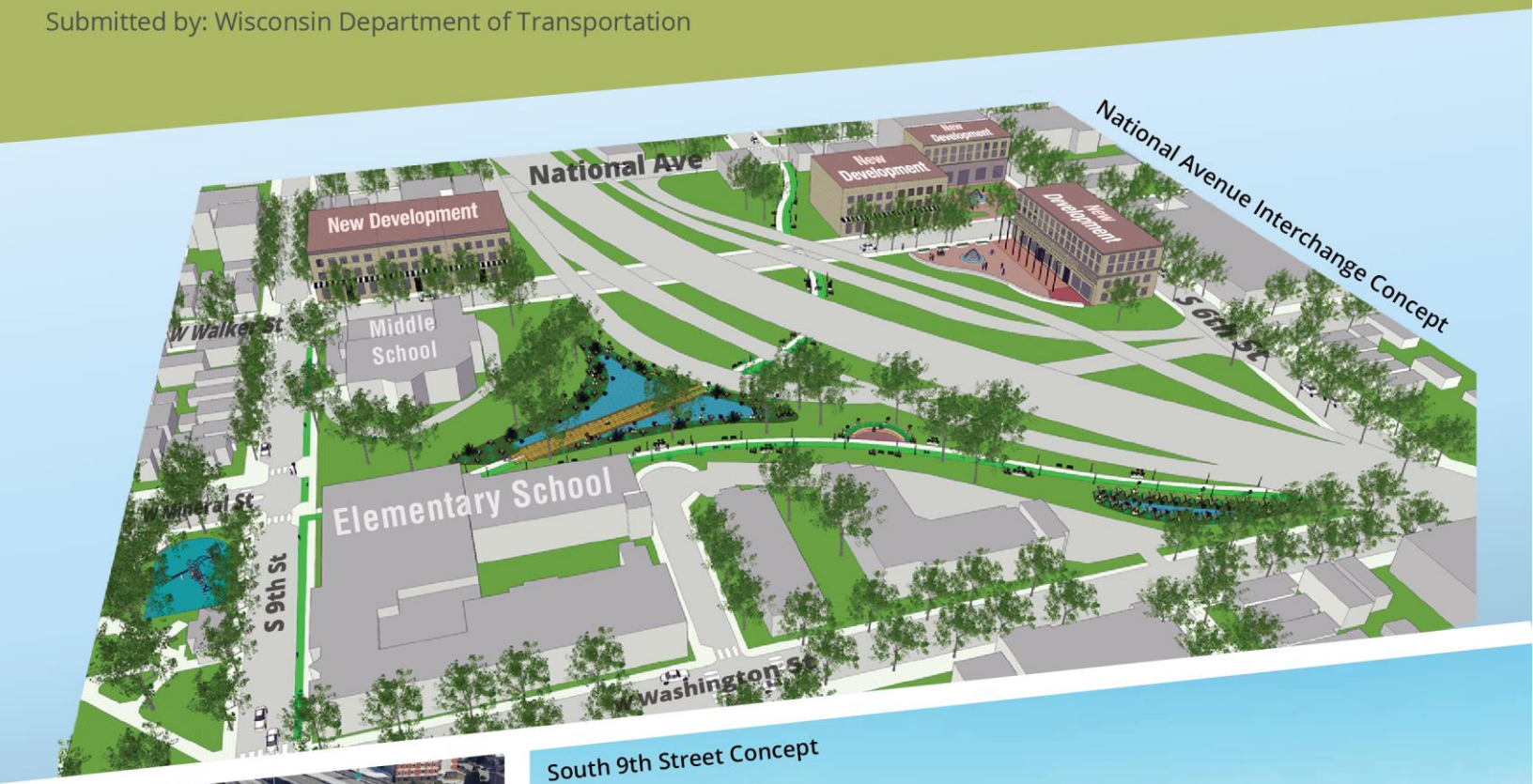
REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



SEPTEMBER 28, 2023

Table of Contents

PART 1. Overview 1
- 1.1. Introduction 1
- 1.2. A Rich History: Walker's Point Neighborhood 2
- 1.3. Divided Neighborhood Character 2

PART 2. Study Location and Map 3

PART 3. Merit Criteria Evaluation 4
- 3.1. Equity and Environmental Justice 5
- 3.2. Context-Sensitive Access and Mobility 6
- 3.3. Poor Facility Suitability 6
- 3.4. Community Engagement, Stewardship, Management and Partnerships 7
  - 3.4.a. Community Participation Plan 7
  - 3.4.b. Community-Centered Partnership Approach 8
- 3.5. Equitable Development and Shared Prosperity 8
  - 3.5.a. Creative Placemaking at the Interchange 8
  - 3.5.b. Mixed-Use Development Surrounding the Interchange 9
  - 3.5.c. National Avenue Area Interest and Coordination 9
  - 3.5.d. Anti-Displacement, Community Restoration and Stabilization Strategies 9
- 3.6. Climate and Environment 9
- 3.7. Workforce Development and Economic Opportunity 10

PART 4. Study Readiness 10

Figures and Tables

Figure 1: Pedestrians Crossing the Ramp Terminals between the Middle and Elementary Schools 1

