City of Madison

DEPARTMENT OF


TRANSPORTATION

# DRAFT
# Bicycle and Pedestrian Facilities
## along and near Rapid Route B
Staff Memo

May 2024

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## 1. Introduction and Base Conditions

During the second round of public meetings for the Rapid Route B Locally Preferred Alternative (LPA), participants expressed concerns about bicycle infrastructure along and near the Rapid Route B corridor. Some concerns about the lack of existing facilities along the northern route segment were received; however, the majority of feedback focused on the lack of existing and planned facilities along and near S. Park Street and concerns regarding the recommendation to change the existing outside-running shared bus-bike lane along Fish Hatchery Road to a center-running bus-only lane. 4

This memo describes the existing bike facilities in the corridor (base conditions), current recommendations and other planned projects related to bicycle and pedestrian facilities along and near the route, and some additional proposed improvements that staff have identified to enhance connectivity of the bicycle network, particularly along and near the S. Park Street portion of the route.

Figures 1.1a and 1.1b show the existing bicycle facilities on and near the route on the north side and south side, respectively. On the northern segment, bicycle lanes are currently located on Northport Drive and Commercial Avenue. On the southern segment of the route the following bike facilities exist:

- Bicycle lanes from University Ave to Vilas/W. Washington Avenue
- An auxiliary lane on S. Park Street between Vilas/W. Washington and Hughes Place, which serves as a combination bike/parking/bus/turn lane
- Bicycle lanes on Badger Road from Cypress Way to Catalpa Road
- Bicycle lanes on Fish Hatchery Road from Badger Road to Greenway Cross
- A shared-use path on the west side of Fish Hatchery Road from the southern Beltline Ramps to the southern route terminal at Brendan Avenue
- A shared bus-bike lane from Greenway Cross to McKee Road

Sidewalks exist along the entirety of the new route alignment. Crossing and curb ramp improvements are planned at intersections where stations are proposed.


*Figure 1.1a Existing Bicycle Facilities along and near Rapid Route B – North Side*


*Figure 1.1b Existing Bicycle Facilities along and near Rapid Route B – South Side*

## 2. Packers and Northport

Existing Conditions

Northport Drive is WIS 113 and under WisDOT's jurisdiction. It is an urban street with three lanes in both directions. Traffic volumes range from 24,000 to 37,000 vpd. Sidewalks exist on both sides of Northport Drive, yet bike lanes only exist on Northport Drive west of Sherman Ave. Because of the traffic volumes on Northport Drive, the bike accommodations do not meet All Ages and Abilities guidelines.

Packers Ave also is WIS 113 and is under WisDOT's jurisdiction. It currently has an expressway configuration with two to three lanes in each direction. The posted speed is 35 mph, yet with the expressway configuration and the interchange at Aberg Ave. speeds are greater. Traffic volumes range from 32,000 vehicles per day (vpd) to 53,000 vpd. Sidewalks exist intermittently outside of the main roadway. No bicycle facilities exist.

Objectives

The project will add center-running bus lanes and BRT stations into the existing roadway. This includes adding signals at all BRT stations, and strengthening crossings. Because WIS 113 was reconstructed in 2011, the project will not reconstruct the roadway. Instead, stations bus lanes will be retrofitted into the existing roadway, similar to what occurred on East Washington Ave, University Ave, Whitney Way, and Mineral Pt Road with the East West BRT.

Constraints
Both Packers and Northport Drive are under WisDOT jurisdiction. Project staff have been working with WisDOT to determine locations where a general-purpose lane can be converted to a bus only lane. The current project budget can only accommodate retrofitting BRT facilities into the existing street. Reconstruction is not possible.

Options
As mentioned, bus lanes and stations are being retrofitted into the existing roadway. Intersection improvements will be made at BRT station locations, but otherwise both Northport and Packers Ave will remain largely as is. However, the City is developing an Active Transportation Infrastructure Investment grant application to develop plans for an All Ages Ability Bike Route connections on the Northside that would connect into other parts of the City.

## 3. Park Street

Existing Conditions
Park Street is US 151 under WisDOT's jurisdiction. It carries roughly 26,000 vpd south of Fish Hatchery and between 40,000 to 46,000 vpd north of Fish Hatchery Road. It is an auto oriented corridor with several deficiencies, including:

- Wide lane widths that promote higher speeds.
- Very narrow terraces (1.5 to 4 feet) that do not support street trees. Park Street scores low in the tree equity scoring criteria.
- A low quality at-grade bike facility that is shared with either bus lanes, right turn lanes, or parking. Directly adjacent to traffic volumes ranging from 26,000 to 46,000 vpd – it is a high stress corridor that is does not meet All Ages and Abilities guidelines.

