



Department of Public Works
Infrastructure Services Division

Karen Dettmer, P.E.
Interim Commissioner of Public Works

Jerrel Kruschke, P.E.
City Engineer

Timothy J. Thur, P.E.
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January 31, 2022

To the Honorable, Public Works Committee
City of Milwaukee
200 East Wells Street, Room 205

Re: Resolutions 211266 and 211267

Dear Committee Members,

Milwaukee Department of Public Works (DPW) has prepared two reports per Common Council Files (CCFN) 211266 – Resolution directing the Department of Public Works to prepare a report on the feasibility of funding and implementing various improvements to a portion of North Van Buren Avenue and CCFN 211267 – Resolution directing the Department of Public Works to prepare a report on the feasibility of various improvements to a portion of North Water Street introduced at the December 1, 2021 Public Works Committee meeting.

Attached please find both reports outlining the project goals and potential funding sources. In both cases, extensive public engagement would be needed to narrow down the design alternatives.

Please feel free to contact me if you have any questions.

Sincerely,

Jerrel Kruschke, P.E.
City Engineer
Department of Public Works – Infrastructure

JK:kv

Water Street (Milwaukee River to Clybourn) – Proposed Street Transformation Project

A street transformation project on Water Street between the Milwaukee River and Clybourn Street would present a unique opportunity to reimagine a major corridor in the City of Milwaukee. Water Street has been identified in the City of Milwaukee's Pedestrian Plan as a corridor on the Pedestrian High Injury Network (PHIN), serves as the primary entryway into and through the Historic Third Ward, connects the Historic Third Ward to Downtown and Walkers Point, and serves major MCTS bus routes. The City of Milwaukee's Department of Public Works (DPW) has also received numerous complaints from residents, elected officials, business owners, and people traveling along the Water Street corridor regarding high motor vehicle speeds, inadequate pedestrian crossings, lack of on-street bicycle accommodations, and narrow sidewalks with little to no landscaping or places for people to gather.

The goals of this project are numerous and will be addressed by adhering to the City of Milwaukee's Complete Streets Policy:

- Reduce motor vehicle speeds
- Reduce crashes for all users
- Improve the comfort, accessibility, and efficiency for all modes, but in particular people walking, biking, and taking transit
- Better manage curbside activities to allow for varied uses such as deliveries, loading, mobility parking, seating, landscaping, and parking
- Incorporate landscaping, street trees, and/or green stormwater infrastructure (GSI) into the public right of way
- Enhance the streetscape to create a welcoming and vibrant corridor that supports existing land uses, spurs additional economic development, and prioritizes people over the movement over automobiles

Existing traffic volumes suggest that removing one lane of motor vehicle traffic in each direction should be feasible. To achieve the goals stated above and to identify priority uses / design features, the following tasks are envisioned:

Existing Conditions, Data Collection, and Capacity Analyses

Conduct an existing conditions assessment of the corridor, conduct data collection throughout the corridor, and perform motor vehicle capacity analyses using Synchro.

Street Existing Conditions

Inventory and document existing conditions related to street design. The existing conditions assessment will include, but is not limited to:

- Curbside uses, including loading zones, bus stops, driveways, parking regulations, parking usage, etc.
- Street width, pavement markings, signage, and sidewalk condition
- Existing land uses
- Presence of hollow walk along the corridor

- Pavement condition analysis
- Photograph log of the corridor

Data Collection

Data collection efforts and observations will include, but are not limited to the following:

- Collecting and analyzing multiple 24-hour ADT/speed/classification counts along the corridor
- Collecting and analyzing signalized and all-way stop intersection traffic counts – pedestrian, bicycle, and motor vehicle
- Conducting AM and PM peak-hour, midday, and evening traffic observations on both weekdays and weekends, including queue lengths, select turning movement observations, and cursory evaluation of intersection operations along the corridor
- Analyzing MCTS stop data, dwell time, stop placements, etc.
- Conducting observations of street user behavior where needed based on crash history, public comment, land use, or other data sources
- Conducting a crash analysis using a minimum of 5 years of crash data

Capacity Analyses of Existing and Proposed Conditions

Develop Synchro model with AM and PM capacity analyses for the existing and proposed traffic and geometric conditions.

Utility and Agency Coordination

Due to the complexities and potential substantial changes this project will result in, significant coordination (and possible approvals) will be necessary with various utilities, agencies, and community groups. These groups will include, but are not limited to, Milwaukee Water Works, Milwaukee County Transit System (MCTS), The Hop, DPW Forestry, various other DPW Divisions/Sections, the Milwaukee Downtown BID, The Historic Third Ward BID, individual building owners, and others.