Figure 2: National Avenue Interchange Study Location Map 4

Figure 3: Diesel and Particulate Matter Percentiles 5

Table 1: Demographic Census Trends 6

Figure 4: Crash Data at Ramp Terminals 6

Figure 5: Before and After Construction of the National Avenue Interchange 7

Figure 6: Overall Disadvantage Component Scores – Percentiles 10

PART 1. OVERVIEW

1.1. Introduction

Milwaukee's Walker's Point neighborhood, which is divided by the I-43/94 National Avenue Interchange, has a minority population of 82% and a high poverty rate exceeding 28%[1]. The Wisconsin Department of Transportation (WisDOT) submits this application for a FY 2023 Reconnecting Communities and Neighborhoods (RCN) grant award to conduct the Reimagining the National Avenue Interchange Study (Study). Should WisDOT receive a grant award, the Walker's Point neighborhood stands to benefit from a safer, more well-connected neighborhood with greater economic potential. The Climate and Economic Justice Screening Tool (CEJST) identifies both Census tracts within the Study Area as disadvantaged. The outcomes of this Study will therefore meet Justice40 goals by providing 100% of its benefits to a disadvantaged community. The Study will work to reconnect the historic south side neighborhood by reducing the barriers and burdens caused by the interchange in this disadvantaged Milwaukee, Wisconsin neighborhood. These barriers and burdens include:

- Looping on- and off-ramps that collect and disperse speeding traffic directly to residential streets.
- A disconnected street grid that limits bicycle, pedestrian, transit, and vehicular movements.
- A large void in the urban fabric with little room for placemaking and development.
- High pedestrian and vehicle conflict points with interchange ramps immediately adjacent to schools.

Figure 1: Pedestrians Crossing the Ramp Terminals between the Middle and Elementary Schools

WisDOT requests $2,000,000 in RCN funding to pair with a local match of $500,000 (20%). WisDOT is prepared to begin the Study immediately after signing a grant agreement, which would run through 2025 (see **Study Budget and Funding Commitment Letter**). There is community and political commitment for this Study as illustrated in the letters of support received (see **Letters of Support**). Through robust public engagement and technical analysis the Study will identify community concerns, create a collective vision, develop a range of improvement alternatives, and conduct a feasibility study that will investigate traffic, ramp geometries, street connections, shared use paths, and other potential improvements. WisDOT will work closely with the city of Milwaukee, Milwaukee County, local organizations, and the public to ensure involvement in developing and implementing the Study's deliverables.

These deliverables will help WisDOT advance to the next stages of realizing a reimagined National Avenue Interchange (henceforth referenced as Interchange) to reconnect the disadvantaged communities within the Walker's Point neighborhood. The Study will aim to improve the Interchange design while applying anti-displacement strategies to achieve these potential benefits:

[1] U.S. Census, *American Community Survey: 2021 Five-Year Estimates*, accessed September 14, 2023.

- Return approximately four acres of developable land back to the community.
- Ensure safety improvements by moving freeway ramps away from Walker Square Park and the Middle and Elementary schools, and from directly dispersing speeding traffic to local streets (see **Figure 1**).
- Aid economic development and investment through placemaking in an underserved community.
- Reconnect streets and add shared use paths to enhance multimodal mobility and access to daily needs such as jobs, education, health care, food, nature, and recreation.
- Integrate stormwater management and climate resiliency practices into placemaking and design.
- Increase equitable and inclusive economic strength with more direct access and connectivity.
- Improve design of intersections, curb ramps and pathways in accordance with the Americans with Disabilities Act (ADA).

This Study will build on WisDOT's previous National Avenue Interchange work, which culminated in 2018 with a Safety Improvement Report (**Attachment 5**). Due in part to this technical foundation, WisDOT is well-equipped to meet the Study's goals well before statutory deadlines.

This application is a resubmittal of the FY 2022 *Reimagining the National Avenue Interchange* submittal to the Reconnecting Communities Pilot (RCP) Program. Since that application, WisDOT has debriefed with U.S. Department of Transportation (DOT) and adjusted the application to more align with the Notice of Funding Opportunity (NOFO) and better explain the barriers present within the study area, along with how the Study will address gentrification, placemaking, and work to reduce barriers and reconnect communities.

1.2. A Rich History: Walker's Point Neighborhood

Walker's Point is one of three communities that were combined to establish the city of Milwaukee in 1846. Platted in 1836, Walker's Point established a grid land subdivision pattern that was eventually replicated across the entirety of the city's south side. Isolated from Milwaukee's central business district and more densely populated than the other south side Milwaukee neighborhoods, Walker's Point was the natural location for the development of a south side downtown at the turn of the Century.[2] Walker's Point was a bustling working-class neighborhood with a strong commercial and industrial base. Need for laborers outpaced the available workforce so factory owners began recruiting Mexican migrants to fill positions throughout the 1920s.[3] Walker's Point eventually became the center of the largest Latino community in the State of Wisconsin.[4] Today, over 75% of the study area's population is Hispanic or Latino, as also seen in **Table 1**.[5]

1.3. Divided Neighborhood Character

Walker's Point is Milwaukee's oldest neighborhood,[6] with a storied history that has seen tremendous change. As shown in **Figure 2**, the National Avenue Interchange and the I-43/94 freeway divide Walker's Point into east and west subareas. In the past 20 years, the eastern subarea of Walker's Point, especially its northern extent closer to downtown Milwaukee, has seen substantial economic development resulting in market rate housing, mixed uses, and employment opportunities that continue to attract young professionals and students.