Weekday bicycle counts at Olin Ave in April 2024 indicate roughly 60 cyclist a day use Park St dispersed in both directions evenly dispersed throughout the day. Park Street is one of the more culturally rich areas of the city yet has an auto oriented corridor segmenting the neighborhood.

Objectives
The N-S BRT and associated CIG funding provides an opportunity to partially address the above stated deficiencies on a portion of the corridor. From University Avenue to Fish Hatchery Road, this project will not reconstruct the roadway. Improvements, including center-running bus lanes and BRT stations which are described further below, will be retrofitted into the existing roadway.

From Fish Hatchery Road to Badger Road, a reconstruction of the roadway is included in the project. Along this segment, the project objectives include:

- Providing BRT stations and center-running bus lanes, consistent with the majority of the existing BRT system.
- Adding signals near any BRT stations as needed, and strengthening crossings in at intersections
- Providing an All Ages and Abilities bike facility to the extent possible
- Increasing street canopy to the extent possible, consistent with corridors in other neighborhoods.

Constraints
There are several constraints along the Park St corridor.

- Park Street is US 151, a Connecting Highway under WisDOT's jurisdiction. Consequently:
    - Capacity for vehicle traffic cannot be reduced. Extensive traffic modeling indicates that motor vehicle operations required by WisDOT cannot be maintained if the number of travel lanes are reduced. Even if the jurisdiction were transferred to Madison, similar concerns would exist since Park St is on the National Highway System.
    - WisDOT Facilities Development Manual requirements apply. This affects the minimum distance from travel lanes to path edges, median refuges, etc.

- Park St from Badger to Fish Hatchery Road can be reconstructed, Fish Hatchery Road to West Washington cannot be reconstructed. Ridership levels on the N-S BRT only qualifies for enough Small Starts funding to reconstruct Park St from Badger to Fish Hatchery Road.
- Right of Way is limited to roughly 106 feet throughout the corridor. There are some sections where Right of Way can be purchased, the majority of the corridor can be purchased, yet the majority has development directly up to the corridor.

Options –Fish Hatchery Road to West Washington Ave

This section of Park St is not being reconstructed, consequently bus lanes and stations must fit within the existing street section. The dedicated bus lane will be removed for three blocks in the southbound direction to address specific parking needs. This issue is addressed in the North Park Street Running Way Report (https://madison.legistar.com/View.ashx?M=F&ID=12885375&GUID=D8CC4F62-7430-4DD3-9BD4-79A823AAFEAE). It should be noted that maintaining the parking for these three blocks does affect the presence of a bus lane but does not affect the presence of bicycle facilities.

Options reviewed include:

1. Siderunning bus lanes (dismissed) – This option would essentially keep the existing configuration for this half mile, with buses on the side of Park St and cyclists sharing the bus/right turn lanes. This was dismissed for the following reasons:
    a. BRT will be center running for the majority of the Park St corridor. Switching from center to side running for 0.5 miles could introduce weaving challenges. Siderunning BRT would also experience some delays associated with right turning vehicles at both West Washington Ave (NB) and Fish Hatchery Rd (SB).
    b. The right of way would not be able to accommodate 12-foot side running stations on both sides of Park St and maintain sidewalks.
    c. The cycling accommodations remain poor and are not all ages and abilities.
2. Shared-use side path on the west side (dismissed) – This option would continue the side path on the west side. Sidewalks in this section cannot be widened to 8 feet accommodate bicycle traffic.
    a. MGO 12.76(1) which prohibits cycling next to building faces would need to be repealed
    b. WisDOT FDM 11-46 (fig 15.6) requires minimum 5-feet from face of curb to side path, which is not possible in this section without reconstruction.
3. Shared-use side path on the east side (dismissed) – This option would construct a new side path on the east side of Park St. This option has the same feasibility challenges associated with the west side path, requiring repealing MGO 12.76(1) and a variance from WisDOT FDM standards.
   West Shore Drive lies 240 feet to the east. Crossing from the west to the east side at Parr St (Fish Hatchery) can facilitate a connection to West Shore Drive as easily as an East side path.


*Figure 3.1 Southbound Park St*
*Does not support a path*

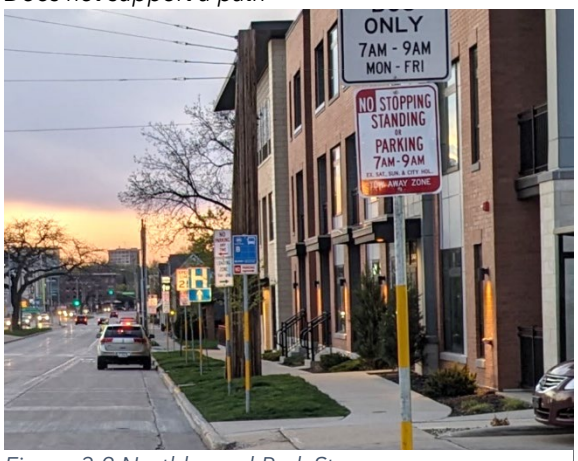


*Figure 3.2 Northbound Park St*
*Does not support a path*

4. Parking protected bike lane in the southbound direction (dismissed). This option would place a parking protected bike lane adjacent to the parking being preserved for 3 blocks in the southbound direction. This option is not possible because the minimum width needed for a parking protected lane is 16 feet (6.5′ bike lane and gutter, 2′ buffer, 7.5′ parking), and only 12 feet is available. However, the parking that is being preserved in the southbound direction does provide a small (4-foot) on-street bike accommodation.

