

County of Milwaukee Interoffice Communication

DATE: June 24, 2022

TO: Supervisor Marcelia Nicholson, Chair, Milwaukee County Board of Supervisors

FROM: Donna Brown-Martin, Director, Department of Transportation

SUBJECT: Milwaukee County North-South Transit Enhancement Study – Status Update (Tier 2 Evaluation and Recommended Alternative)

FILE TYPE: Informational Report

BACKGROUND

In Milwaukee County's 2021 Recommended Operating Budget, County Executive David Crowley outlined that the Milwaukee County Transit System (MCTS) and Milwaukee County Department of Transportation (MCDOT) are coordinating with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to study transit improvements from the north to the south of the County within the proximity of 27th Street and MCTS' PurpleLine.

The County Executive's recommendation recognized a need to invest in the 27th Street area as part of North-South Transit Enhancement Study since the corridor serves some of the most concentrated areas of underrepresented populations in the Milwaukee area, which is among the most racially segregated metro areas in the Nation. The investment aligns with Milwaukee County's 2019 declaration of racism as a public health crisis and its commitment to addressing the root causes of racial inequities.

Subsequently, in the 2022 Adopted Capital Budget, the Milwaukee County Board of Supervisors approved project WT153, Engineering, Design and Environmental Review for the North-South Transit Enhancement Project.

SEWRPC is undertaking an incremental evaluation process, described in the following three steps, that will progress to the final phase of the analysis:

- The first step (Tier 1 Evaluation) defines the alternatives to be evaluated and recommended, including the transit technology and the identification of alignment options. This evaluation step results in the elimination of some of the alternatives considered and is the subject of this report.
- The second step (Tier 2 Evaluation) will further assess the alternative alignments defined in step one and identify potential station locations along the alignments, using the evaluation criteria outlined in the table below. This evaluation step may also result in the elimination of some of the alternatives considered.
- The third step (Tier 3 Evaluation) builds upon any alternative still under consideration after the second step. Any remaining alternative will be evaluated against federal criteria for transit projects to determine if refinements should be made.

At the conclusion of the third step of the evaluation process, a locally preferred alternative (LPA) will be recommended to the Milwaukee County Board of Supervisors, city councils, and village boards for adoption. The LPA will be the transit investment alternative that best meets the purpose of and need for the project and is competitive for funding through the Federal Transit Administration (FTA) Capital Investment Grant (CIG) funding program. This feasibility study is

scheduled to be completed with a recommended alternative in Summer 2022, and a letter to FTA requesting to enter project development is expected to follow. WT153 will conduct federally mandated engineering, design and environmental review requirements for the project to be eligible for CIG funding.

This Tier 2 evaluation process provides analyses of the range of alternatives that remained after the Tier 1 analysis: bus rapid transit (BRT) technology, route alignments and associated BRT stations, that will result in a recommended alternative. The Tier 2 evaluation and recommendation will be posted for public comment, then will be followed by the Tier 3 analysis where further refinements will be considered, if appropriate.