Public Engagement

A project of this scope will require a robust public engagement plan, including general public engagement meetings, agency meetings, aldermanic meetings, stakeholder group meetings, and individual stakeholder meetings. Typically, three phases of meetings are envisioned – an existing conditions phase, an alternatives development phase, and a final alternative phase. Public engagement must be clear, effective, and creative in order to ensure buy-in and support from stakeholders. In addition to traditional engagement opportunities, community surveys, walks, bike rides, and/or demonstrations will also be considered. A project website will also be created to ensure all materials are available to anyone interested.

Phase1: Project Intro / Existing Conditions

The first opportunity to engage the public will consist of identifying project goals and objectives, including how the project helps achieve broader city goals and goals of the neighborhood. The City will present existing condition data and obtain feedback on lived experiences to identify how these experiences relate to the data collected. Individual property owners / stakeholders will also be engaged

to gain a complete understanding of how various entities use the curbside, and how any changes to curbside designations would impact their uses (e.g. loading, deliveries, pick-up/drop-off, etc.).

Phase 2: Alternatives Development

Several design alternatives representing best practice in Complete Streets, progressive transportation design, and feedback from stakeholders will be developed (likely 2-4). These alternatives must be presented in a visually appealing way that clearly shows what the street could look like, as well as what the trade-offs for each alternative are. Feedback on the alternatives, including information on what is missing, will be used to develop a preferred alternative.

Phase 3: Preferred Alternative

A preferred alternative will be developed based on feedback received throughout the project development process (from all stakeholders – internal and external). Information on how the final alternative meets the shared goals of the project and the trade-offs required will also be presented.

Design Alternatives

Two to four design alternatives will be developed that help achieve the project and city goals. The alternatives will be developed from feedback received from the first phase of community engagement and the existing conditions data collection efforts. The scope of improvements will likely vary tremendously, and may include, but are not limited to, curb extensions, pedestrian refuge islands, corner radius modifications, street and intersection reconfigurations, protected bike lanes (one-way, two-way, etc.), transit enhancements including transit only lanes, bus bulbs, and shelters, driveway closings, RRFBs, raised crosswalks, new ADA ramps, pedestrian countdown signals, traffic signal timing and/or equipment updates, sidewalk rehabilitation, signage and pavement marking modification, landscaping, GSI, wayfinding, and decorative treatments.

Cost Estimate

Varies depending on a full analysis of hollow walk impacts and available TID funding.

Funding Opportunities

This area of Water Street in the Third Ward is encompassed by multiple Tax Incremental Financing Districts (TIFD) within a half-mile boundary, which provide opportunities to contribute to public infrastructure improvements along this section of Water Street. Once the project is defined and there is a cost estimate, the Department of City Development can review and recommend how the project could be financed using TIFDs.

Schedule

At the earliest the project would not start until the completion of the development located on the southwest corner of Saint Paul Avenue and Water Street.

Next Steps

DCD and DPW work together to determine full capabilities of this roadway and possible impacts to businesses.

Van Buren Street (Wisconsin to Brady) – Street Transformation Project

The Van Buren Street transformation project presents a unique opportunity to completely reimagine a major corridor in the City of Milwaukee. Van Buren Street has been identified in the City of Milwaukee's Pedestrian Plan as a corridor on the Pedestrian High Injury Network (PHIN), connects the Historic Third Ward, Downtown, Lower East Side, and Riverwest neighborhoods, serves major MCTS bus routes, and is included in the Route of the Badger plan for an all ages and abilities bikeway. The City of Milwaukee's Department of Public Works (DPW) has also received numerous complaints from residents, elected officials, business owners, and people traveling along the Van Buren Street corridor regarding high motor vehicle speeds, dangerous crossings, and instances of reckless driving.

In fall 2021 DPW restriped Van Buren between Kilbourn and Brady from 4 lanes of motor vehicle traffic (2 in each direction) to 3 lanes of motor vehicle traffic (1 in each direction + a center turn lane) with new bike lanes and marked parking lanes. This fairly typical "4->3 Road Diet" was completed with pavement markings only in an attempt to quickly and inexpensively address some of the dangerous driving behaviors that had become commonplace on the street.

This Street Transformation Project will build upon the quick changes implemented in 2021 with more robust infrastructure that will better serve all users. The goals of this project are numerous and will be addressed by adhering to the City of Milwaukee's Complete Streets Policy:

- Reduce motor vehicle speeds
- Reduce crashes for all users
- Improve the comfort, accessibility, and efficiency for all modes, but in particular people walking, biking, and taking transit
- Create an all ages and abilities bikeway as called for in the Route of the Badger Plan
- Incorporate landscaping, street trees, and/or green stormwater infrastructure (GSI) into the public right of way
- Enhance the streetscape to create a welcoming and vibrant corridor that supports existing land uses and spurs additional economic development.