Because this section of Park St is not being reconstructed, long-term All Ages and Abilities facilities cannot be incorporated into the street at this time. The BRT project will strengthen connections to alternate routes.

- Improve bike facilities on Parr Street to better connect to W. Shore Drive
- Continue recent bike improvements that end at Erin St further north on Mills Street
- Improve the connection from the new S. Park Street path to Brooks St potentially via South St and/or signal improvements.
- Develop a new transition (ramp) from on-street bike facilities to W. Shore Drive at the intersection of S. Park Street / W. Washington Avenue / Vilas Street

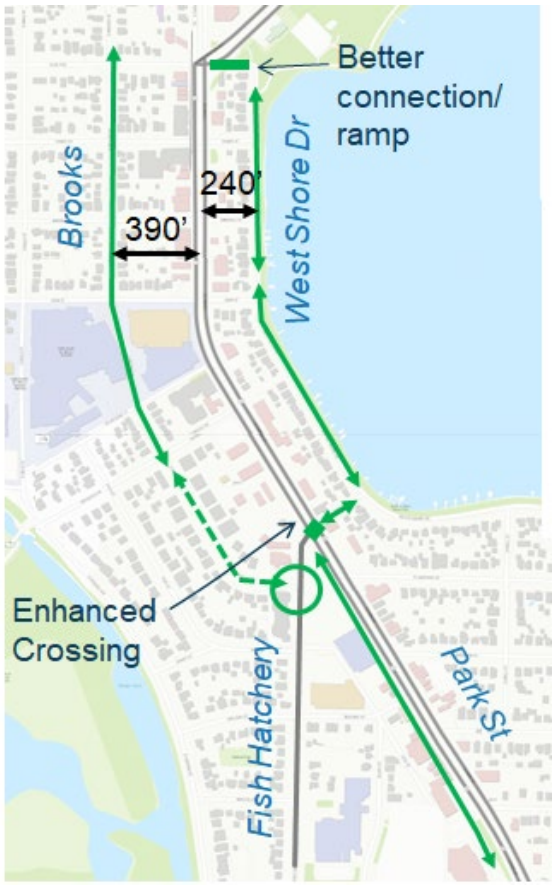


*Figure 3.3 Strengthened parallel connections*

<u>Options – Badger to Fish Hatchery Road</u>
The study team reviewed several options to provide dedicated bus lane, better bike accommodations, and better street tree canopy. They include:

1. On-street bike lanes (Dismissed) – This option would provide dedicated bus lanes and 5-foot street level bike lanes on both sides of Park St. This was dismissed because the bike facility is not an All Ages and Abilities accommodation and it would leave only a 1.5-foot terrace which could not support trees.
2. One-way Shared Use Paths on Both Sides of Park Street (Dismissed) – This alternative would provide dedicated bus lanes and 7-foot one-way shared use paths on both sides of Park St – which would be consistent with an All Ages and Abilities facility. This option was dismissed because with WisDOT separation standards it would require strip right of way for the majority of the corridor and terrace widths would only marginally support trees. Two-way pedestrian travel combined with one-way bike travel may pose challenges.
3. Two-way Shared Use Path (Selected) – This option would provide dedicated bus lanes and 8 to 10-foot shared use path on one side of Park St, with a standard 5-foot sidewalk on the other side. This option is selected because it provides an All Ages and Abilities facility, generally within the existing right of way. It also provides sufficient terrace to provide canopy trees in the majority of the corridor.

   While both the west and east sides of Park St have comparable population, the shared use path is recommended for the west side of Park St. The majority of attractions (Library, schools, BIPOC programming and investment) is on the west side of the corridor. Additionally, the west side has roughly 30 percent fewer driveways than the east side.

   With the placement of the shared use path on the west side of Park St, crossing connections to the west side of the street will be strengthened. This includes installing two new traffic signals, reducing speeds, and installing continental cross walks.