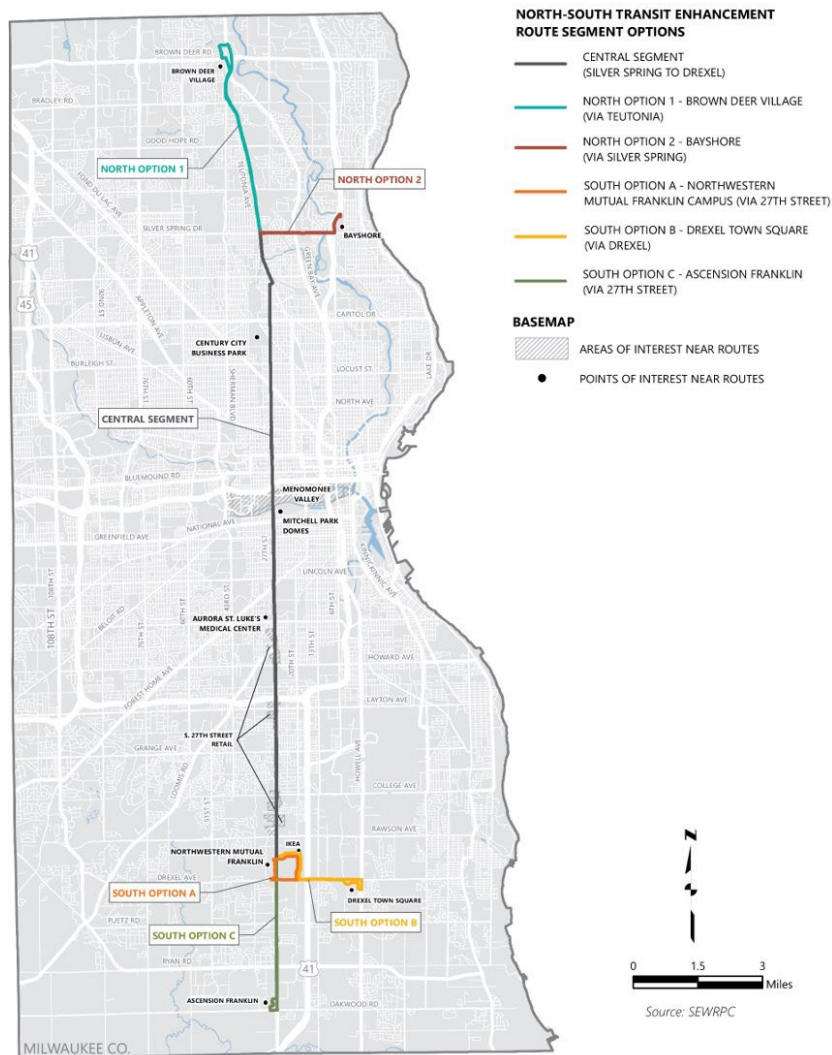
Tier 1 Evaluation

SEWRPC presented a report in December 2020 (File #20-897) discussing the goals of and processes being undertaken for the study. The status update described the draft recommendations of the Tier 1 Evaluation derived from robust public outreach and feedback from key stakeholders including but not limited to riders, businesses, and local municipalities.

Tier 2 Evaluation

Map 1: Tier 2 BRT Route Options Under Consideration, shows the range of six route options that were evaluated in the Tier 2 evaluation. The Tier 2 evaluation factors included transportation systems and station area analysis, ridership, environmental, and capital and operations costs for each of the six route options.

Map 1: Tier 2 BRT Route Options Under Consideration



Each of the Tier 2 route options were evaluated to determine where it is feasible to convert a wide shoulder, traffic lane or parking lane to a dedicated BRT transit lane. In addition, bike lanes that could be shared with the BRT vehicles and opportunities for new exclusive bike lanes were identified. Route segments that have high incidents of pedestrian crashes were recommended to have a vertical separation element, or a curb with bollards on top, to discourage cars from using the dedicated BRT transit lanes to speed or pass other vehicles. The vertical separation elements along with the reduction in the number of travel lanes and speeds will improve safety on those high pedestrian crash segments in the corridor.

Route segments that were identified as feasible for dedicated BRT transit lanes were further evaluated to determine if the dedicated transit lanes should be right-side running or in the lane closest to the roadway median. In general, where a median boulevard was available and where the roadway could accommodate a dedicated lane, center-running dedicated transit lanes were recommended. There are several advantages to center-running lanes including:

