

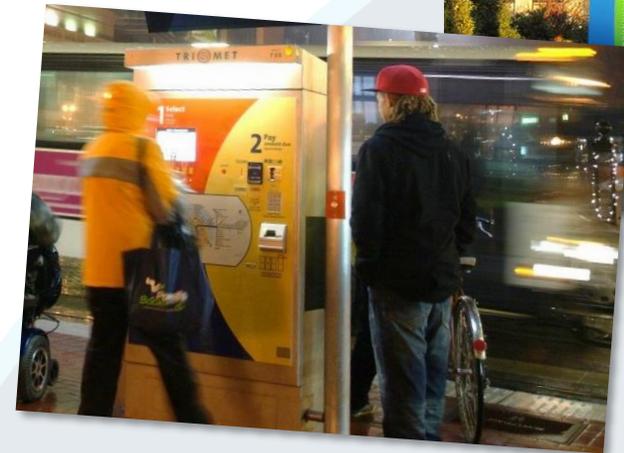
Madison East-West Bus Rapid Transit

Joint Campus Area Committee

February 9, 2021

Bus Rapid Transit

- + Direct routes and fewer stops
- + Frequent, all-day service (every 10-15 minutes)
- + Bus-only lanes where feasible
- + Transit signal priority
- + Off-board fare payment
- + Branded stations and buses



Benefits of BRT

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

7 Basics of Bus Rapid Transit (BRT)

Madison East-West BRT Planning Study
Transportation Efficiency • Economic Development • Safety Improvements • Environmental Sustainability
www.madisonbrt.com

- 1. DEDICATED LANES**
Options range from BRT in mixed traffic to dedicated side or center lane.


Security and safety will be increased through lighting or monitoring features.
- 2. STATIONS**
Stations will include fare ticketing machines, covered-waiting areas, level boarding, and real-time transit information.


Dedicated lanes give buses uninterrupted travel.

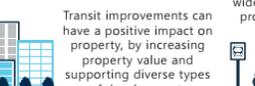
Streetscaping, pedestrian amenities, and bicycle facilities promote healthy lifestyles.
- 3. VEHICLES**
BRT vehicles may be 40' or 60' long to accommodate more riders, and include features like multi-door boarding and interior bike storage.


Making the shift to BRT buses helps reduce vehicle emissions and pollutants. Options for alternative fuel buses can also increase environmental sustainability.
- 4. FARE COLLECTION**
Fare payment will occur at BRT stations.


Cashless and automated systems eliminate on-board fare collection, reducing boarding times.
- 5. INTELLIGENT TRANSPORTATION SYSTEM**
Technology is used to help improve system operation and passenger experience, including transit priority at intersections, real-time arrival information, and safety enhancements.


Sophisticated traffic signal management can minimize delays by extending green signals for buses approaching an intersection.
- 6. SERVICE AND OPERATION PLAN**
BRT routes are designed to efficiently connect riders with their destinations by optimizing routes, station locations, and service schedules to meet rider demand.


High-frequency bus service minimizes passenger wait-time.

BRT systems generate permanent jobs in operations.
- 7. BRANDING**
Unique name, color scheme, logo or other visual identifiers to differentiate BRT service from existing bus service.


Transit improvements can have a positive impact on property, by increasing property value and supporting diverse types of development.

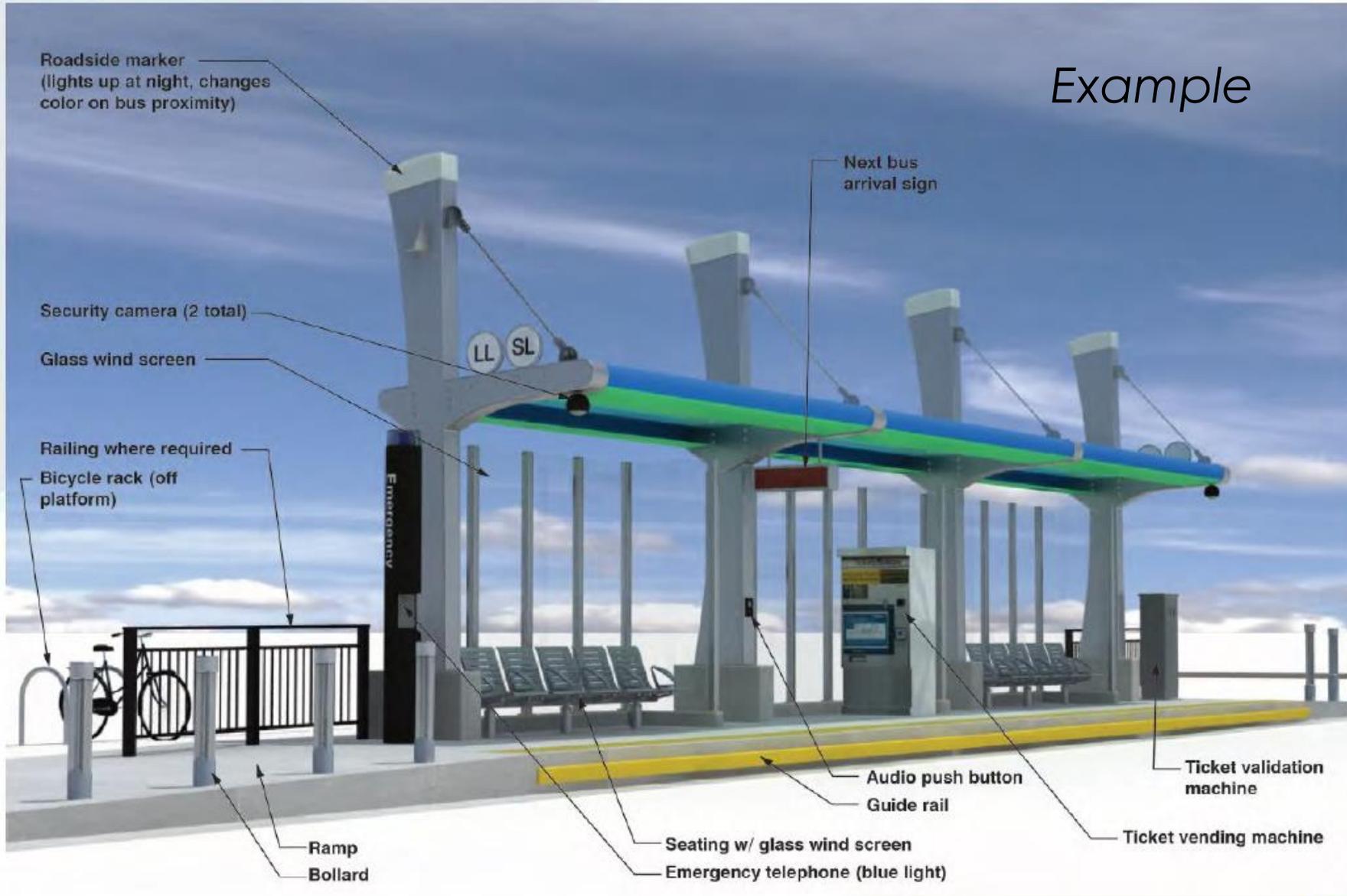
Level boarding platforms and wider and additional doorways provide greater accessibility.

Madison East-West BRT Planning Study

The City of Madison is exploring options for a new East-West Bus Rapid Transit line to make our city's transit system work faster and smarter. Madison's BRT will complement existing Madison Metro routes and be our city's next big step toward a sustainable local transit system.

