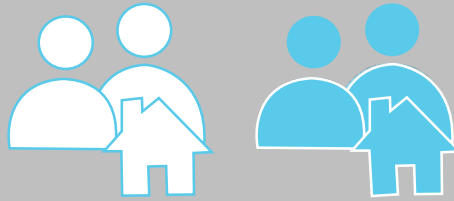


# FEATURES WITHIN A 10 MINUTE WALK OF EAST-WEST BRT

120,000



jobs



80,000

residents

3

hospitals



2

Higher  
education  
institutions



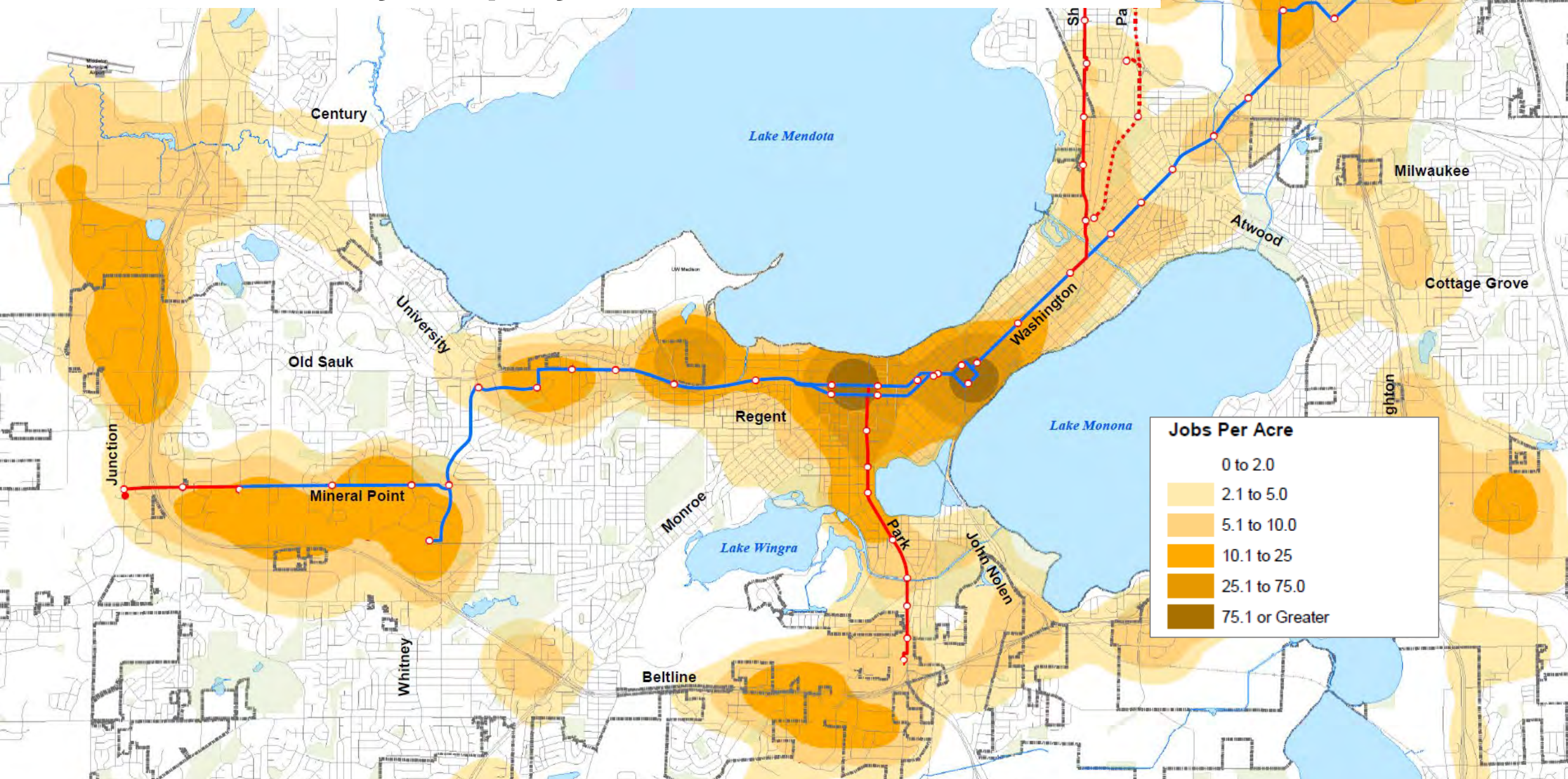
4

with  
complementary  
Service



MADISON DEPARTMENT  
OF TRANSPORTATION

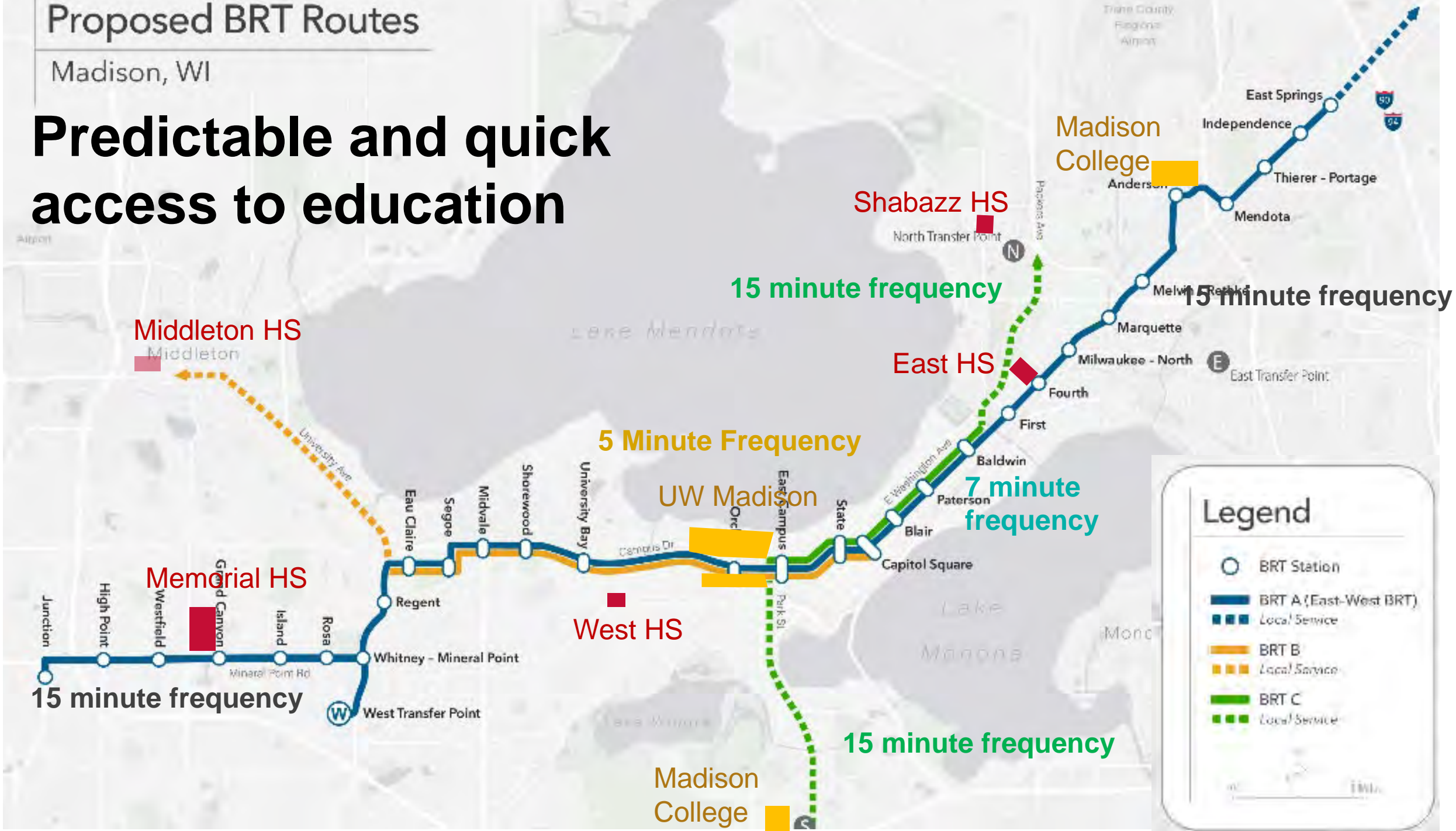
# Connects Key Employment and Business Areas