During that same period, the subarea west of the Interchange has maintained its aging housing assets with a focus on capitalizing on the investments of eastern Walker's Point and the surrounding neighborhoods, while

[2] City of Milwaukee DCD, South Side Neighborhood Historic Resources Survey, July 1987, accessed August 2023.

[3] Kathleen Kean, Walker's Point, Encyclopedia of Milwaukee, accessed August 2023.

[4] City of Milwaukee, DCD, Walker's Point Strategic Plan, June 2015, accessed August 30, 2023.

[5] U.S. Census, *American Community Survey: 2021 Five-Year Estimates*, accessed September 14, 2023.

[6] Historic Milwaukee, Doors Open Neighborhoods, Walker's Point, accessed August 2023.

doing its best to preserve its remaining historic character. This area has instead seen disinvestment, greatly due to the physical and psychological barriers that the National Avenue Interchange creates.

The two-acre Walker Square Park, access to transit, and proximity of the remaining neighborhood businesses are among the top assets of the western Walker's Point subarea. However, these assets are disjointed by the Interchange and the barriers it creates to safety and connected multimodal travel. The Interchange configuration has also made placemaking impossible in what is geographically the center of Walker's Point.

The Interchange poses a barrier for western Walker's Point residents to access the growing employment opportunities available in eastern Walker's Point (see **Attachment 2**). The Interchange's configuration and lack of connectivity substantially decreases the quality of life for the disadvantaged people living in western Walker's Point forced to contend with this unsafe Interchange daily. School children are forced to cross non-signaled intersections at freeway ramp terminals with high-speed traffic to get to and from school. The Interchange also generates cut-through, speeding traffic which creates conflict points and unsafe conditions for neighborhood residents to access Walker Square Park. This cut-through traffic generates safety concerns and crashes throughout the neighborhood and study area.

WisDOT and its partners are prepared to rectify these concerns by reconfiguring the Interchange's ramps, connecting and completing local streets, adding bicycle and pedestrian paths, improving safety, creating land for mixed-use development, placemaking, improving access for those with a disability, and adding resiliency to this historically disadvantaged neighborhood.

PART 2. STUDY LOCATION AND MAP

The National Avenue Interchange is located on the south side of Milwaukee, Wisconsin in the Walker's Point neighborhood. This Study will focus on a quarter mile area surrounding the Interchange (**Figure 2**). The National Avenue Interchange is located one mile south of the Marquette Interchange, which connects I-94, I-43, and I-794 and is one of the state's busiest freeway system interchanges handling more than 300,000 vehicles daily. The National Avenue Interchange divides western Walker's Point, the disadvantaged and minority area of the neighborhood, from the commercial corridors and employment opportunities in eastern Walker's Point, as well as employment opportunities in downtown Milwaukee. Downtown Milwaukee, just one mile to the northeast from the Interchange, is home to 90,000+ jobs. The construction of the Interchange created dead end streets without non-motorized paths to cross, reducing connectivity for non-drivers. This resulted in this historic mixed-use neighborhood becoming more difficult to walk, bike and utilize transit.

The Interchange further divides the neighborhood with its poorly placed ramps running straight into residential streets and dividing essential uses, such as schools, a community center and a central park. Please see **Attachment 2** for supporting exhibits including maps and photographs.

Figure 2: National Avenue Interchange Study Location Map

PART 3. MERIT CRITERIA EVALUATION

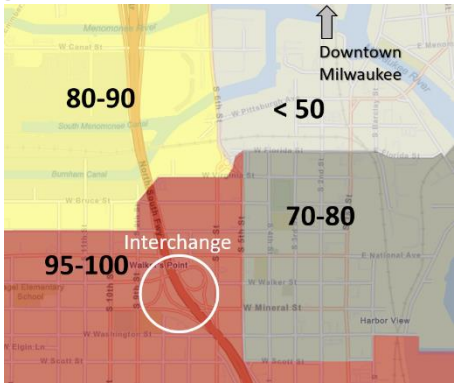
The construction of the National Avenue Interchange is a prime example of a dividing freeway facility and it epitomizes the problems created by the 1960s freeway design. The resulting barriers and burdens disconnected a minority, disadvantaged and underserved community from the greater Walker's Point neighborhood, downtown, and resident's daily needs such as jobs, education, healthcare, food, nature, and recreation. The Interchange severs connectivity and deters placemaking and community growth in its vicinity. As addressed in sections below, the Study is an ideal RCN candidate because it will further the Biden-Harris Administration's Strategic Plan goals, including U.S. DOT's Strategic Plan goals of Safety, Economic Strength,

Equity, Climate and Sustainability, Transformation and Organizational Excellence, and will align with U.S. DOT's Equity Strategic Goal to reduce inequities across our transportation systems and the communities they affect.