BRT Station Components

Example



BRT Project - Current Status

- LPA Adopted by the Common Council in January 2021.
- Federal Transit Administration approval for entry into the Small Starts program for Project Development in August 2020.
- Detailed planning and design ongoing
- Construction 2023 -2024
- Open Fall 2024

LPA Report can be found on www.madisonbrt.com

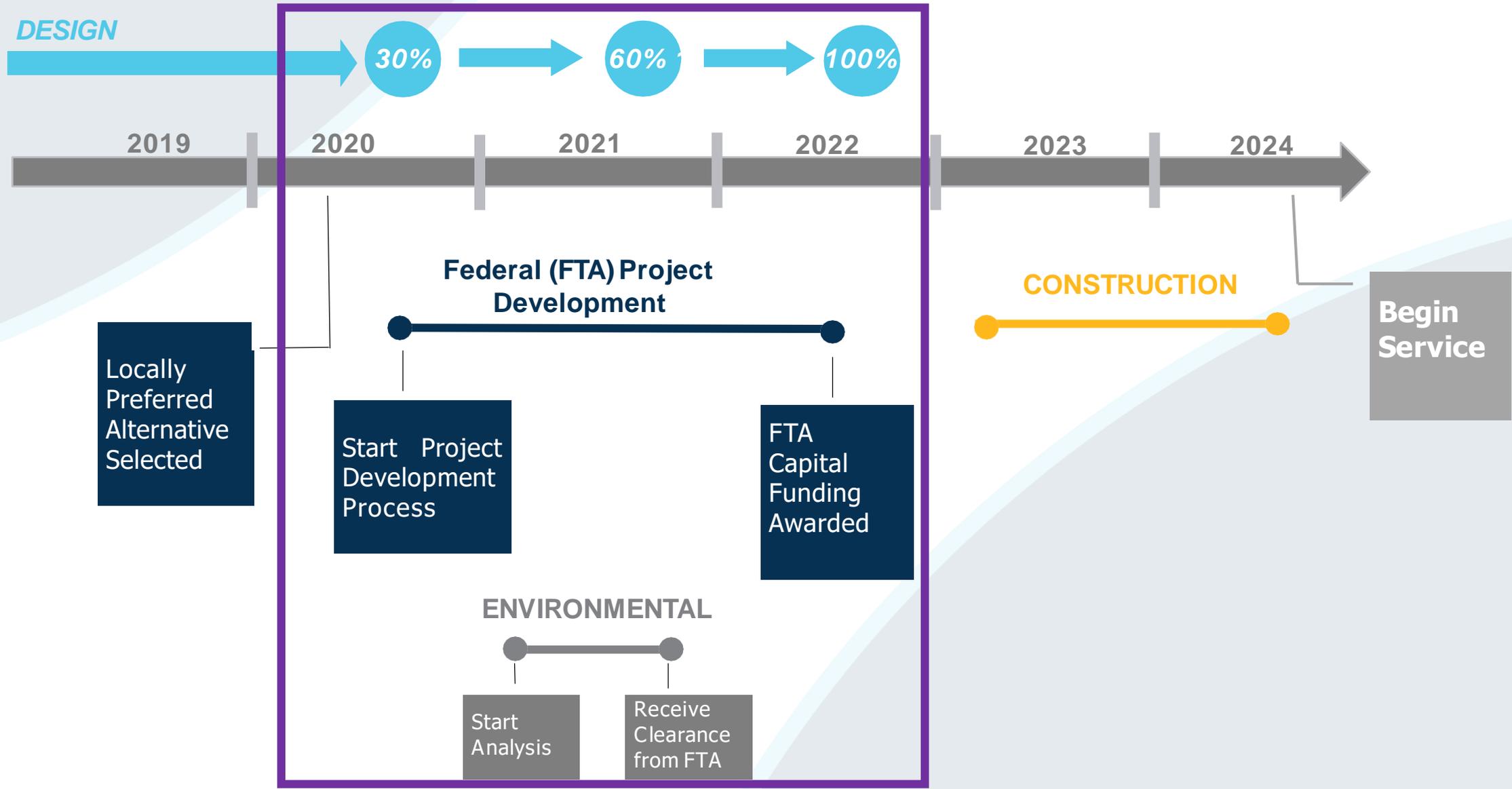
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OF TRANSPORTATION

BRT Timeline

Project Development



Madison, WI



Legend

- BRT Station
- BRT A (East-West BRT)
- BRT B
- Local Service
- BRT C
- Local Service

N

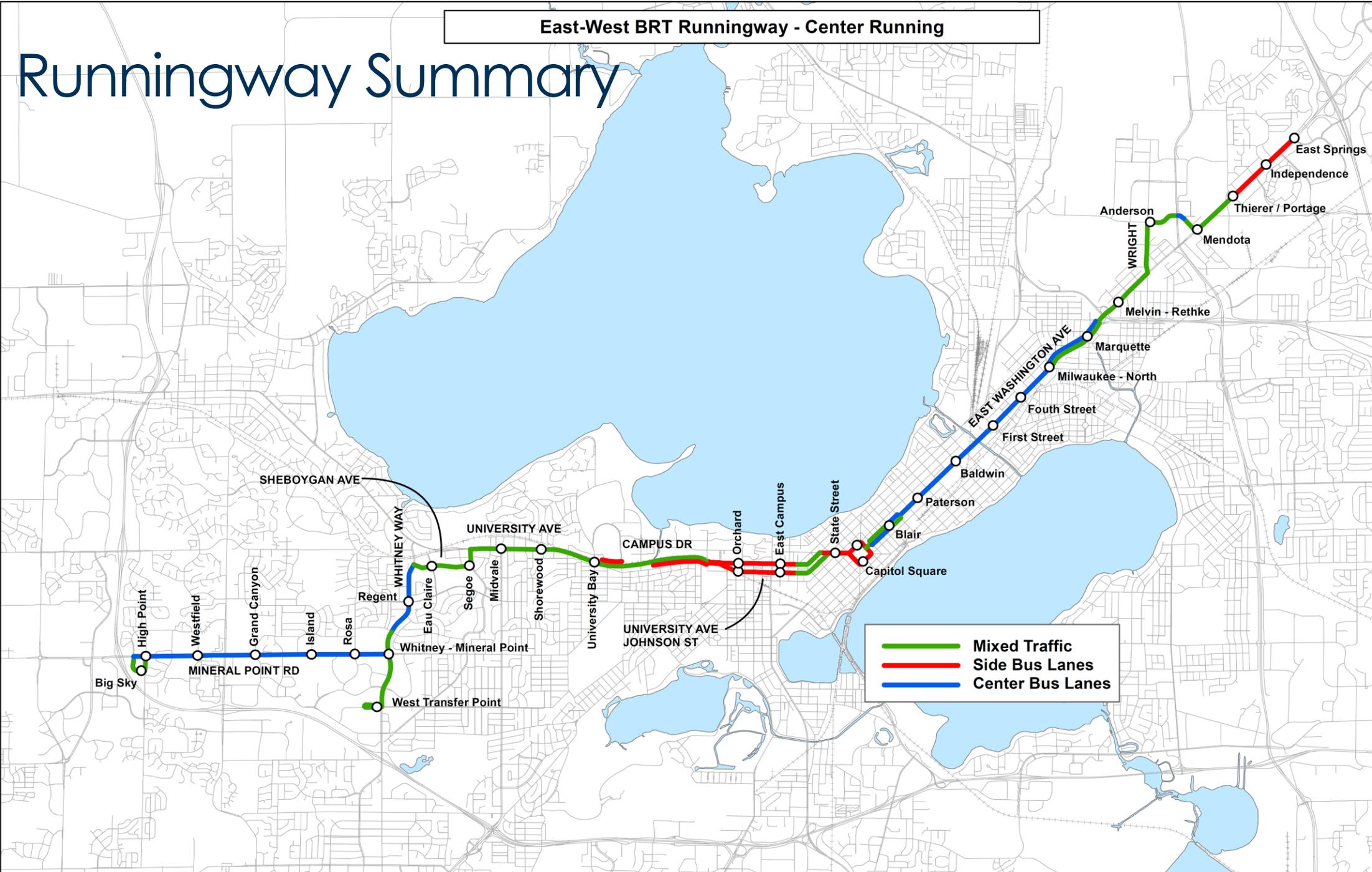
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East-West BRT Runningway - Center Running