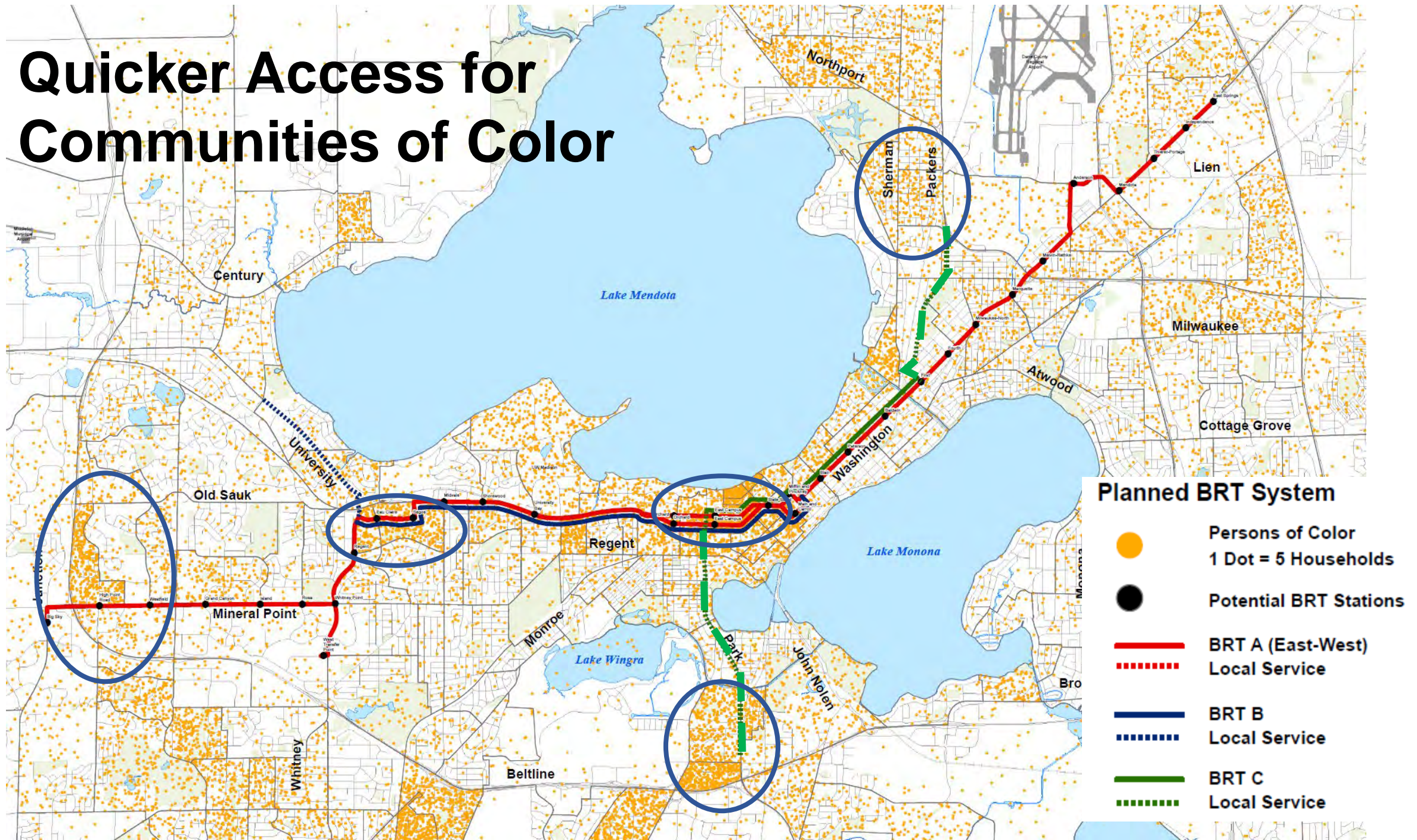
# Proposed BRT Routes

Madison, WI

## Predictable and quick access to education



# Quicker Access for Communities of Color





**\$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

# Bus Rapid Transit

- Direct routes and fewer stops
- Frequent, all-day service
- Bus-only lanes
- Branded stations & buses
- Transit signal priority
- Faster fare payment