3.1. Equity and Environmental Justice

The National Avenue Interchange divided a once connected and vibrant neighborhood into two unequal parts, leaving the area around the Interchange, especially west of the freeway, with socioeconomic disparities and safety issues that threaten residents' quality of life. Most people who live in the neighborhoods surrounding the Interchange are minorities and experience more socioeconomic disparities than the city of Milwaukee and Milwaukee County (**Table 1**).

Figure 3: Diesel and Particulate Matter Percentiles



Source: EPA EJ Screen Tool

As shown in **Figure 3**, stark differences emerge when comparing the disparate halves of Walker's Point. The Environmental Protection Agency's (EPA) EJScreen Tool visually shows this comparison in most of its factor considerations. For instance, western Walker's Point has greater exposure to diesel particulate matter and toxic releases in the air in part due to its higher proximity to traffic.[7] Please see **Attachment 3** for additional visual comparisons of the unequal halves of a once connected neighborhood. Walker's Point is comprised of two census tracts (**Figure 2**). The Climate & Economic Justice Screening Tool (CEJST) identifies both tracts as disadvantaged. The outcomes of this Study will meet Justice40 goals by providing 100% of its benefits to a disadvantaged community. All factors analyzed by CEJST report that the census tract to the west of the Interchange where its ramps funnel speeding freeway traffic into residential streets (Tract 157) are negatively impacted more than the eastern Walker's Point census tract abutting downtown (Tract 1865). Please see **Attachment 1** for the detailed results from all Federal Environmental Justice tools.

The U.S. DOT Equitable Transportation Community (ETC) Explorer reports that the transportation cost burden is also higher in the census tract to the west of the Interchange (Tract 157). The average household in this western tract spends 37.8% of their income on transportation compared to 18.9% of income spent on transportation in eastern Walker's Point (Tract 1865). The percentage of households without a vehicle in western Walker's Point is 22.7% compared to 18.2% in eastern Walker's Point. Housing costs are also higher in western Walker's Point. A total of 41.1% of households spend more than 30% of their incomes on housing compared with 28.5% of households in the eastern Walker's Point census tract.[8] People living in poverty and contending with these environmental burdens and risks have difficult lives, which are only further exacerbated by the barriers caused by the Interchange. Reconnecting this disadvantaged community will help to rectify the damages of past actions while improving safety and improving access to jobs and other daily needs.

The western portion of Walker's Point also suffers from a higher poverty rate than eastern Walker's Point in part due to the historic severance of the neighborhood by freeway construction and decades of subsequent policies that reinforced the reality of two distinctly different and separated Walker's Points (see **Table 1**). WisDOT is committed to facilitating public and stakeholder conversations on how to rapidly plan and implement consensus-driven change.

[7] *EPA EJ Screen Tool: EPA's Environmental Screening and Mapping Tool, v2.2*, accessed August 24, 2023.

[8] USDOT Equitable Transportation Community (ETC) Explorer, accessed August 23, 2023.

Table 1: Demographic Census Trends

Trend	Study Area	Western Walker's Point	Eastern Walker's Point	City of Milwaukee	Milwaukee County
Total Minority	86.6%	92.3%	64.0%	60.1%	44.7%
Hispanic or Latino	75.9%	81.5%	43.8%	19.9%	15.8%
Speak Spanish at Home	60.1%	70.1%	35.1%	13.8%	10.5%
Poverty Rate	28.0%	31.3%	23.6%	24.1%	17.9%
Population <18	29.5%	33.7%	14.6%	26.3%	24.2%
Population >65	12.8%	10.1%	12.2%	10.8%	13.6%

Note: Eastern Walker's Point is east of S. 9th Street and north of W. Scott Street (Census Tract 1865, Block Groups 1 and 2). Western Walker's Point is west of S. 9th Street and north of W. Scott Street (Census Tract 157, Block Groups 1, 2 and 3).

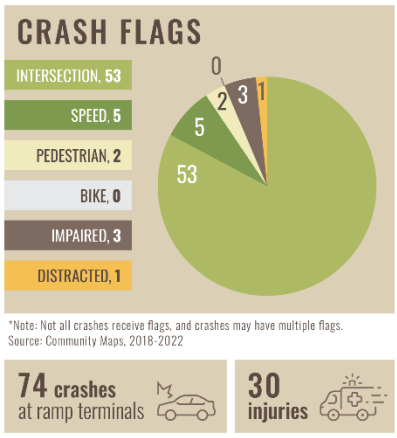
3.2. Context-Sensitive Access and Mobility

Through collaboration with Study partners, WisDOT will develop and evaluate alternatives for the Interchange configuration inclusive of ramp reconfiguration and new and improved multimodal transportation facilities. WisDOT is well-positioned to begin these conversations, with the conceptual renderings provided in **Attachment 3**. By reconfiguring the Interchange's ramps, WisDOT could potentially return approximately four acres of land back to the community (see **Attachment 2**). The Study will analyze alternatives that ensure the greatest benefit and least negative impact to this already struggling community. The city, adjacent schools and churches support the inclusion of shared use paths to create healthy transportation choices people of all abilities can use to move freely and have meaningful access to amenities and natural resource areas within the neighborhood without a car.