Tasks will include, but are not limited to the following:

Existing Conditions, Data Collection, and Capacity Analyses

Conduct an existing conditions assessment of the corridor, conduct data collection throughout the corridor, and perform motor vehicle capacity analyses using Synchro.

Street Existing Conditions

Inventory and document existing conditions related to street design. The existing conditions assessment will include, but is not limited to:

- Curbside uses, including loading zones, bus stops, driveways, parking regulations, parking usage, etc.
- Street width, pavement markings, signage, and sidewalk condition

- Existing land uses
- Photograph log of the corridor

Data Collection

Data collection efforts and observations will include, but are not limited to the following:

- Collecting and analyzing multiple 24-hour ADT/speed/classification counts along the corridor
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- Conducting AM and PM peak-hour traffic observations including queue lengths, select turning movement observations, and cursory evaluation of intersection operations along the corridor
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- Conducting a crash analysis using a minimum of 5 years of crash data

Capacity Analyses of Existing and Proposed Conditions

Develop Synchro model with AM and PM capacity analyses for the existing and proposed traffic and geometric conditions.

Utility and Agency Coordination

Due to the complexities and potential substantial changes this project will result in, significant coordination (and possible approvals) will be necessary with various utilities, agencies, and community groups. These groups will include, but are not limited to, Milwaukee Water Works, Milwaukee County Transit System (MCTS), The Hop, DPW Forestry, various other DPW Divisions/Sections, the Milwaukee Downtown BID, Brady St BID, and others.

Public Engagement

A project of this scope will require a robust public engagement plan, including general public engagement meetings, agency meetings, aldermanic meetings, stakeholder group meetings, and individual stakeholder meetings. Typically, three phases of meetings are envisioned – an existing conditions phase, an alternatives development phase, and a final alternative phase. Public engagement must be clear, effective, and creative in order to ensure buy-in and support from stakeholders. In addition to traditional engagement opportunities, community surveys, walks, bike rides, and/or demonstrations will also be considered. A project website will also be created to ensure all materials are available to anyone interested.

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A preferred alternative will be developed based on feedback received throughout the project development process (from all stakeholders – internal and external). Information on how the final alternative meets the shared goals of the project and the trade-offs required will also be presented.

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Two to four design alternatives will be developed that help achieve the project and city goals. The alternatives will be developed from feedback received from the first phase of community engagement and the existing conditions data collection efforts. The scope of improvements will likely vary tremendously, and may include, but are not limited to, curb extensions, pedestrian refuge islands, corner radius modifications, street and intersection reconfigurations, protected bike lanes (one-way, two-way, etc.), transit enhancements including transit only lanes, bus bulbs, and shelters, driveway closings, RRFBs, raised crosswalks, new ADA ramps, pedestrian countdown signals, traffic signal timing and/or equipment updates, sidewalk rehabilitation, signage and pavement marking modification, landscaping, GSI, wayfinding, and decorative treatments.

Cost Estimate

Design

- \$565K for outreach, planning, preliminary and detailed designs, and PSE development
- **Design Total = \$570K**

Construction

- Ped refuge + trees at the departure of various intersections = \$500K (assumes 20 locations, \$25K each)
- Bus Bulbs at various intersections = \$450K (assumes 6 locations, \$75K each)
- Midblock bumpouts / bike lane separation w/out trees at various locations = \$250K (assumes 10 locations, \$25K each)
- Midblock bumpouts / bike lane separation w/trees at various locations = \$300K (assumes 10 locations, \$30K each)
- Pavement markings and signs = \$500K (assumes a lot of green pavement markings)
- Signal work = \$450K (assumes \$50K of signal work at 9 signalized intersections)
- Kilbourn protected bike lane extension (Jackson to Van Buren) = \$85,000 (pavement markings, signs, delineators)
- **Construction Total = \$2.53M**

ESTIMATED PROJECT TOTAL = \$3,100,000



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Funding Opportunities

Existing Tax Incremental Districts (TIDs) along and within ½-mile of the Van Buren Street corridor have sufficient capacity to fund the proposed improvements. Subject to approval of amendments for this purpose, TID #49 (Cathedral Place) could provide up to \$1.6M towards the project and TID #79 (North Water Riverwalk) could provide up to \$1.5M towards the project.

Schedule

- January 2022:
 - Briefing provided by DCD and DPW to key stakeholders
- February 2022:
 - TID amendments to fund project are presented to necessary boards and committees for approval
- March 2022:
 - DPW initiates contract negotiations with selected consultant(s) for outreach/design work
- May 2022:
 - Outreach/Design Kick-Off
- Summer/Fall/Winter 2022:
 - Outreach and Design process
- Spring 2023:
 - Project letting
- Spring/Summer 2023:
 - Project Construction

Next Steps

After review by the administration, local alderpersons and key council members, and select stakeholders, DCD will move forward with the funding to allow DPW to proceed with the scope of work.