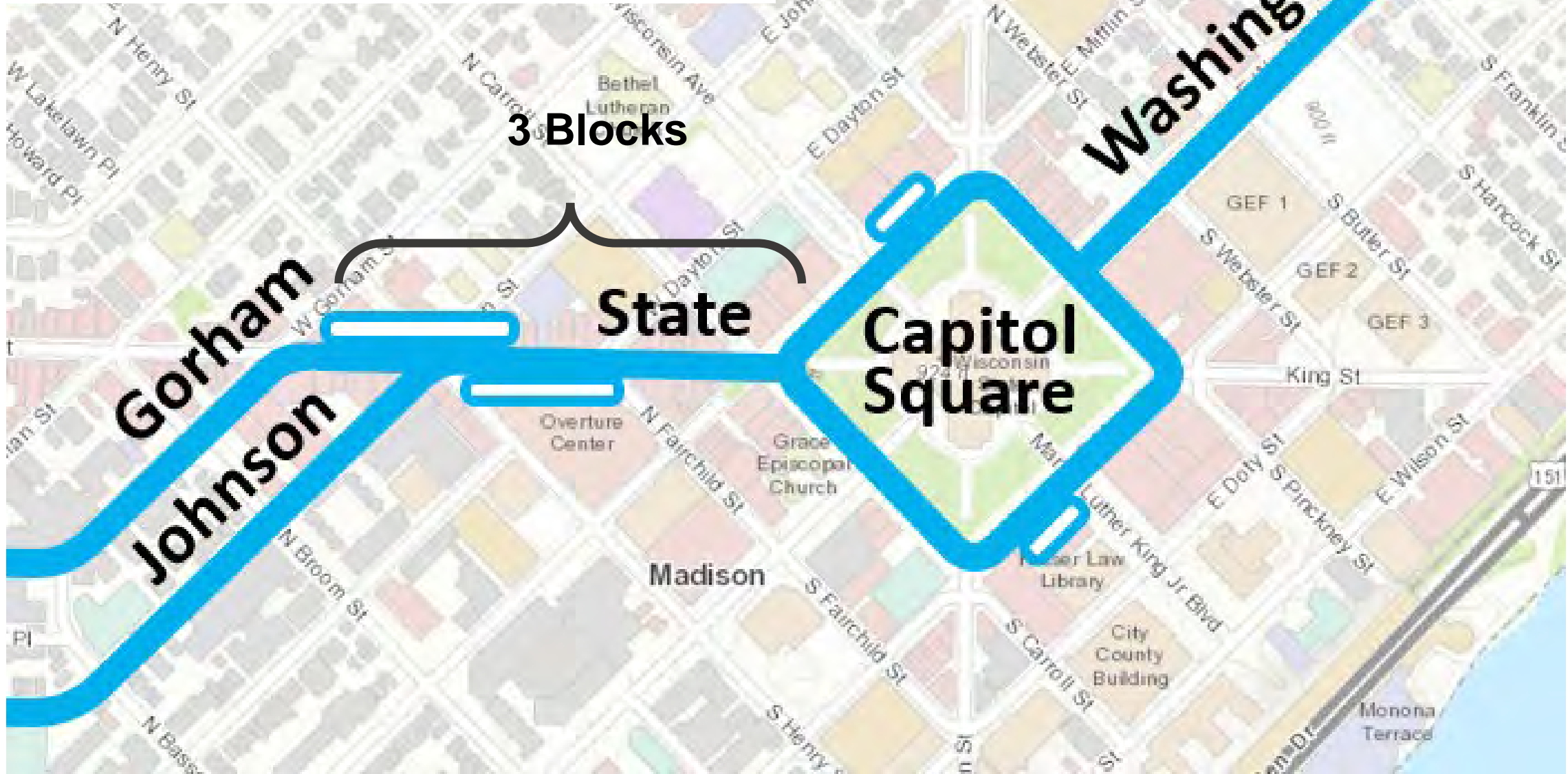


# Mineral Point at Island

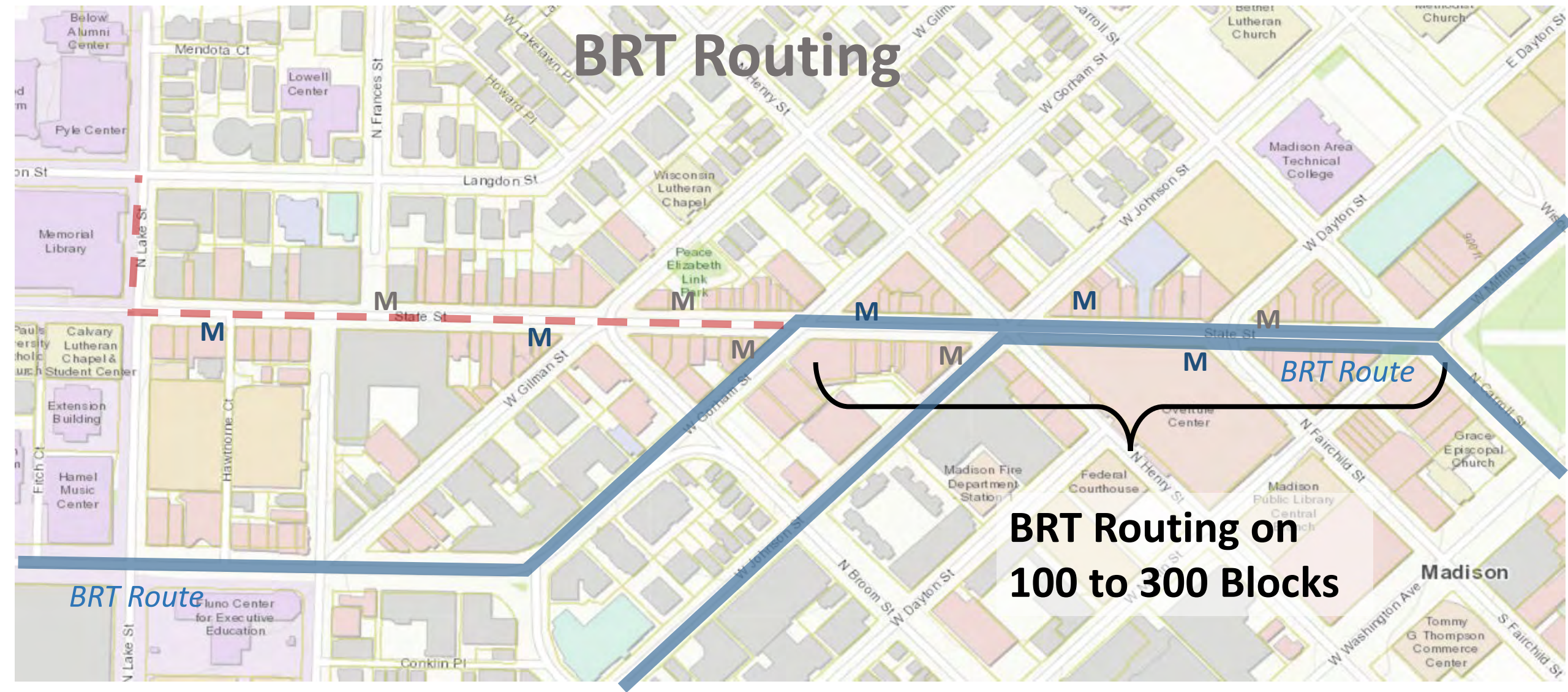


# Cap East District



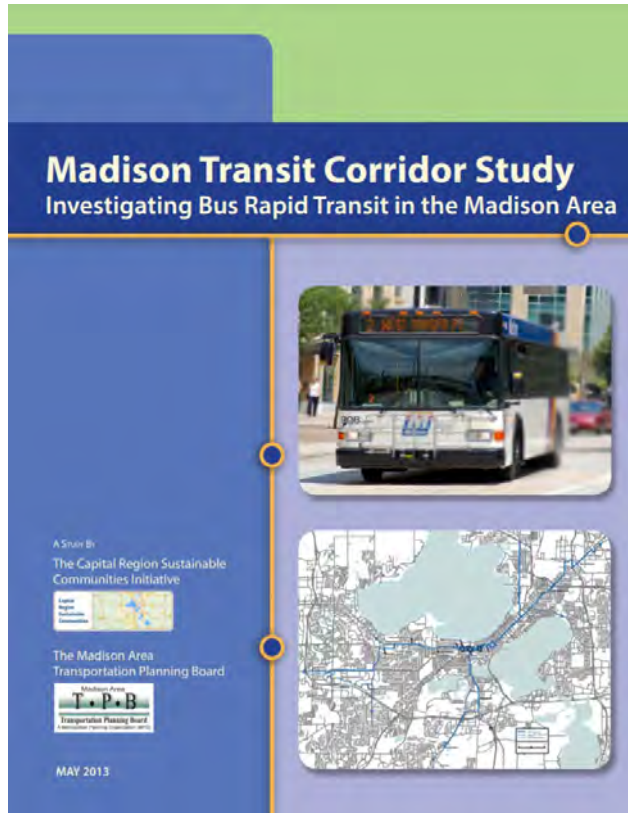
[illegible]