Runningway Summary



Center Running BRT



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Center Running

- More consistent travel times
- Little to no conflicts with turning vehicles
- Little to no conflicts with bikes
- Bus lane is not blocked by delivery vehicles
- Potential cost savings due to one two-sided station instead of two stations required for side running
- Fewer right-of-way and utility issues
- Better look and feel for passengers

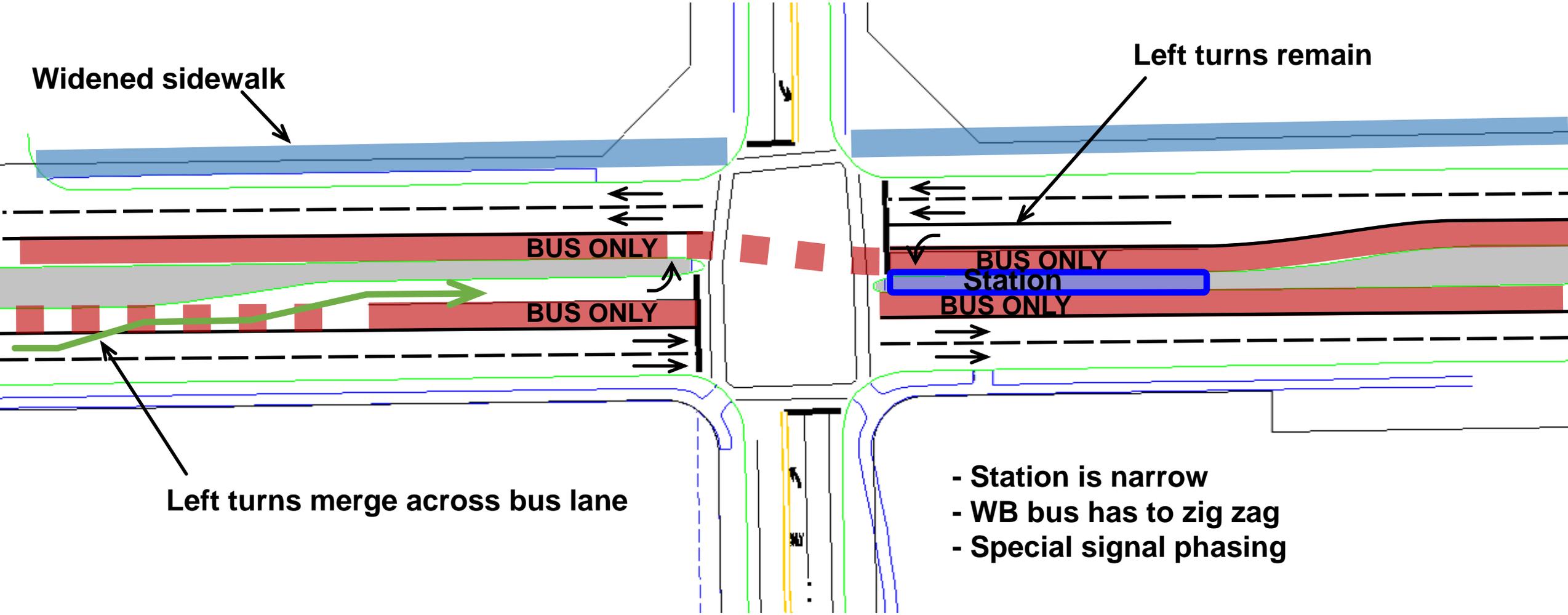


Eugene, OR



Photo: ITDP

Mineral Point Road



Widened sidewalk

Left turns remain

BUS ONLY

BUS ONLY

Station

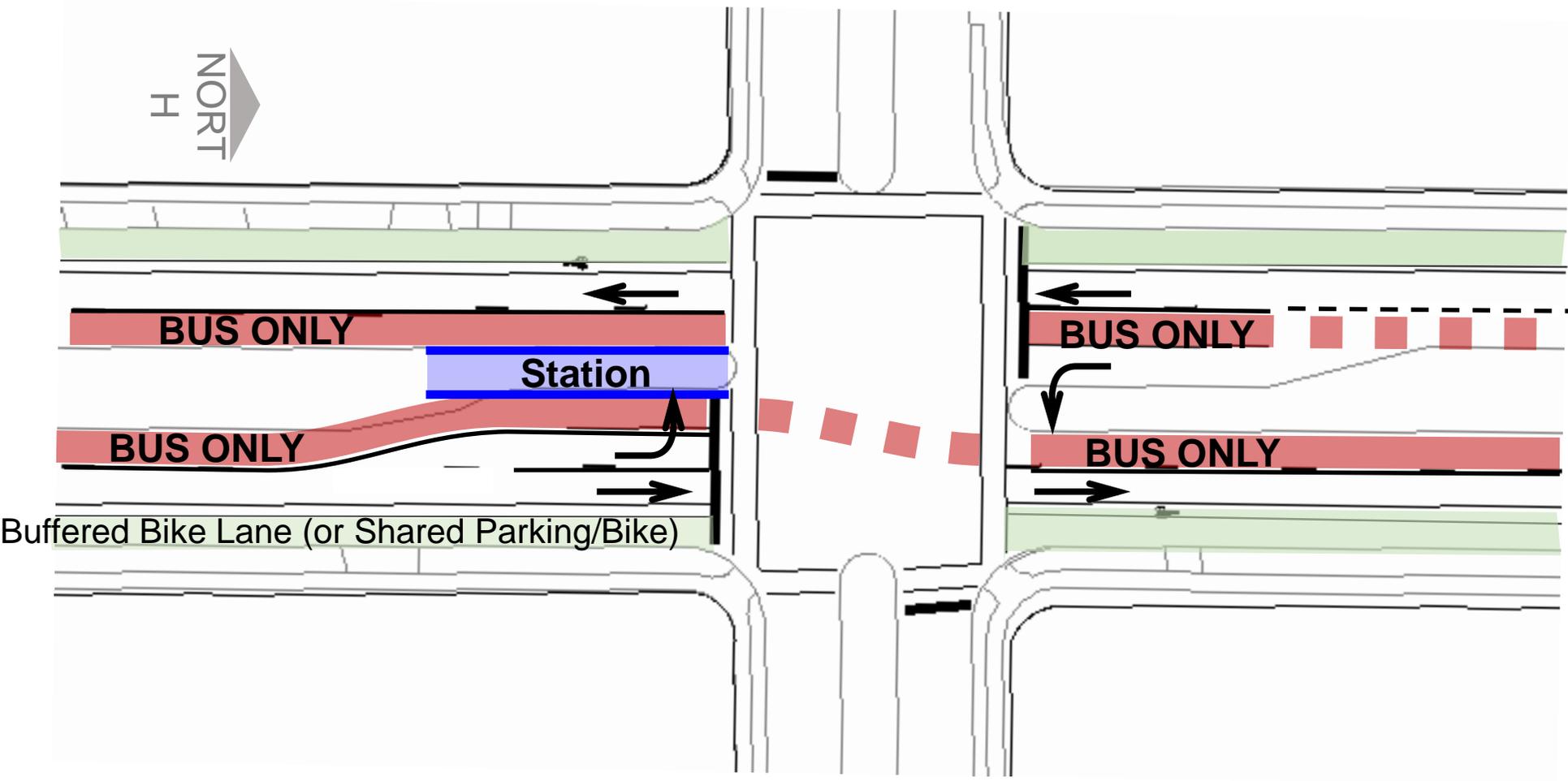
BUS ONLY

BUS ONLY

Left turns merge across bus lane

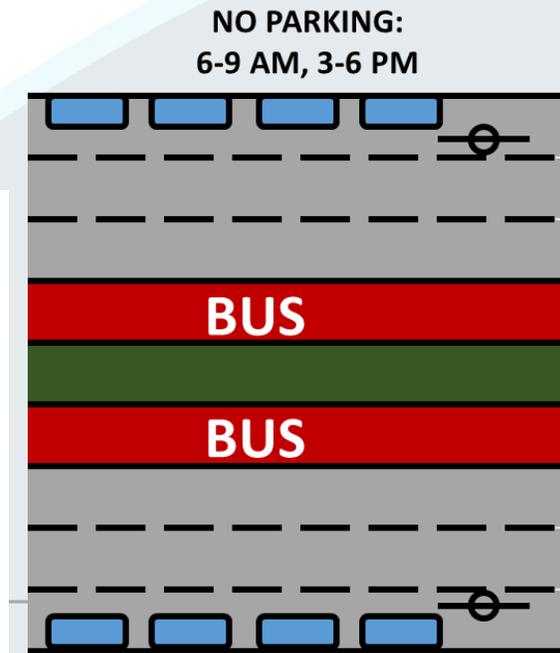