WisDOT will work with its partners to explore context-sensitive complete and bidirectional street techniques for 9th Street where the elementary and middle schools are located and Walker Square Park abuts. These redesigned and new street facilities (see **Cover Page and Attachment 3**) will decrease greenhouse gas emissions by connecting the grid, thus decreasing trip times.

The Study Area saw close to 1,200 crashes from 2018 to 2022, with freeway ramps playing a large role in high-speeds and conflict points. The design developed by the Study will focus on improving safety. As detailed in **Figure 4**, there have been 74 crashes at the ramp terminals from 2018 to 2022. WisDOT is committed to studying how to resolve these safety issues while redesigning infrastructure to create a healthy, safe and thriving community that will integrate the community's unique character and link transportation and land use access for people who need it the most. The result of the Study will be an improved community with less vehicle usage, safe travel, and a design that provides access to daily needs.

Figure 4: Crash Data at Ramp Terminals



3.3. Poor Facility Suitability

Built in the 1960s, the Interchange demolished and replaced nine city blocks comprised mostly of homes and local businesses with looping on- and-off ramps that collect and disperse speeding traffic directly to and from residential streets in Walker's Point. These ramps, and the traffic patterns created by them, pose a substantial threat to safety and quality of life, and create barriers to neighborhood connectivity, access, mobility, the environment, economic development, and equity.

Figure 5: Before and After Construction of the National Avenue Interchange

Source: Milwaukee County Land Information Office, Microsoft Corporation 2022

Construction of the freeway and the Interchange disrupted the surface street grid. Prior to the Interchange, Walker and Mineral Streets were connected east-west providing access to neighborhood amenities and community facilities. The existing Interchange configuration requires people to travel around the Interchange while facing high-speed traffic accessing the ramps. Similarly, the Interchange cuts off 7th and 8th Streets, running north-south, limiting access between the neighborhoods to the south and the commercial and mixed-uses along National Avenue. More than 20 acres of homes, businesses, and parks were razed to build the Interchange, creating a nine-block void in the heart of Walker's Point (see **Figure 5**). This led to the overreliance on automobiles and the increase of noise pollution. The Interchange and the freeway infrastructure created barriers to economic development along with environmental risks and burdens. Additionally, the proximity of K-12 schools to the Interchange poses pedestrian safety concerns, as does the location of Walker Square Park, used as a gathering place by people of all ages and abilities. Vehicle traffic entering or exiting the freeway conflicts with pedestrians attempting to access community services. The current design, if not updated, threatens the current and future mobility, safety and economic growth of the surrounding community.

The Study will expand the scope of WisDOT's 2018 Safety Improvement Report (see **Attachment 5**) and work with the community to identify short- and long-term implementable improvements. The Study will also identify the roles each agency and organization will take to address the safety, connectivity, access, environmental, social, and economic barriers created by the ramp configuration of this poorly suited freeway facility.

3.4. Community Engagement, Stewardship, Management and Partnerships

WisDOT has already conducted initial outreach within the area as a part of the 2018 Report. This early engagement has shown that local stakeholders view the Interchange as a burden and barrier, with the desire to reimagine the Interchange while maintaining critical freeway access. As a part of the Study, WisDOT will leverage and develop partnerships throughout the local community with organizations, businesses, political entities, and services while engaging the broader public throughout the Study process. This will ensure that organizational excellence is developed and sustained through an inclusive community culture that will grow throughout the Study's initiatives. WisDOT will ensure that the Study's robust community engagement includes: 1) The identification of equitable placemaking locations; 2) A decision hierarchy where community preferences are given the most weight; and 3) An equity assessment, that built using U.S. Department of Health and Human Services (DHHS) Assistant Secretary for Planning and Evaluation (ASPE) and U.S. DOT guidelines, will ensure that the Study is holistically equitable throughout.

3.4.a. Community Participation Plan

Following a grant award, WisDOT's first step would be to work with the city of Milwaukee and Milwaukee County to form a community Advisory Group (AG) to assist in the development and implementation of a Community Participation Plan. The AG will be made up of members who live, work and recreate in the

community, including the Hispanic Collaborative, Latino Chamber of Commerce, United Community Center, Business Improvement Districts, educational services, faith-based institutions, and city staff, among others. This will ensure that the Study's direction originates from community needs rather than from perceived needs.

Informed by the recommendations of the AG on how to best engage hard-to-access community members, WisDOT will host in-person neighborhood meetings and workshops. WisDOT will work with the AG and the greater community to develop culturally appropriate feedback and input techniques. Meetings will be held at different times of the day, materials will be translated into Spanish, and efforts will be made to provide childcare at meetings. WisDOT will use innovative public involvement applications already in use on other projects to develop a comprehensive contact database, hold virtual public meetings, and disseminate materials, such as meeting invitations, newsletters, fact sheets and renderings as they become available on a WisDOT webpage. WisDOT maintains a robust public involvement process as a part of all its projects and studies. The WisDOT Facilities Development Manual (FDM) guides its project processes and states, "Good public involvement is integral to good transportation planning. Without meaningful public participation, there is a risk of making poor decisions, or decisions that have unintended, negative consequences."[9] WisDOT will ensure that the AG weighs-in at critical milestones to guide the Study process, engagement, and approach.