# BRT Routing

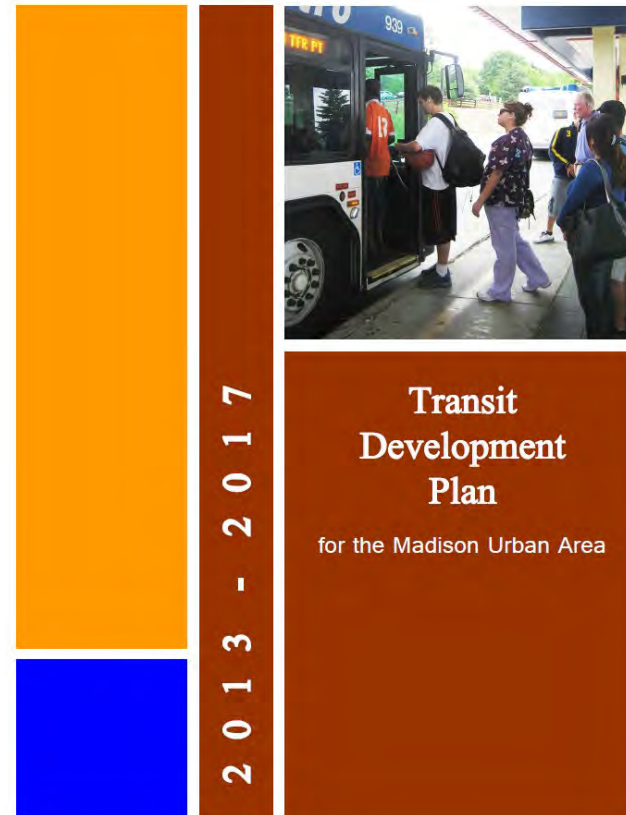


**BRT Routing on  
100 to 300 Blocks**

# State Street in BRT Routing



2013

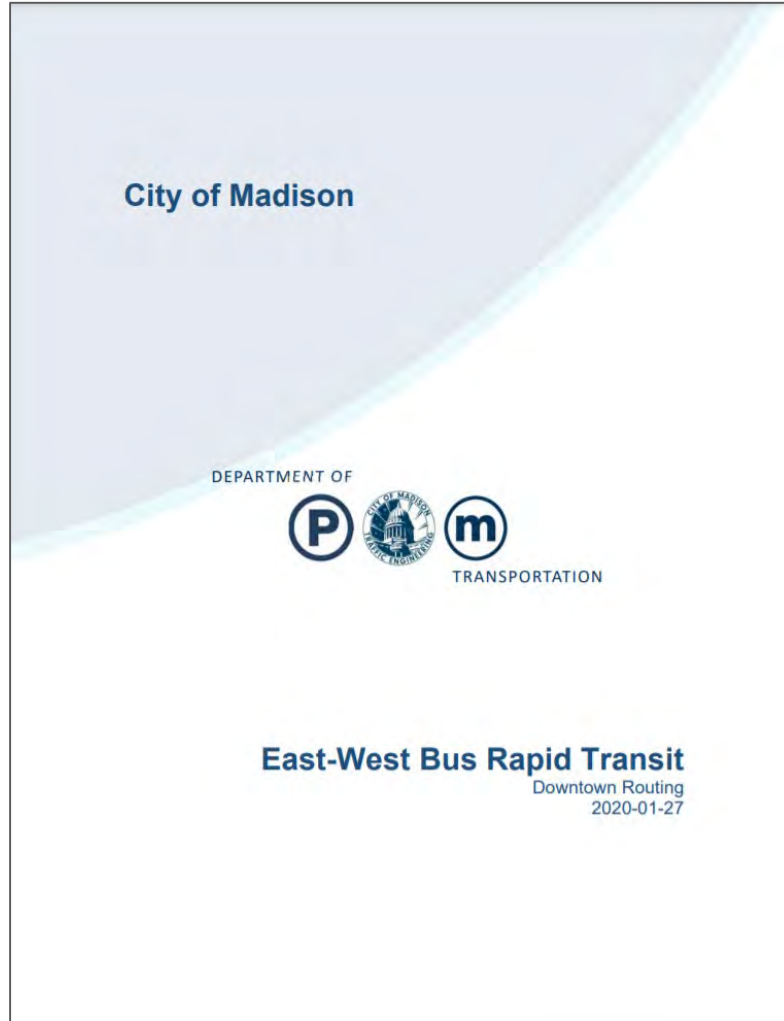


2013

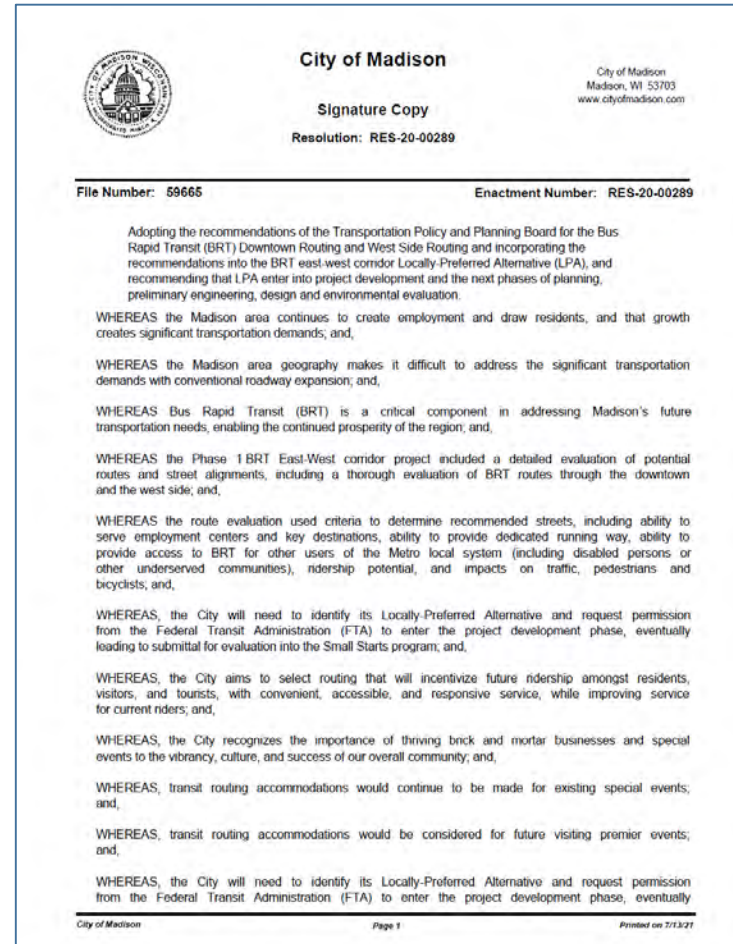


2018

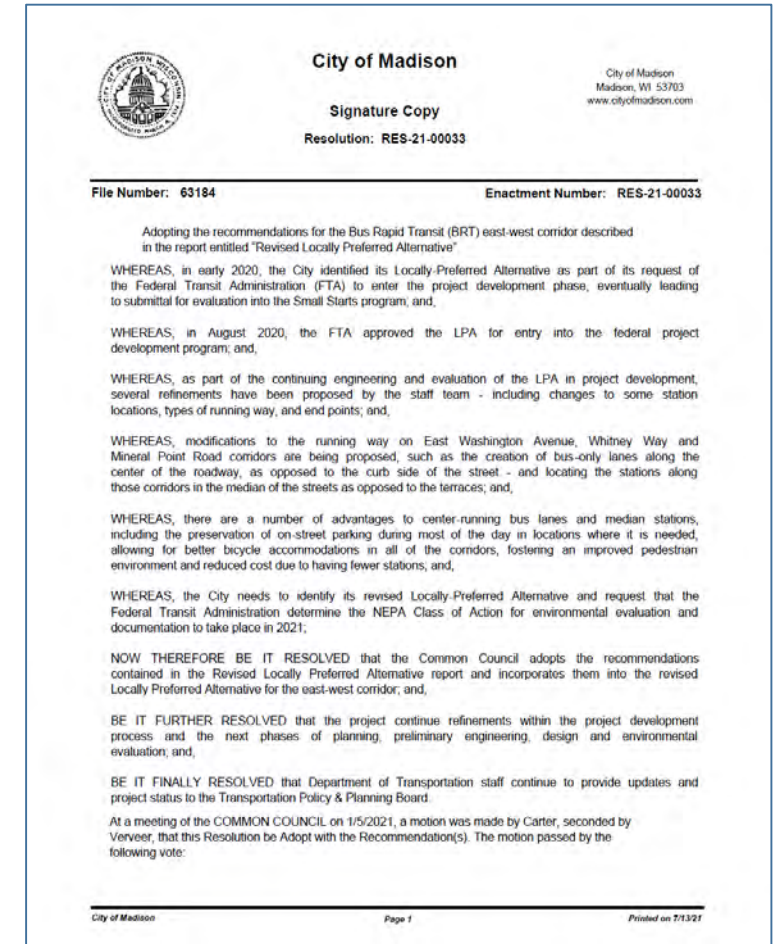
# State Street in BRT Routing



2019-20



(Legistar 59665)



(Legistar 63184)  
(Center Running)