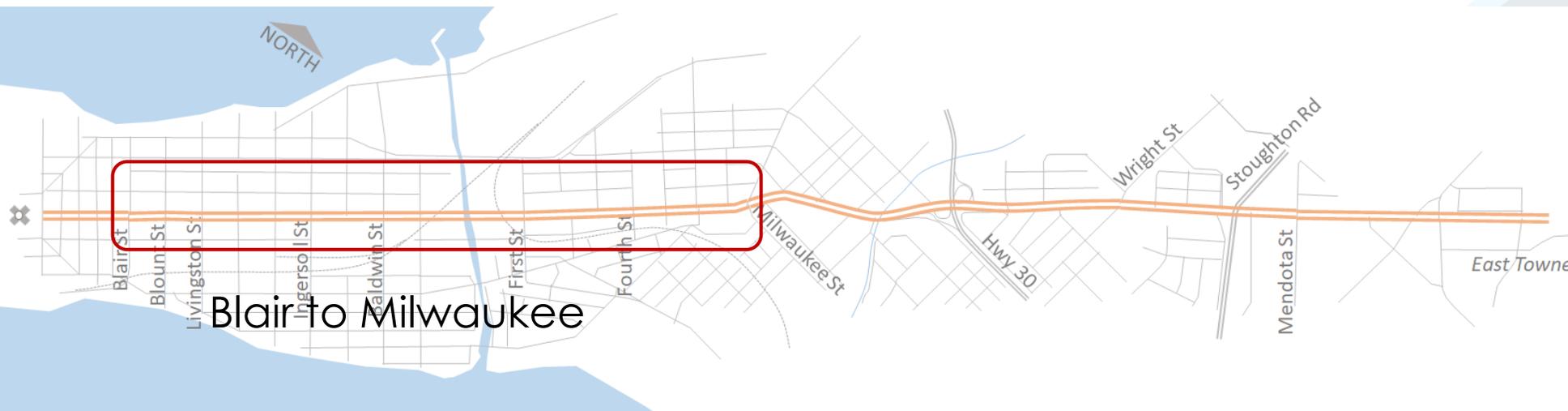
- Station is narrow
- WB bus has to zig zag
- Special signal phasing

Whitney Way



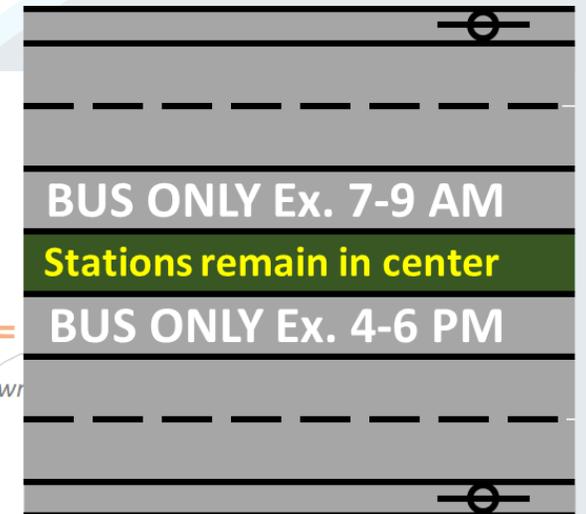
East Washington Avenue

- Median lanes converted from general purpose to bus only
- Parking restricted peak periods
 - 3 lanes, no parking or bike facilities peak periods
 - 2 lanes with parking and bike lanes off peak
- Left turns merge through bus lanes, some left turn restrictions
- Center stations with left-side doors



East Washington Avenue

- Median lanes converted from general purpose to bus only off peak
- Two general-purpose travel lanes each way off peak, three general-purpose lanes peak periods
- Center stations with left-side doors