3.4.b. Community-Centered Partnership Approach

WisDOT will implement a community-centered partnership approach by listening, developing early alternatives, and working with the public through an alternative refinement process. Following these community-centered phases, the Study will position WisDOT to move forward into design, environmental analysis, and construction. As detailed in the **Letters of Support** attachment, the Study has broad support from the State of Wisconsin, city of Milwaukee, Milwaukee County, local community organizations, and elected officials. WisDOT will partner with local organizations embedded in the neighborhood to ensure there is representation from and engagement of underrepresented groups and disadvantaged people.

3.5. Equitable Development and Shared Prosperity

The Study will build on recent planning efforts in the Walker's Point neighborhood. *The Walker's Point Strategic Action Plan* was approved by the city of Milwaukee in 2015 and the *Walker Square Strategic Action Plan* was approved in 2016. The 2016 Strategic Action Plan speaks to the economic benefits that could be realized with a reconfigured Interchange that has a smaller footprint and placemaking opportunities.

3.5.a. Creative Placemaking at the Interchange

The Study will develop a framework to address identified community visions, policies and priorities with context-sensitive interchange design alternatives. The visions will lead to the creation of a location that people and businesses will want to be. The alternatives will focus on providing a non-motorized, universally designed path across the Interchange area and greenspace, activating the area under the freeway for public recreational use, creating complete streets, and installing public art to celebrate the community's identity. Coordination with the Milwaukee Metropolitan Sewerage District (MMSD) will work to implement green infrastructure to enhance the placemaking while caring for stormwater runoff. Potential placemaking opportunities are shown on the renderings on the **Cover Page and Attachment 3.** WisDOT will work with its partners to determine community desires and facilitate economic development by opening land for greenspace and development. WisDOT will also work with the city of Milwaukee to create a safe, connected and walkable street framework. This placemaking will turn the area from a thoroughfare into a destination.

[9] Wisconsin Department of Transportation, Facilities Development Manual, Chapter 6: Public Involvement, accessed August 30, 2023.

3.5.b. Mixed-Use Development Surrounding the Interchange

Depending on the desires of the community, the vision developed by the Study could include medium density development between the high-density Eastern Walker's Point and the low-density to the west of the Interchange. Mixed use developments with first floor commercial uses would be very attractive in the area, especially with the proximity to transit. This development would be an equitable economic and social development driver for the community to the west of the Interchange, which has not seen this type of investment since it was founded.

3.5.c. National Avenue Area Interest and Coordination

The Study would coordinate with and compliment several other projects in the area led by WisDOT and other agencies. WisDOT is currently studying alternatives to convert National Avenue into a complete street from 1st Street to 39th Street. MMSD is engaging the public on green infrastructure alternatives around the existing Interchange, which would be incorporated in the Study. WisDOT has coordinated with MMSD to adjust their work to accommodate any potential redesign of the Interchange. WisDOT is in support of the city of Milwaukee's concurrent application for a FY 2023 Neighborhood Access and Equity (NAE) construction grant to reconstruct 6th Street into a complete street with its southern limit at National Avenue. The Milwaukee County Transit System Development Plan[10] includes an analysis of a third Milwaukee area Bus Rapid Transit project along National Avenue (see **Attachment 4**). WisDOT is coordinating with these entities to transform this historically disadvantaged area into a more vibrant, connected and resilient community. Additionally, the potentially realigned ramps onto National Avenue could spur economic development on that corridor.

3.5.d. Anti-Displacement, Community Restoration and Stabilization Strategies

The redesign of the Interchange will help to stabilize the neighborhood, restore community connections, and spread economic value and growth. In 2018, the city of Milwaukee published *A Place in the Neighborhood: An Anti-Displacement Plan for Neighborhoods Surrounding Downtown Milwaukee.* The Plan was written to ensure development does not dismantle or displace existing neighborhoods to make way for new residents. The Plan will be utilized to ensure that placemaking and other infrastructure improvements do not displace existing residents and instead restore and stabilize the community. Examples of the Plan's strategies that will be followed by the Study are:

- Identify and engage hard-to-access community members that will be most impacted by changes.
- Strategize how newly available land can be leveraged for the development of location-efficient, mixed income housing and mixed-use development.
- Provide opportunities for small businesses and entrepreneurs.
- Incentivize public private partnerships for transit-oriented development in a walkable neighborhood.

Additionally, the *MKE United Anti-Displacement Fund* provides resources and grants to maintain residents in their communities. Walker's Point is a specific community of focus for the Displacement Fund, which will help ensure displacement doesn't occur due to the outcomes of the Study.

3.6. Climate and Environment

As shown in **Figure 6,** the neighborhoods surrounding the Interchange are environmentally burdened. The study area is considered disadvantaged across Climate and Disaster Risk Burden, Environmental Burden, and Social Vulnerability.[11] Residents experience harsh conditions that are further illustrated in **Attachment 2**. In the

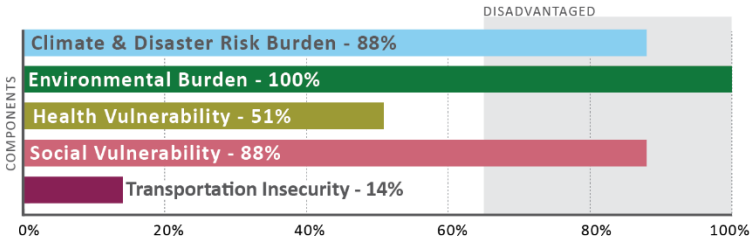
[10] Southeast Wisconsin Regional Planning Commission, Milwaukee County Transit System Development Plan, accessed August 31, 2023.