# State Street Routing

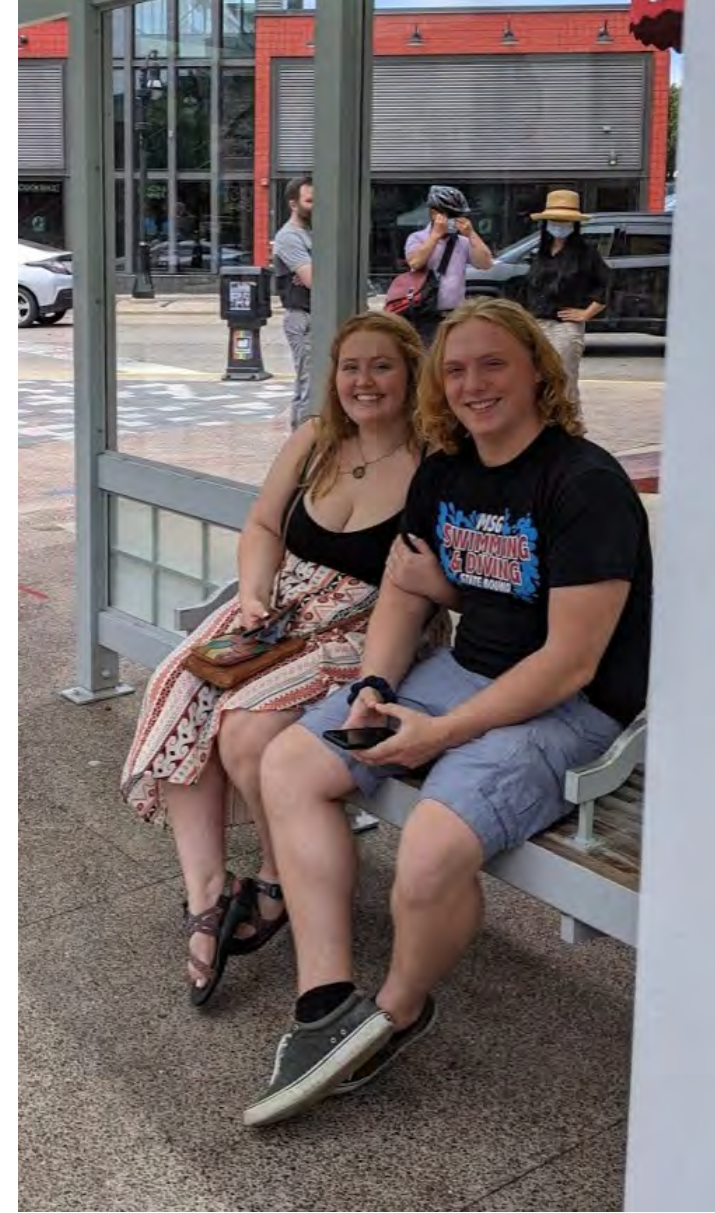
- Goes to where people want to **go**.
- Provides access to the visible and cultural center of the City
  - Three museums
  - Performing arts center
  - Retail and Restaurants
- Station and people oriented
- Free from most traffic delays
- Fast and direct (rather than circuitous)



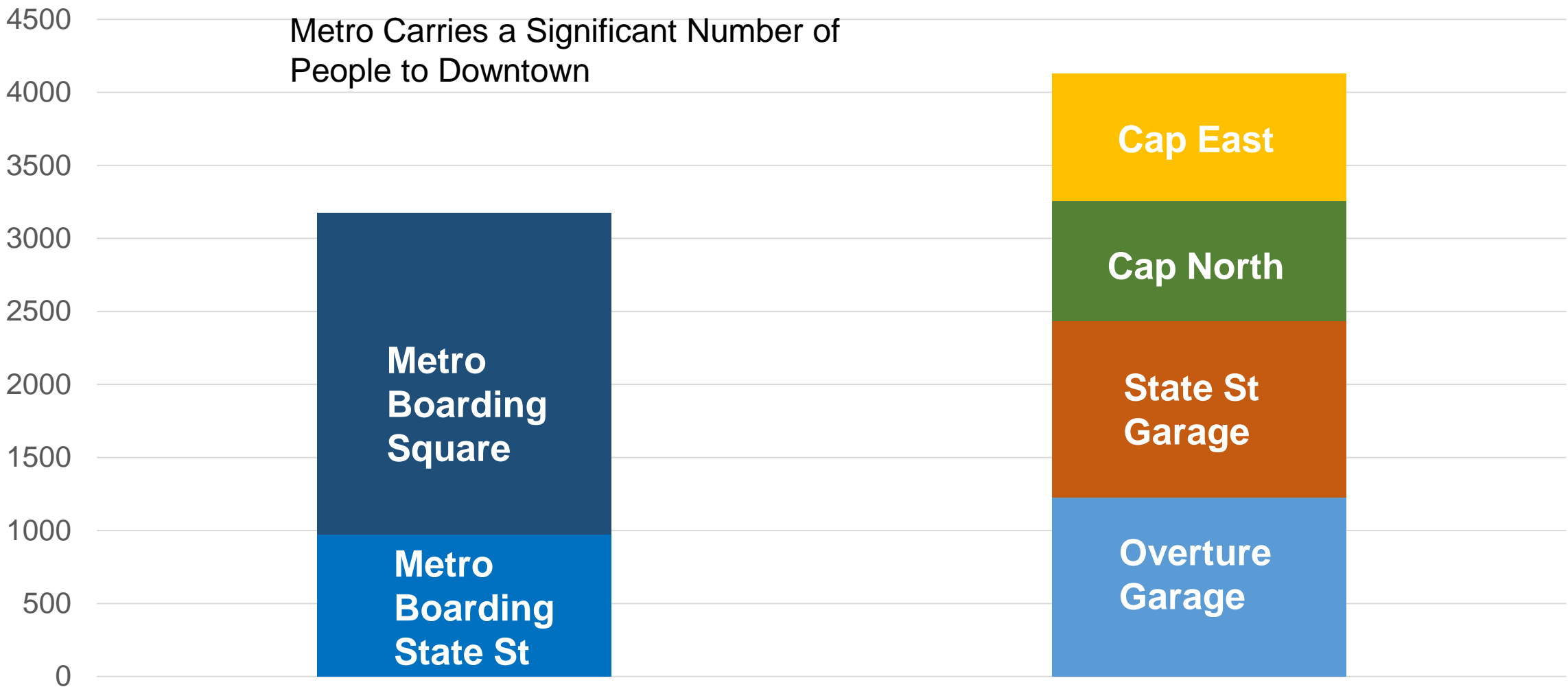
# Transit Use On State Street

- 950 people per weekday boarded at the stops that will be consolidated into the State Street BRT station
- About 250,000 people per year
- Many times more pass through State Street on the bus and see the opportunities