Left Turn Restrictions

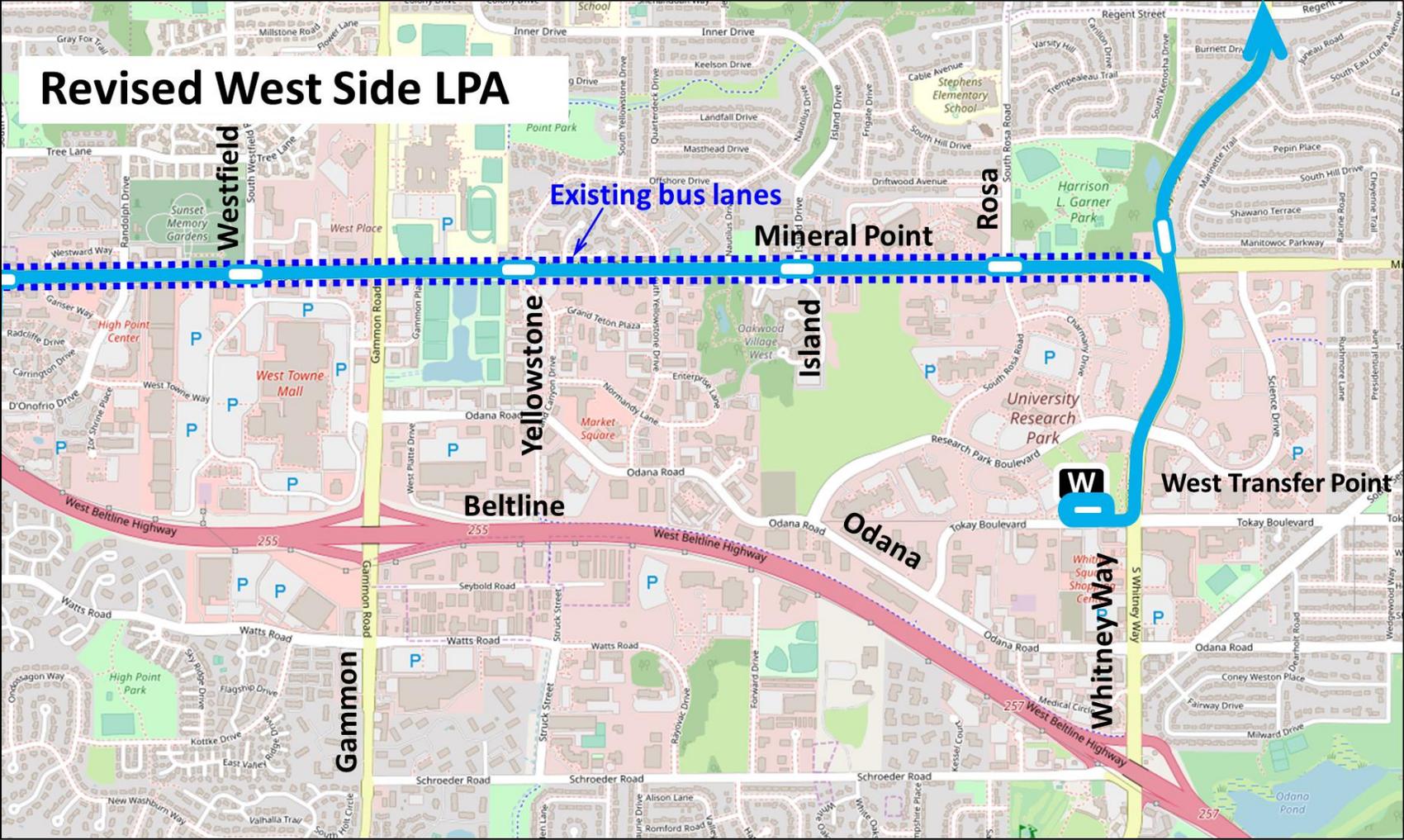


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West Side

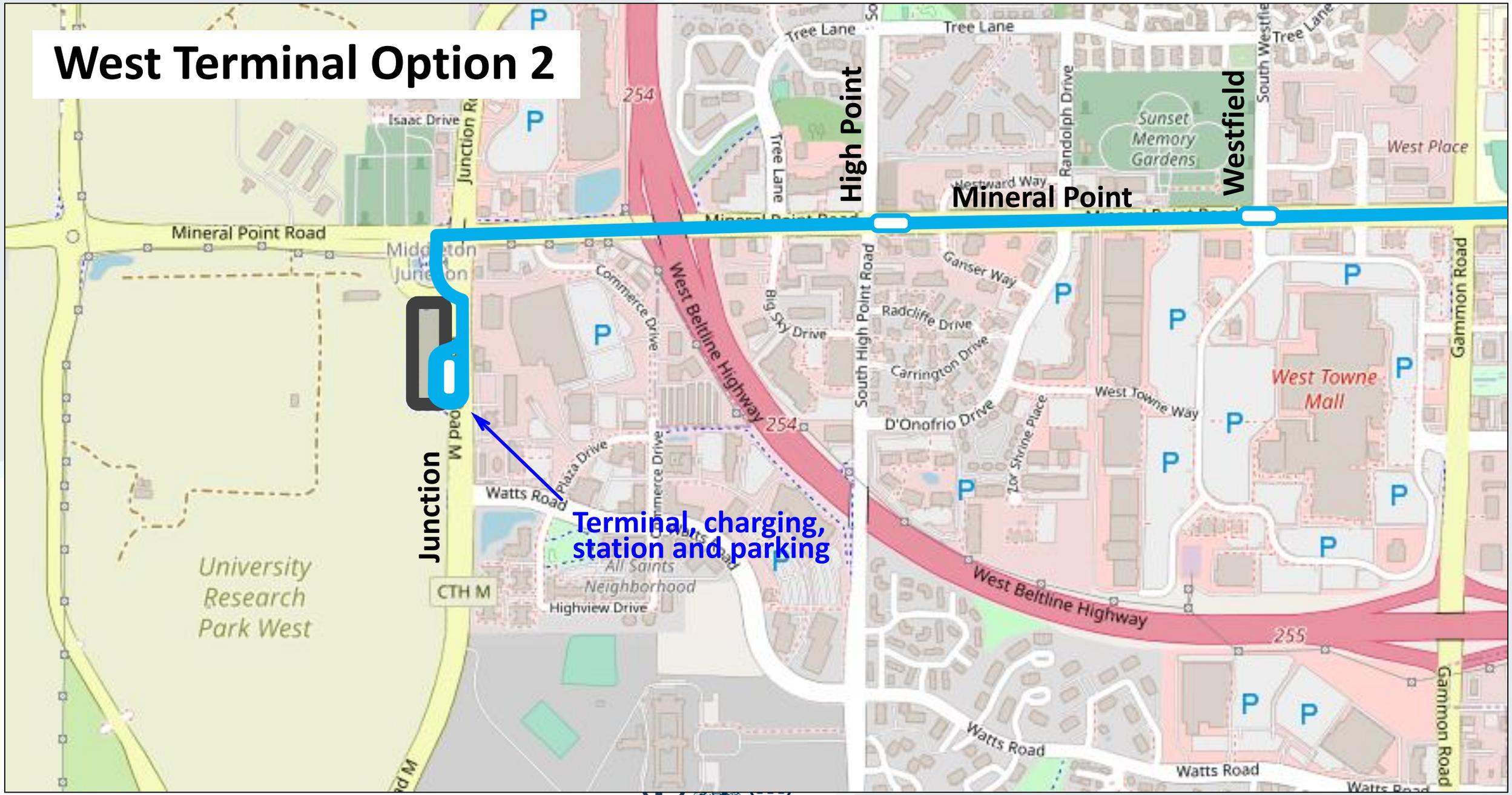


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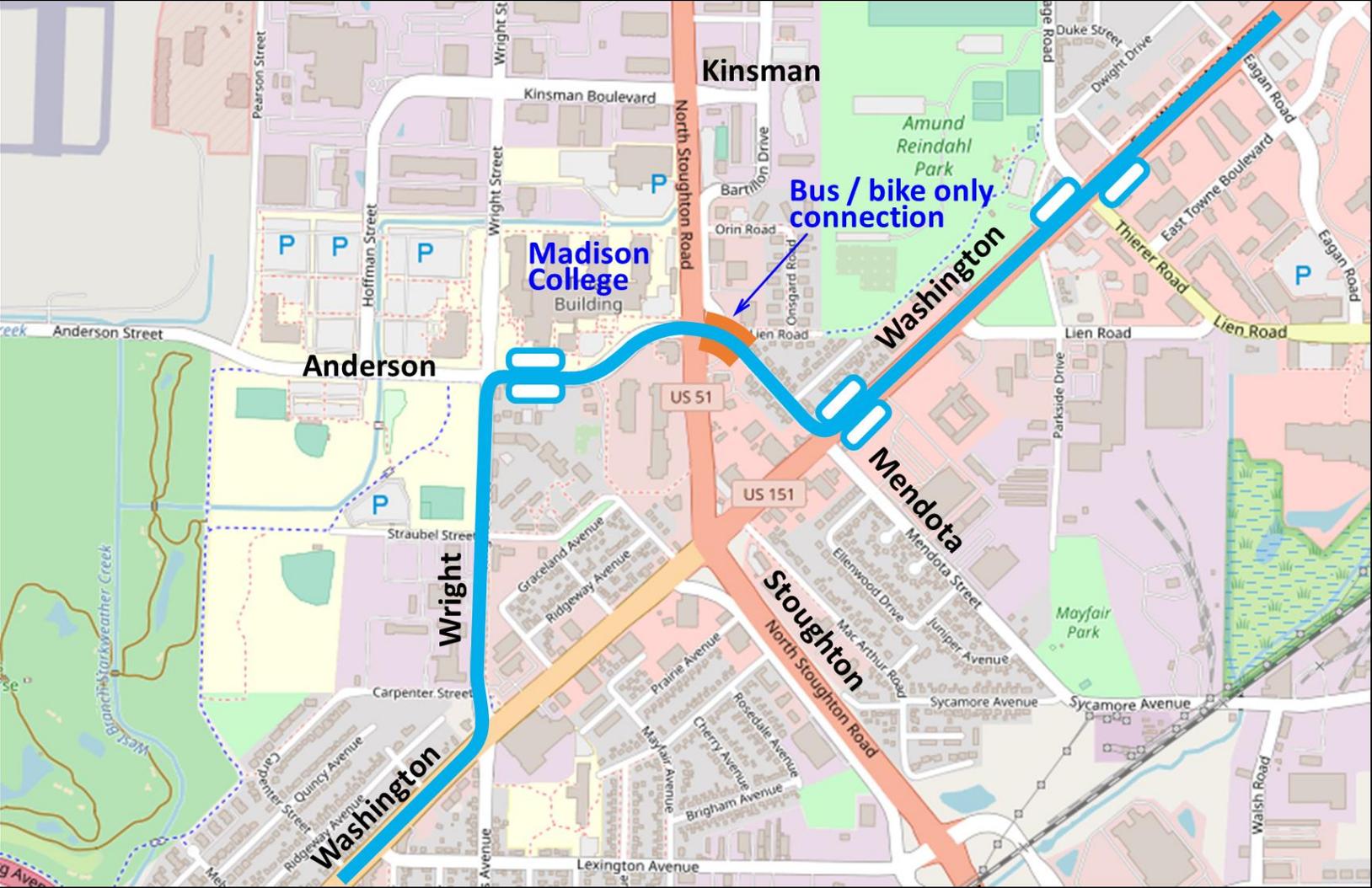
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West Terminal Option 2