[11] USDOT Equitable Transportation Community (ETC) Explorer, accessed August 30, 2023.

center of these neighborhoods is the Interchange and a split grid where vehicles must travel, resulting in decreased air quality. With few low carbon choices for travel and a lack of walkability to transit stops, people are forced to continue their high vehicle use, which negatively impacts the environment. WisDOT and its Study partners will address the disproportionate negative environmental impacts the Interchange has on the disadvantaged community by exploring alternatives to improve environmental burdens.

Alternatives will include adding non-motorized facilities to support mode shifts from cars to transit and non-motorized travel. In addition to catalyzing bicycle and pedestrian trips, the potential reconnection of the local street grid and more direct ramp connections will decrease vehicle miles traveled and greenhouse gas emissions. Alternatives will also include evidence-based climate resilience measures and features such as pervious pavement, green infrastructure, adding trees to reduce Milwaukee's existing urban heat island, and providing a more natural environment where oversized dividing and impervious interchange ramps no longer loom.

Figure 6: Overall Disadvantage Component Scores – Percentiles



Source: U.S. DOT ETC Explorer, National Results

WisDOT continues to advance the incorporation of climate resiliency into their projects from publications such as the *Governor's 2020 Task Force on Climate Change Report* and municipal plans. WisDOT is currently developing its *Active Transportation Plan 2050* that incorporates best practices from these plans, other state plans, and from statewide outreach. This Plan will be implemented in all WisDOT projects to ensure that, among other goals, alternatives to vehicle travel are considered. WisDOT also works to incorporate climate change resiliency strategies in projects, such as those detailed from *Milwaukee's 2023 Climate and Equity Plan.*

3.7. Workforce Development and Economic Opportunity

WisDOT maintains a robust Disadvantaged Business Enterprise (DBE) Program to ensure WisDOT contracts include disadvantaged and small businesses. WisDOT invests over $1.5 billion annually for highway, airport, and transit projects. These funds translate into millions of dollars in contracts and project work for DBE firms. The Study will include DBE percentage goals to ensure and encourage inclusive economic development. Committed to equity, WisDOT will work with its local partners for this Study to determine how other minority owned, women owned, and 8(a) firms can be involved in the Study and in the potential construction phase of this project. WisDOT will also ensure it explores ways to develop quality jobs, provide workforce development opportunities, and offer supportive services both during the Study and in the design and construction phases that will follow. WisDOT, through their Highway Construction Skills Training program, will seek to train and include local residents with any future construction opportunities at the National Avenue Interchange.