# 2019 Upper State and Square Weekday Access





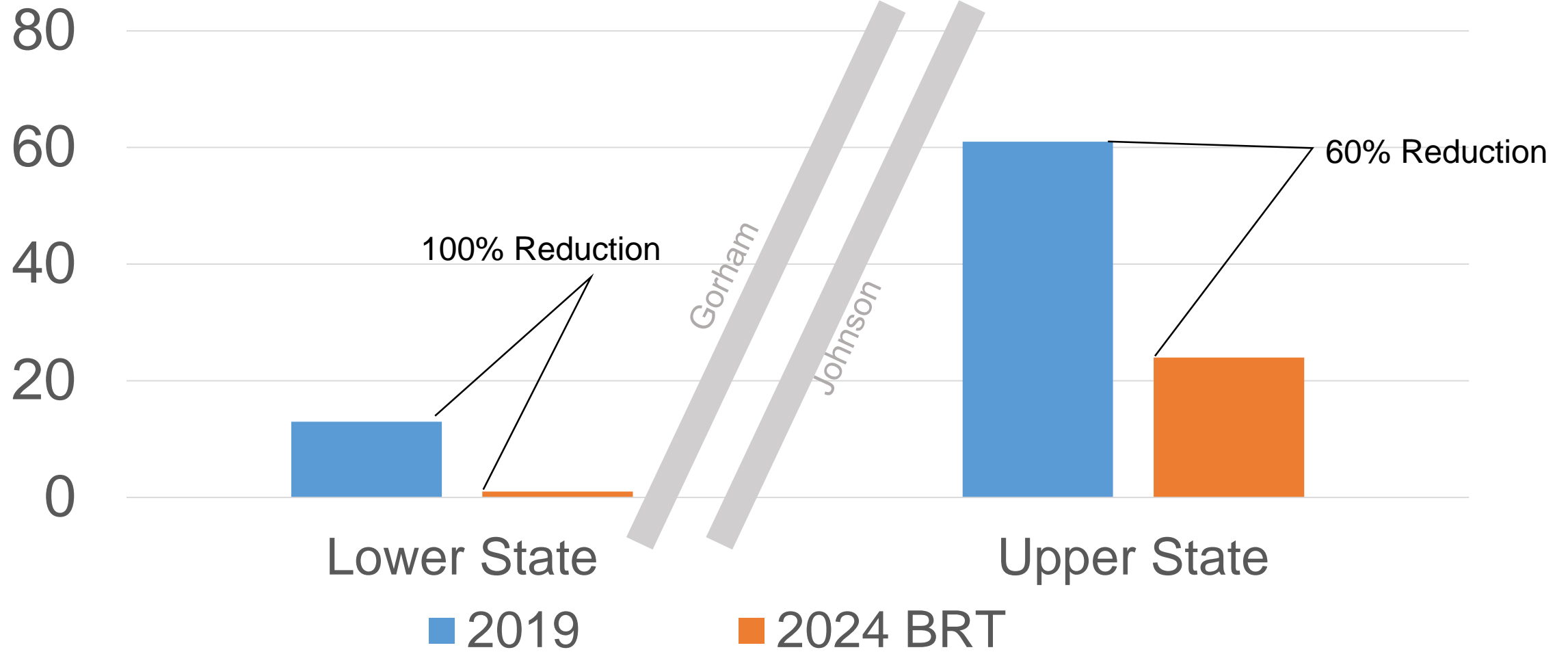
# Existing Bus Stops

**Likely all stations removed  
(pending Metro  
Route Redesign)**

# One Westbound and One Eastbound Station to be selected

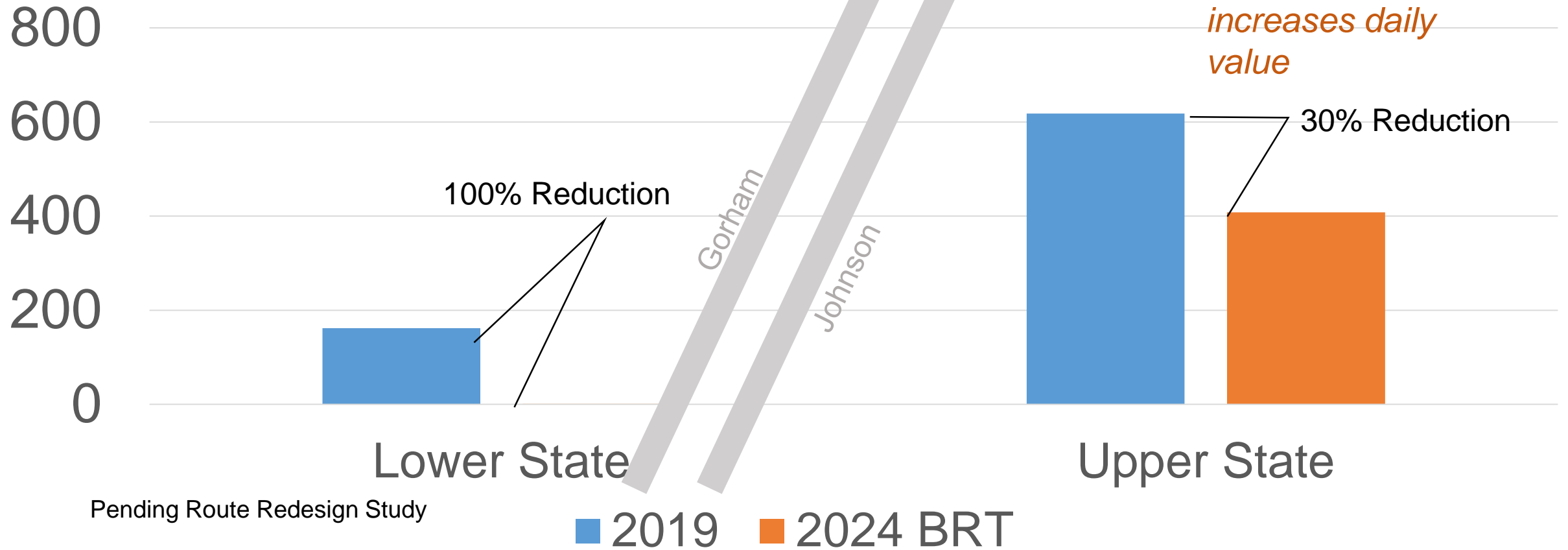


# Peak Hour Buses

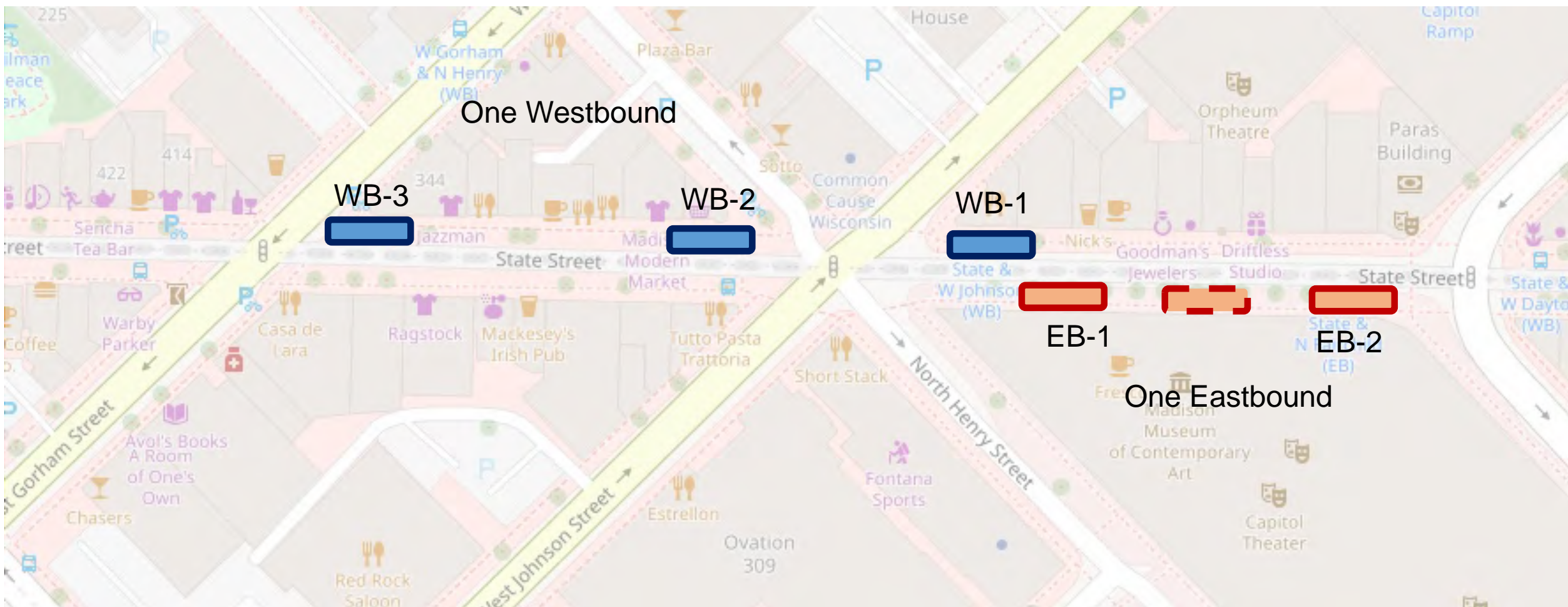


Pending Route Redesign Study

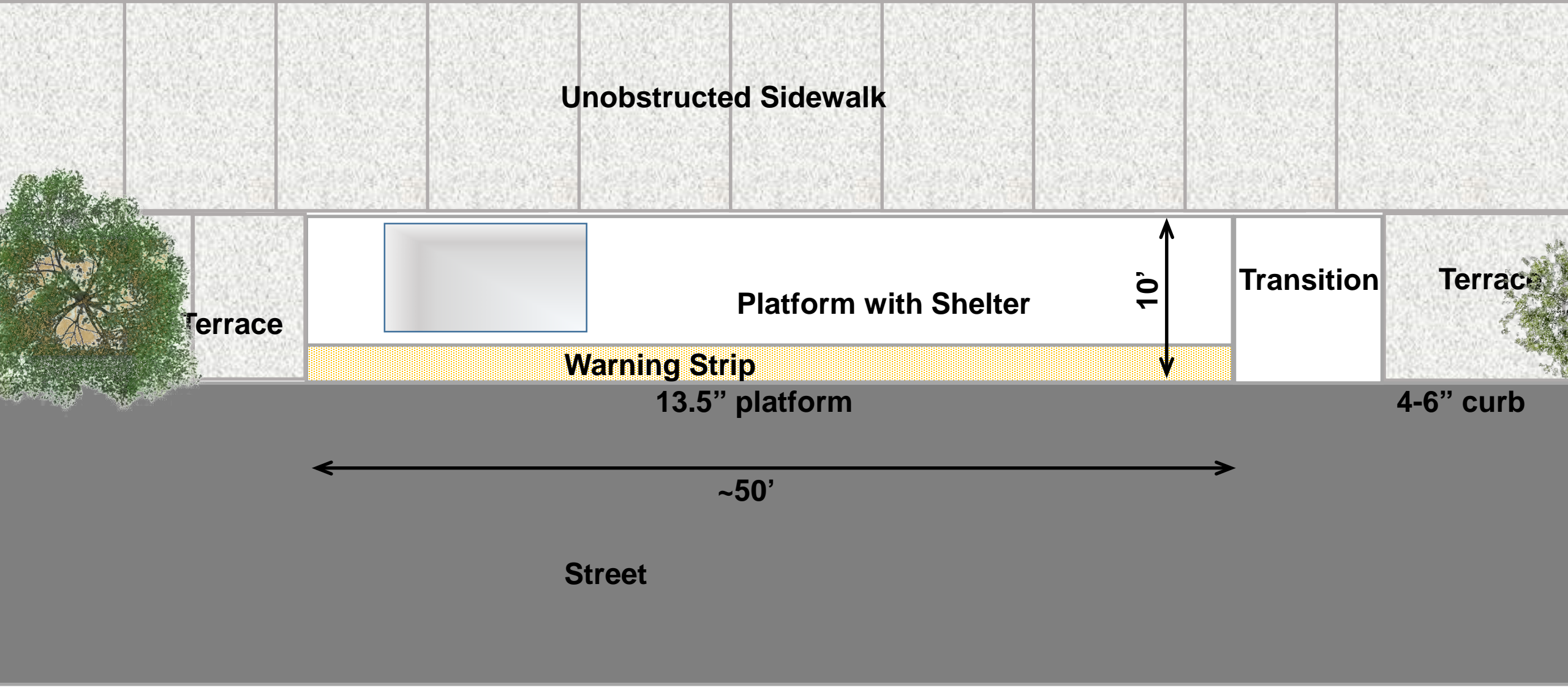
# Daily Buses



# State Street Station Options



# Basic BRT Dimensions







EB-2 Overture

An architectural rendering of a city street scene. On the right, a multi-story building with a mix of brick and stone facades is shown. A modern transit station is integrated into the ground floor of this building. The station features a dark metal frame with large glass panels and a flat roof. A yellow line runs along the base of the station, indicating a platform or boarding area. Numerous people are depicted walking on the sidewalk and standing near the station entrance. The sidewalk is paved with large, light-colored rectangular tiles, some of which are accented with reddish-brown tiles. To the left of the station, there are planters with greenery and a small blue sign. In the background, other city buildings and trees are visible under a clear sky. The text "Not Proposed" is overlaid in yellow, and "EB-2 Overture" is overlaid in white at the bottom.

**Not Proposed**

**EB-2 Overture**





**EB-2 Overture**



Existing Shelter with Platform



New Shelter with Platform





An architectural rendering of a modern building's entrance. The building has a light-colored, textured facade. A prominent feature is a glass-enclosed canopy over the entrance, supported by dark metal columns. A group of about ten people, including men and women in business casual attire, are standing and walking in the plaza area in front of the entrance. The plaza is paved with light-colored concrete and features several rectangular patches of reddish-brown material. To the left, there is a large tree with green leaves and a planter box with orange flowers. In the background, another building with a blue glass facade is visible. The overall scene is bright and sunny.

**Not Proposed**

**EB-1 MMoCA**



EB-1 MMoCA



EB-1 MMoCA



WB-1 Noodles



Tree?