Terminal, charging, station and parking

Mendota Street Route

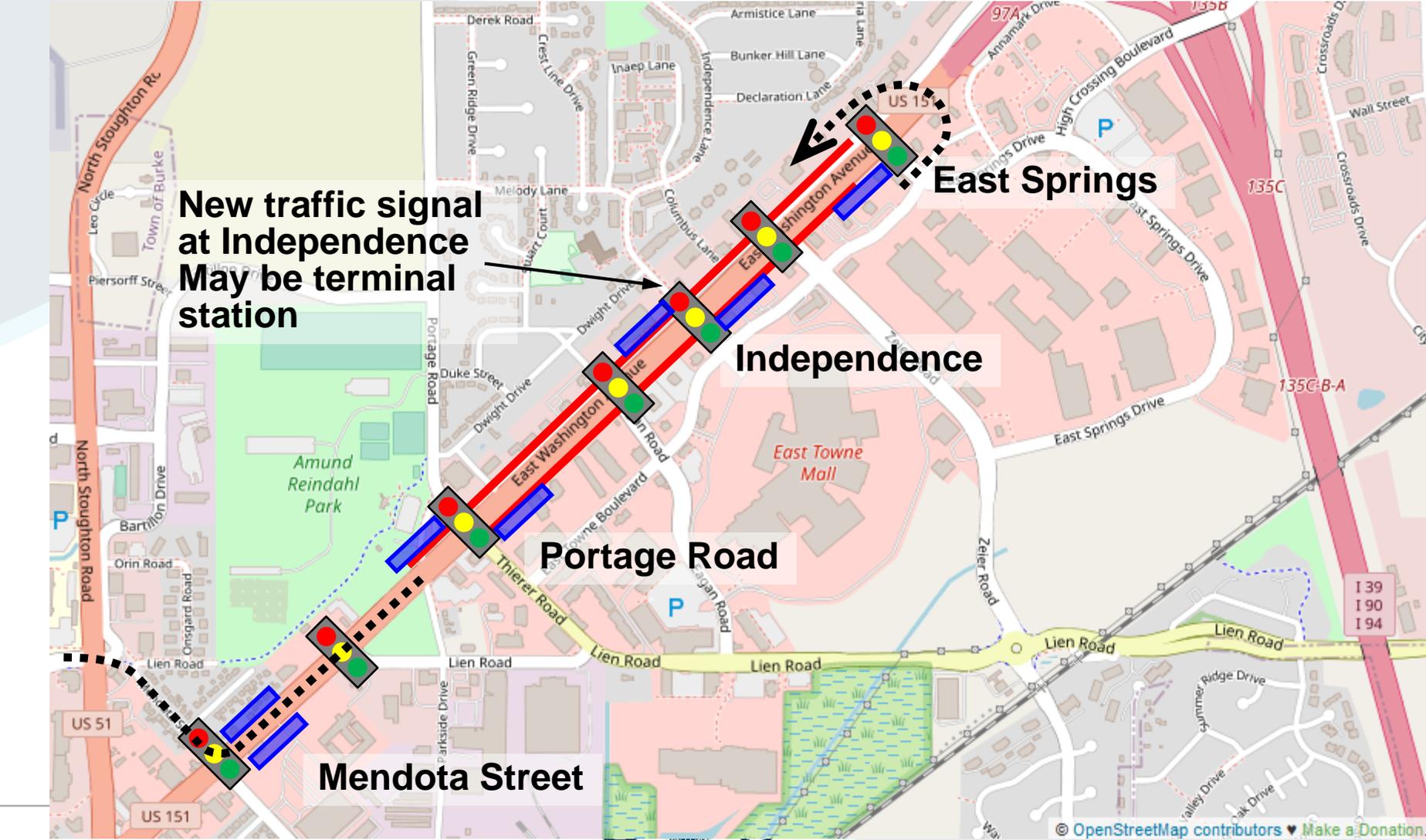


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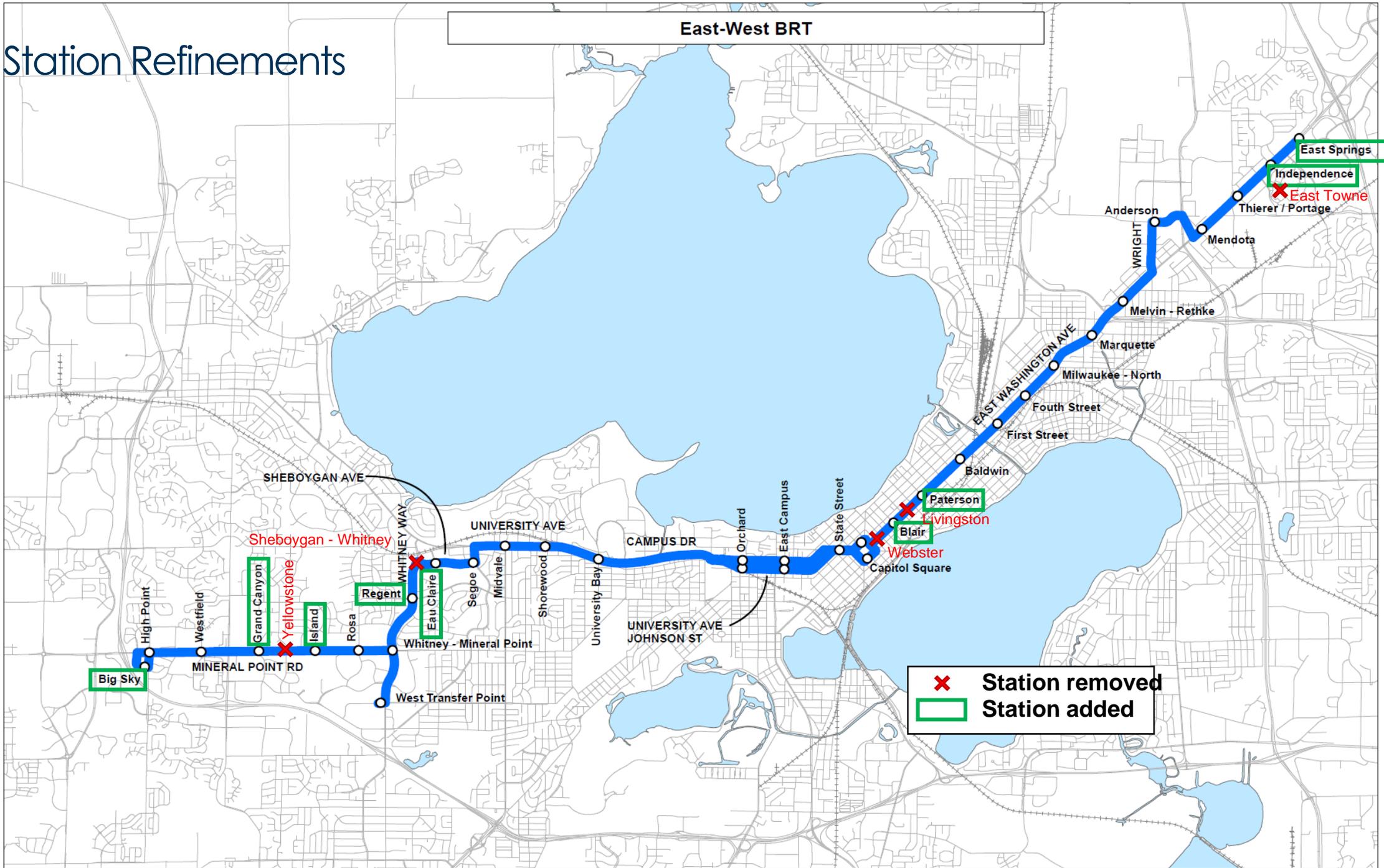
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East Terminal