Near the N-S BRT route, the following bike improvement projects are already planned and/or funded:

Funded:

- Bike lanes on Mills St from Arboretum to Erin St.
- Rapid flashing beacon (RFB) at Delaplaine and Park
- Segments of bike boulevards on Van Deusen Street, Rowell Street, Lakeside Street, and Hickory Street
- Wingra Dr/Wingra Creek Path and Park St intersection improvements
- Traffic calming project on Fischer St to Wingra Creek Path
- Closing Buick Street sidewalk gap
- Sidewalk on Badger from Park to Center for Black Excellence
- Extending Cannonball Path to park from Fish Hatch (google Cannonball Path if necessary)

Planned:

- Improvements on Beld St to Cedar Street
- Curb bumpouts on S Brooks St at Drake St

These improvements will enhance parallel routes and bike/ped connections to BRT stations. Figure 3-4 shows the existing, planned/funded, and additional improvements proposed along and near the S. Park Street corridor.

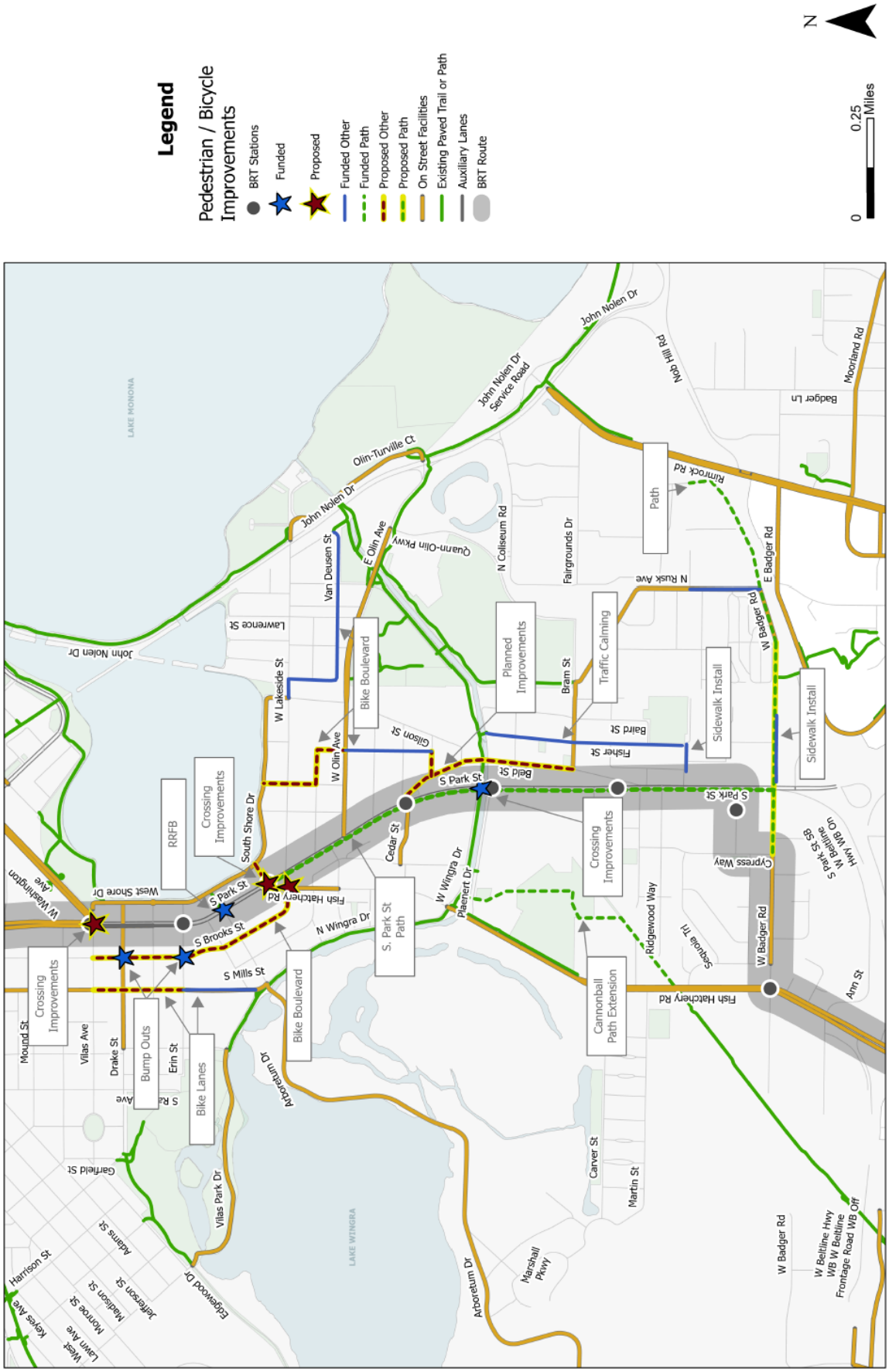


*Figure 3.4 Existing, Funded, and Proposed Bike Network along S. Park Street Corridor*