Tree to be  
evaluated

**WB-1 Noodles**



WB-2 Triangle Market



WB-2 Triangle Market



WB-2 Triangle Market



**WB-3 Fresh Market**



Fresh Market

Snacks Groceries



State  
Street



Fresh Market

Snacks Grapes



State  
Street

Table 2A – Capital Investment Grant Program Summary of FY 2022 Project Ratings

**SMALL STARTS PROJECTS**

Phase

State, City, Project

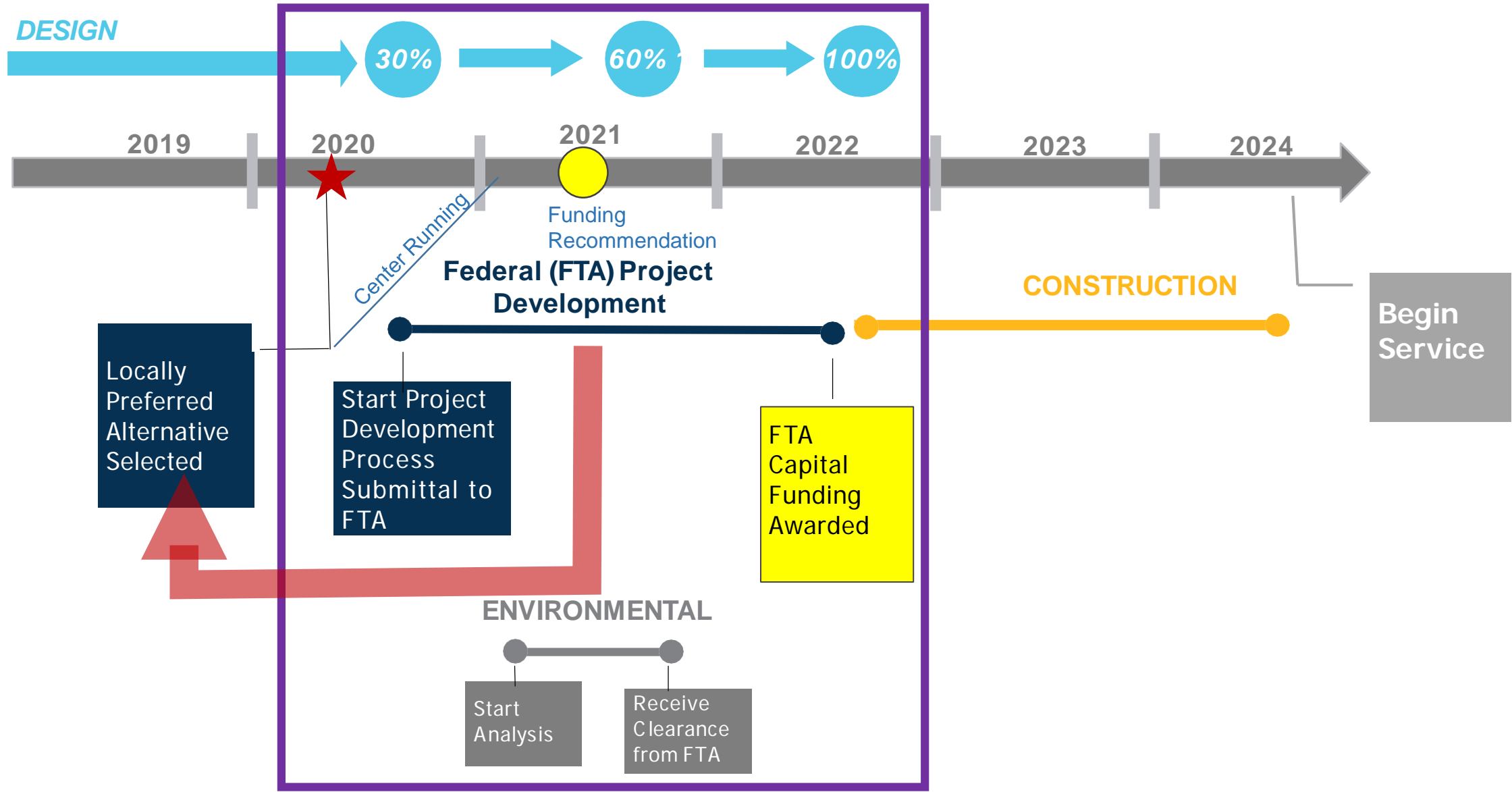
# Recommended Small Starts Projects

al Financial  
Commitment  
RatingProject  
Justification  
RatingOverall Project  
Rating**Small Starts Project Development**

^ AZ Flagstaff, Transit Spine BRT	\$32.9	---	\$32.9	---	---	---	---	---
CA Los Angeles, Restoration of Historic Streetcar in Downtown Los Angeles	\$282.2	\$14.2	\$296.4	\$100.0	33.7%	Medium-Low	Medium	Medium-Low
CA Monterey Bay, SURF! Highway 1 Busway and BRT	\$55.0	---	\$55.0	\$40.0	72.7%	---	---	---
+++ CA Sacramento, Downtown Riverfront Streetcar Project	\$117.0	---	\$117.0	\$50.0	42.7%	Under Review	Under Review	Under Review
CA San Bernardino, West Valley Connector BRT Project	\$261.5	\$1.2	\$262.7	\$86.8	33.0%	High	Medium	Medium-High
^ FL Orlando, SunRail Connector to the Orlando International Airport	\$175 - \$225	---	\$175 - \$225	---	---	---	---	---
& FL Tampa, Tampa Streetcar Extension and Modernization	\$234.5	---	\$234.5	\$99.9	42.6%	Under Review	Under Review	Under Review
IN Indianapolis, IndyGo Blue Line Rapid Transit	\$209.7	\$10.3	\$220.0	\$100.0	45.5%	High	Medium	Medium-High
IN Indianapolis, IndyGo Purple Rapid Transit Line	\$151.7	\$3.3	\$155.0	\$77.5	50.0%	High	Medium	Medium-High
^ LA Baton Rouge, TramLinkBR	\$169.8	---	\$169.8	\$84.0	49.5%	---	---	---
MN Rochester, Rochester Rapid Transit	\$114.5	\$0.0	\$114.5	\$56.1	49.0%	Medium-High	Medium	Medium-High
NC Chapel Hill, North-South Bus Rapid Transit	\$141.3	\$0.0	\$141.3	\$100.0	70.7%	Medium	Medium	Medium
NC Raleigh, Wake Bus Rapid Transit: New Bern Avenue Project	\$71.5	\$0.0	\$71.5	\$35.1	49.1%	High	Medium	Medium-High
^ NC Raleigh, Wake Bus Rapid Transit (BRT) - Western Corridor Project	\$180.0	---	\$180.0	---	---	---	---	---
NY Albany, Washington/Western Bus Rapid Transit	\$81.2	\$0.0	\$81.2	\$60.9	75.0%	Medium	Medium	Medium
NY New York City, Woodhaven Boulevard Select Bus Service	\$258.8	\$0.0	\$258.8	\$97.2	37.5%	High	Medium	Medium-High
OR Portland, MAX Red Line Extension and Reliability Improvements	\$206.0	\$0.0	\$206.0	\$100.0	48.5%	High	Medium	Medium-High
PA Pittsburgh, Downtown-Uptown-Oakland-East End Bus Rapid Transit	\$249.9	\$0.0	\$249.9	\$100.0	40.0%	High	Medium-High	High
TN Memphis, Memphis Innovation Corridor Project	\$87.0	\$1.6	\$88.6	\$43.8	49.4%	---	---	---
TX Austin, Expo Center Bus Rapid Transit Project	\$35.6	\$0.0	\$35.6	\$17.8	50.0%	High	Medium	Medium-High
TX Austin, Pleasant Valley Bus Rapid Transit Project	\$36.6	\$0.0	\$36.6	\$18.3	50.0%	High	Medium	Medium-High
^ TX Austin, South Lamar Bus Rapid Transit Project	\$26.0	---	\$26.0	---	---	---	---	---
^ TX Waco, Rapid Transit Corridor	\$18.3 - \$19.4	---	\$18.3 - \$19.4	---	---	---	---	---
UT Ogden, Ogden/Weber State University BRT	\$99.7	\$0.0	\$99.7	\$64.5	64.7%	Medium	Medium	Medium
^ UT Salt Lake County, Midvalley Connector Project	\$85 - \$105	---	\$85 - \$105	---	---	---	---	---
^ VA Alexandria, West End Transitway	\$119 - \$140	---	\$119 - \$140	---	---	---	---	---
WA Everett, Swift Orange Line BRT	\$81.0	\$0.0	\$81.0	\$37.2	45.9%	High	Medium	Medium-High
WA Seattle, Madison Street BRT	\$133.4	\$0.0	\$133.4	\$59.9	44.9%	High	Medium-High	High
WA Seattle, RapidRide I Line	\$117.6	\$0.0	\$117.6	\$55.6	47.3%	High	Medium	Medium-High
^ WA Seattle, RapidRide K Line BRT	\$89.8	---	\$89.8	---	---	---	---	---
WA Seattle, Roosevelt RapidRide Project	\$90.2	\$0.0	\$90.2	\$45.0	49.9%	High	Medium-High	High
WA Seattle, Seattle Center City Connector	\$285.5	\$0.0	\$285.5	\$75.0	26.3%	High	Medium-High	High
WA Tacoma, Pacific Avenue/SR 7 BRT	\$170.0	\$0.0	\$170.0	\$75.2	44.2%	High	Medium	Medium-High
WA Vancouver, C-TRAN Mill Plain BRT	\$49.9	\$0.0	\$49.9	\$24.9	49.9%	High	Medium	Medium-High
WI Madison, Madison East-West BRT	\$157.2	\$2.8	\$160.0	\$80.0	50.0%	High	Medium	Medium-High

# BRT Timeline

## Project Development



# Modifications to Respond to Concerns

- Majority of BRT buses electric (low noise, no fume)
- Reduced BRT shelter size 50 to 60 percent
- Located shelters to maximize window visibility
- No streetery or sidewalk vending areas affected
- Stations **reduced** from **10 to 2\***
- Substantial reduction of buses on upper State St
- Likely **NO** buses on lower State St\*

\*pending Route Redesign study findings





# East-West Bus Rapid Transit

Common Council Executive Committee  
July 13, 2021