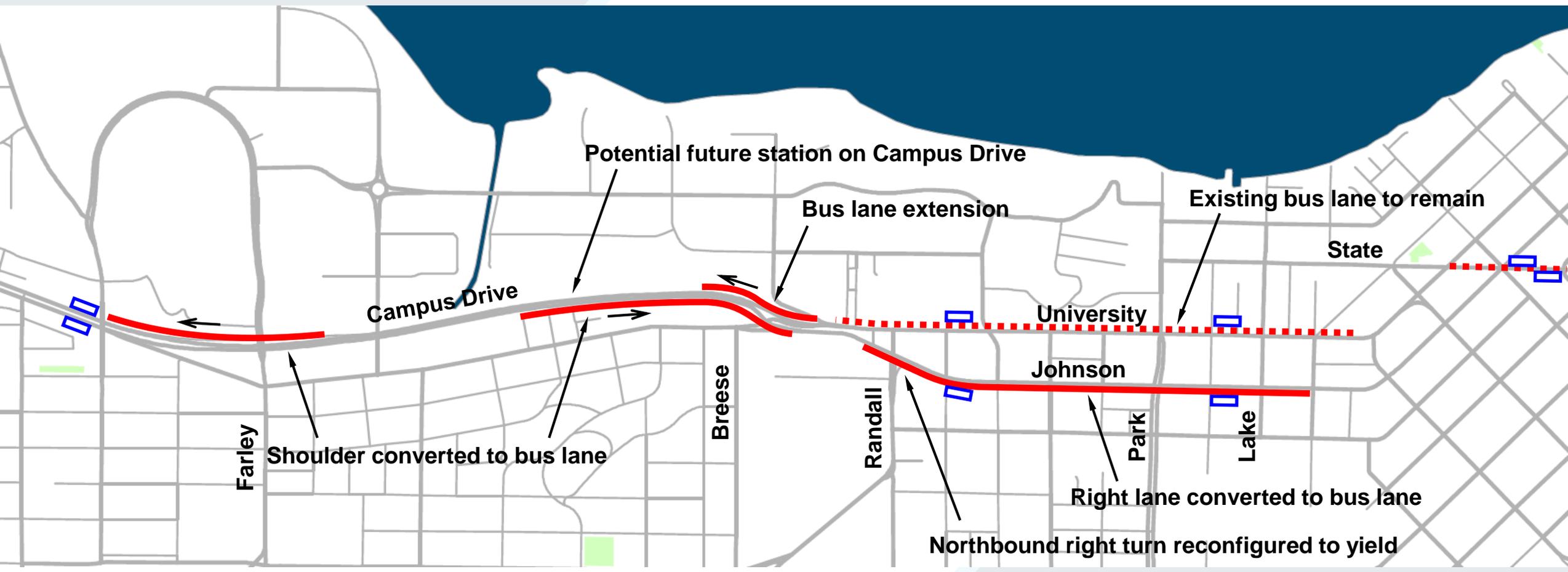


Station Refinements

East-West BRT

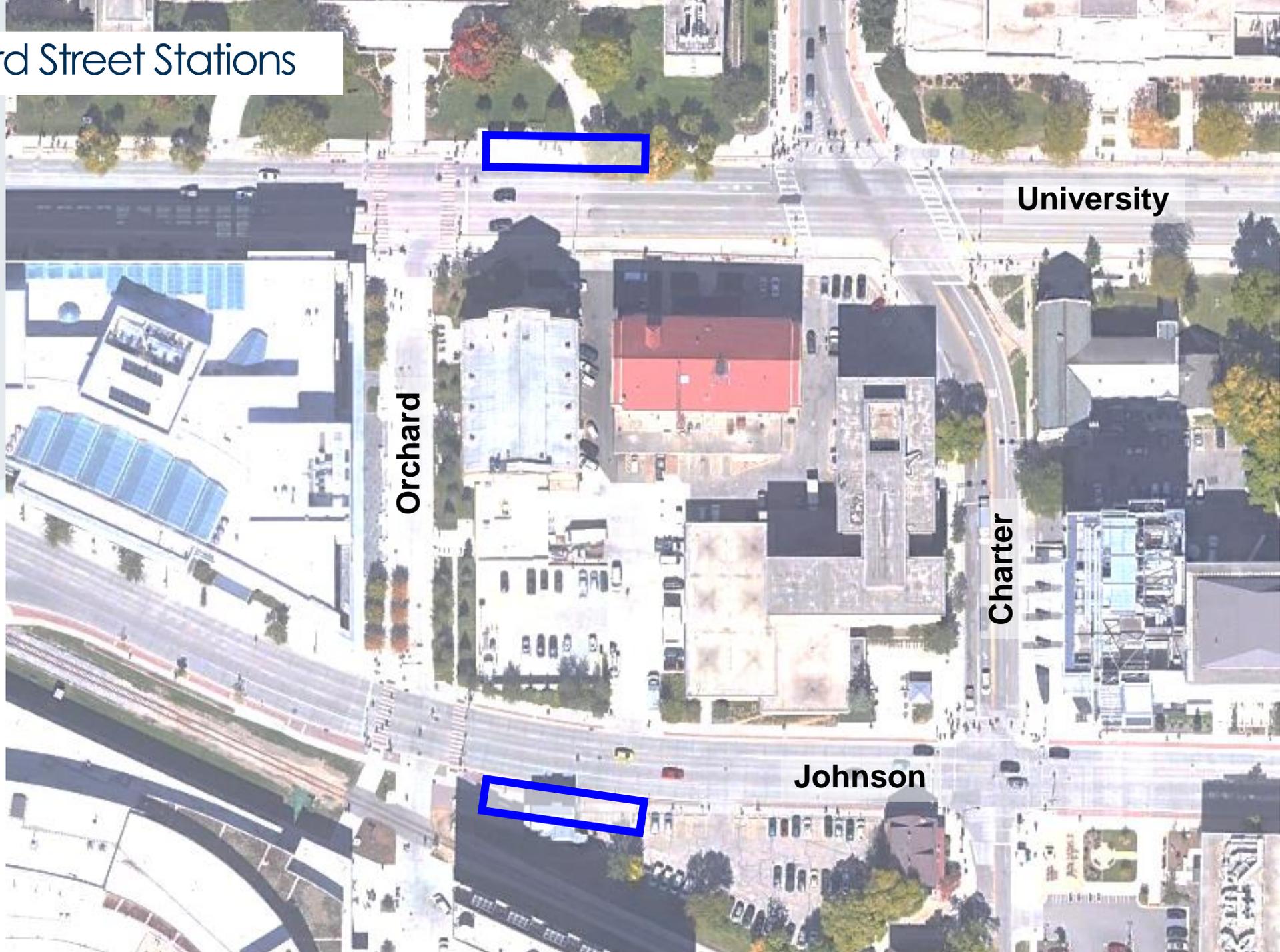


Runningway Improvement Summary



Orchard Street Stations

Randall



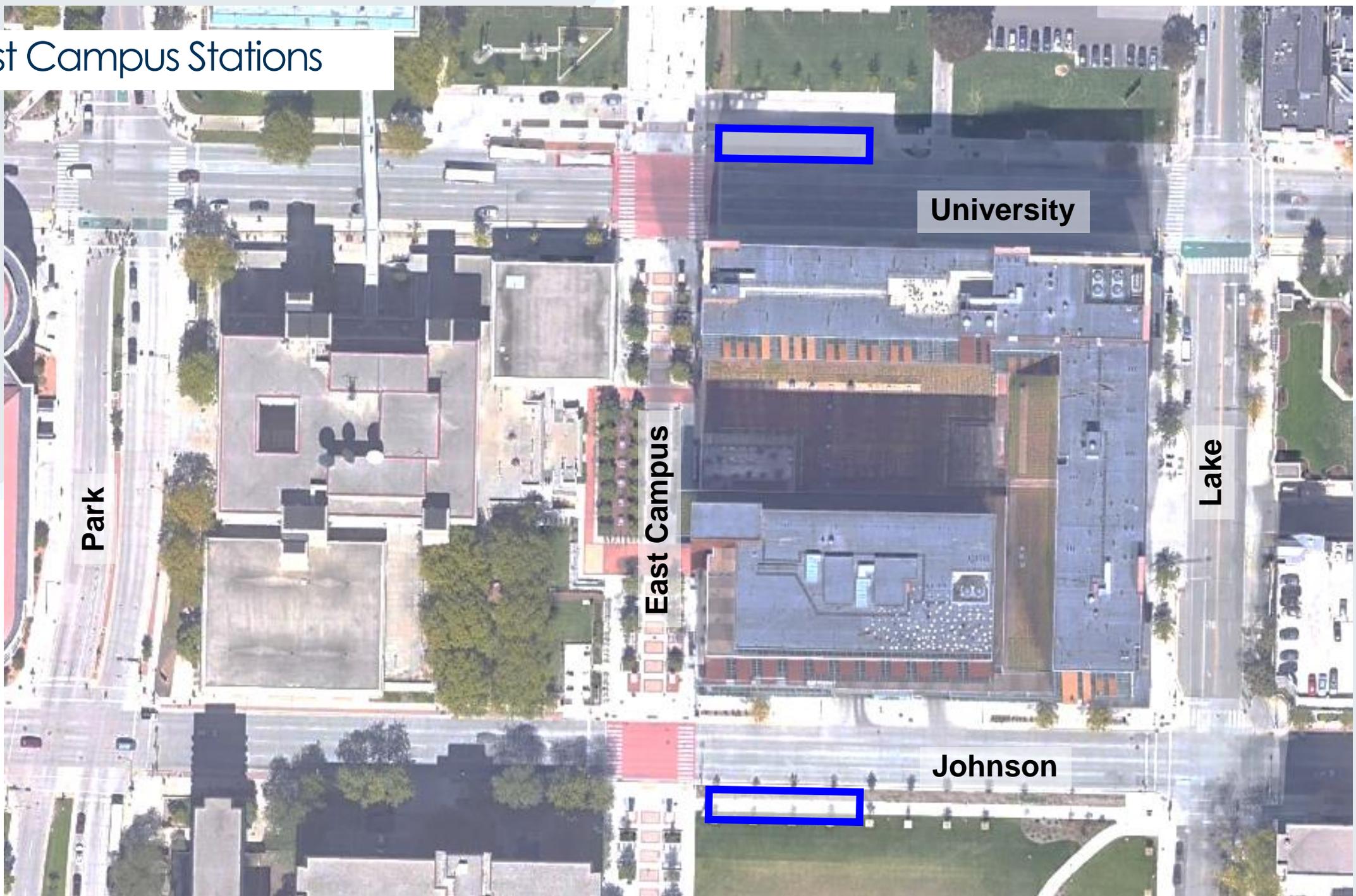