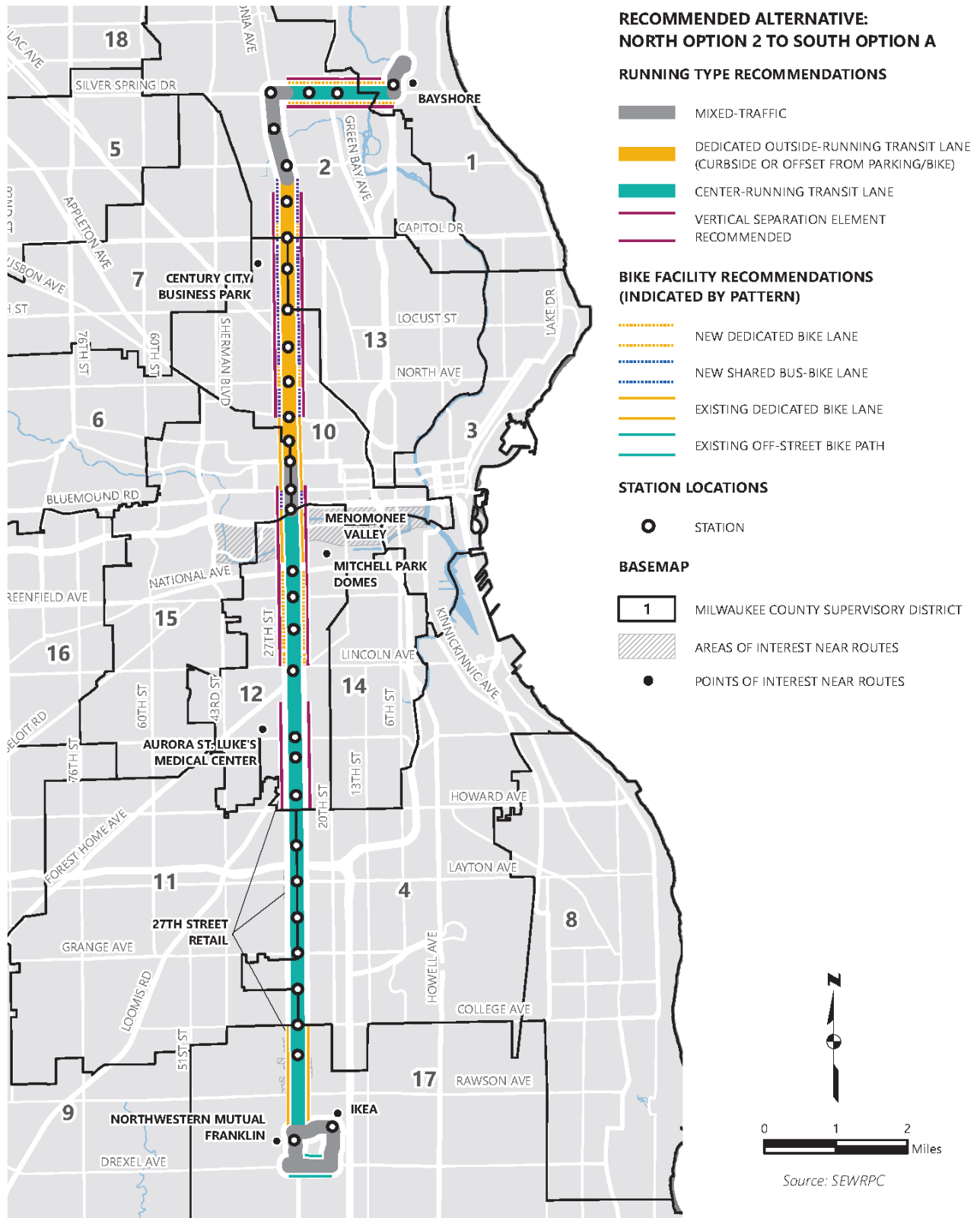
- Reduces conflicts between vehicles and transit vehicles at right turns
- Supports the flow of traffic by only allowing left turns at signalized intersections
- Provides an opportunity in some locations to share one station for both travel directions
- Allows for safer and better traffic flow of vehicles making left-turn lanes with the use of transit signal prioritization
- Maintains emergency vehicle access to business/residential curbsides
- Provides emergency vehicles a safer travel way (in the transit lane) by allowing an easy and clear option for traffic to move right and out of the way

Recommended Alternative

Map 2: Recommended Alternative, North Option 2 to South Option A shows the recommended alternative and details related to dedicated transit lanes, running type, bike lanes, vertical separation elements and stations. North Option 2 to South Option A is least expensive of the route options considered both in capital and operating costs, which are shown below along with other characteristics:

- Capital Cost: \$148.4M
- Operating Cost: \$11.50M per year (with a net increase of \$4.01M per year when considering associated changes to existing transit services)
- BRT Stations: 63
- Electric BRT Vehicles: 24
- Route Length: 18.0 miles (one way)
- Dedicated Transit Lanes: 14.8 miles (82%)
- Ridership forecasts show a 47% to 60% increases in ridership when compared to the existing PurpleLine
- New Dedicated Bike Lanes: 6.7 miles
- Existing bike lanes converted to shared bike/bus lanes: 6.2 miles
- Converted Travel Lanes: 10.9 miles
- Travel time savings: approximately 15 minutes during congested periods
- Maximum Converted Parking Spaces: 1,527

Map 2: Recommended Alternative, North Option 2 to South Option A



The recommended BRT alternative North Option 2 to South Option A will be refined in the Tier 3 Evaluation of this feasibility study, if warranted. In later phases of the project, environmental review, preliminary engineering and design, more detailed information, mapping, and surveys will be conducted and considered for the preferred alternative alignments and station locations prior to finalizing design and construction. Public outreach will continue into the next phases and information will be updated and available on the project website: mkenorthsouth.com

ALIGNMENT TO STRATEGIC PLAN

2C: Apply a racial equity lens to all decisions.

3A: invest “upstream” to address root causes of health disparities.

3B: Enhance the County’s fiscal health and sustainability.

3C: Dismantle barriers to diverse and inclusive communities.

RECOMMENDATION

This report is for information purposes.

VIRTUAL MEETING INVITES

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Carrie Cooper, Principal Transportation Planner, Southeastern Wisconsin Regional Planning Commission (ccooper@sewrpc.org)

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Donna Brown-Martin

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Director, Department of Transportation

ATTACHMENTS:

Milwaukee County North-South Transit Enhancement Study – Status Update

cc:

Kelly Bablitch, Chief of Staff, County Board of Supervisors

Janelle M. Jensen, Legislative Services Division Manager, Office of the County Clerk