University

Orchard

Charter

Johnson

East Campus Stations



Park

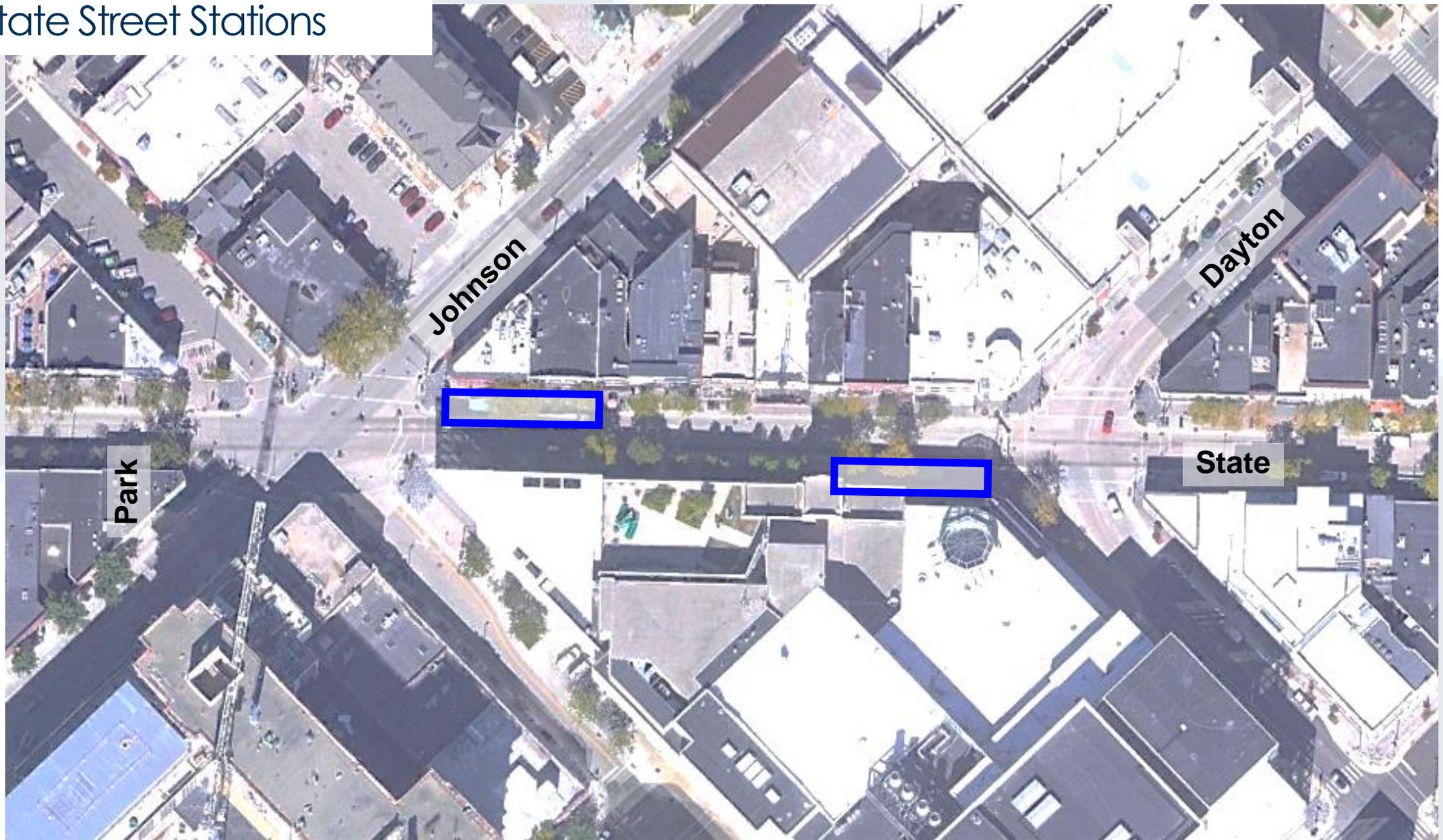
East Campus

University

Lake

Johnson

State Street Stations



Johnson

Dayton

Park

State