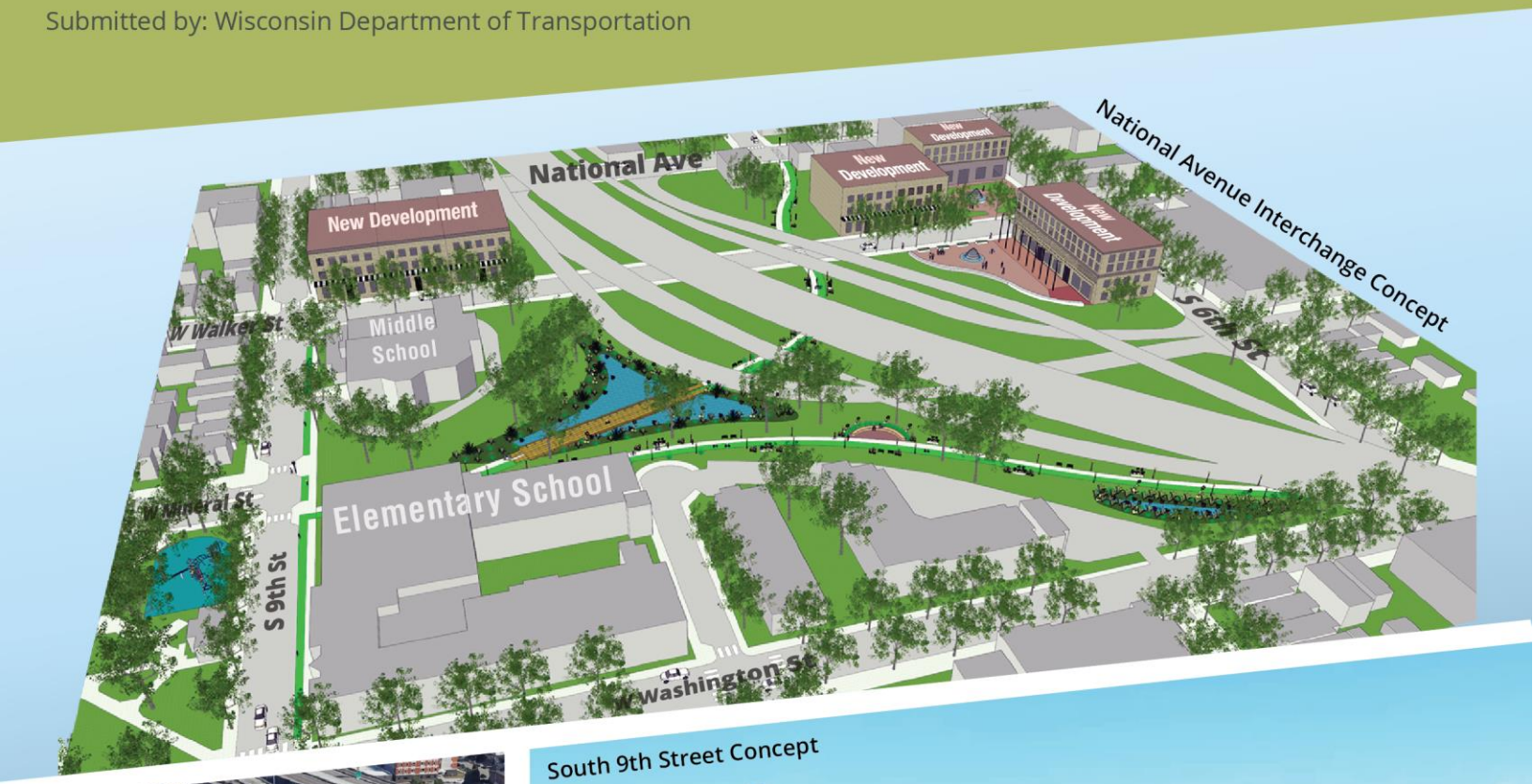
PART 4. STUDY READINESS

Upon award of RCN funding, WisDOT and its partners are prepared to move forward with the Study since 1) WisDOT has committed a match of $500,000 (see **Study Budget and Funding Commitment Letter**) to fund 20% of the Study cost and will have additional funding available to cover any unlikely cost overruns; 2) The Study builds on previously conducted safety, traffic operations and environmental evaluations; 3) WisDOT has worked with discretionary grant programs and understands the requirements, and technical assistance will not be needed; and 4) Once complete, the Study will enable WisDOT to move forward with design (2025-2026) and construction (2027-2028).

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



STUDY BUDGET AND FUNDING COMMITMENT

SEPTEMBER 28, 2023

Contents

Study Budget 1
Funding Commitment 2

Study Budget

Reimagining the National Avenue Interchange Study

The total cost of the FY 2023 Study is estimated at $2,500,000. Funding from the RCN will account for 80% of the Study costs and WisDOT has committed a $500,000 match to fund 20% of the Study's cost. The components of the Study include public engagement, alternative development and analysis, environmental coordination and analysis, multimodal assessment and coordination, and safety and traffic operations analysis. There are no restrictions on funding sources in terms of timing or use. WisDOT will have additional funding available to cover any unlikely cost overruns.

Table 1: Study Budget

		Sources of Funding	
STUDY COMPONENT	**Cost**	**WisDOT (20%)**	**2023 RCN Planning Grant (80%)**
Public and Stakeholder Engagement	$1,000,000	$200,000	$800,000
Environmental Coordination and Analysis	$500,000	$100,000	$400,000
Alternatives Development and Analysis	$400,000	$80,000	$320,000
Safety/Traffic Operations Analysis	$400,000	$80,000	$320,000
Multimodal Assessment/Coordination	$200,000	$40,000	$160,000
GRAND TOTAL	**$2,500,000**	**$500,000**	**$2,000,000**

WisDOT / DTIM
Division of Transportation Investment Management
PO BOX 7913
4822 Madison Yards Way
Madison, WI 53707-7913

Governor Tony Evers
Secretary Craig Thompson
wisconsindot.gov
Telephone: (608) 266-2665
FAX: enter (Area Code) Number

Secretary Pete Buttigieg
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

September 27, 2023

Subject: Funding Commitment Documentation

Dear Secretary Buttigieg,

The Reimagining National Avenue Interchange Study (Study) focuses on the Walker's Point and Walker Square neighborhoods in the city of Milwaukee that surround the I-43/94 National Avenue Interchange (Interchange). The Study will identify and evaluate alternatives to reconnect the neighborhoods and address safety and mobility concerns. An intensive public engagement process will be conducted throughout the Study as well as a detailed analysis of traffic patterns to determine a range of alternatives for Interchange redesign. The Study will build off the previously completed traffic and operations study for the Interchange.

The state of Wisconsin is committed to the following funding sources for the 2023 Reconnecting Communities and Neighborhoods Discretionary Grant (RCN) for the Reimagining National Avenue Interchange Study.

State Highway Rehabilitation Program –

(a) The State Highway Rehabilitation Program is appropriated funding during the State of Wisconsin's biennial budget process.
(b) The State of Wisconsin enacted 2023 Wisconsin Act 19, the state's 2023-2025 Biennial Budget, on July 5, 2023.
(c) 2023 Wisconsin Act 19 provides $1,156,611,300 in State funding: $572,071,100 in State Fiscal Year (SFY) 2024, and $584,540,200 in SFY2025.

This letter represents the "documentation of funding commitment" as requested in the 2023 RCN NOFO Section D.2.iv.

Sincerely,

Justin Shell

Justin Shell

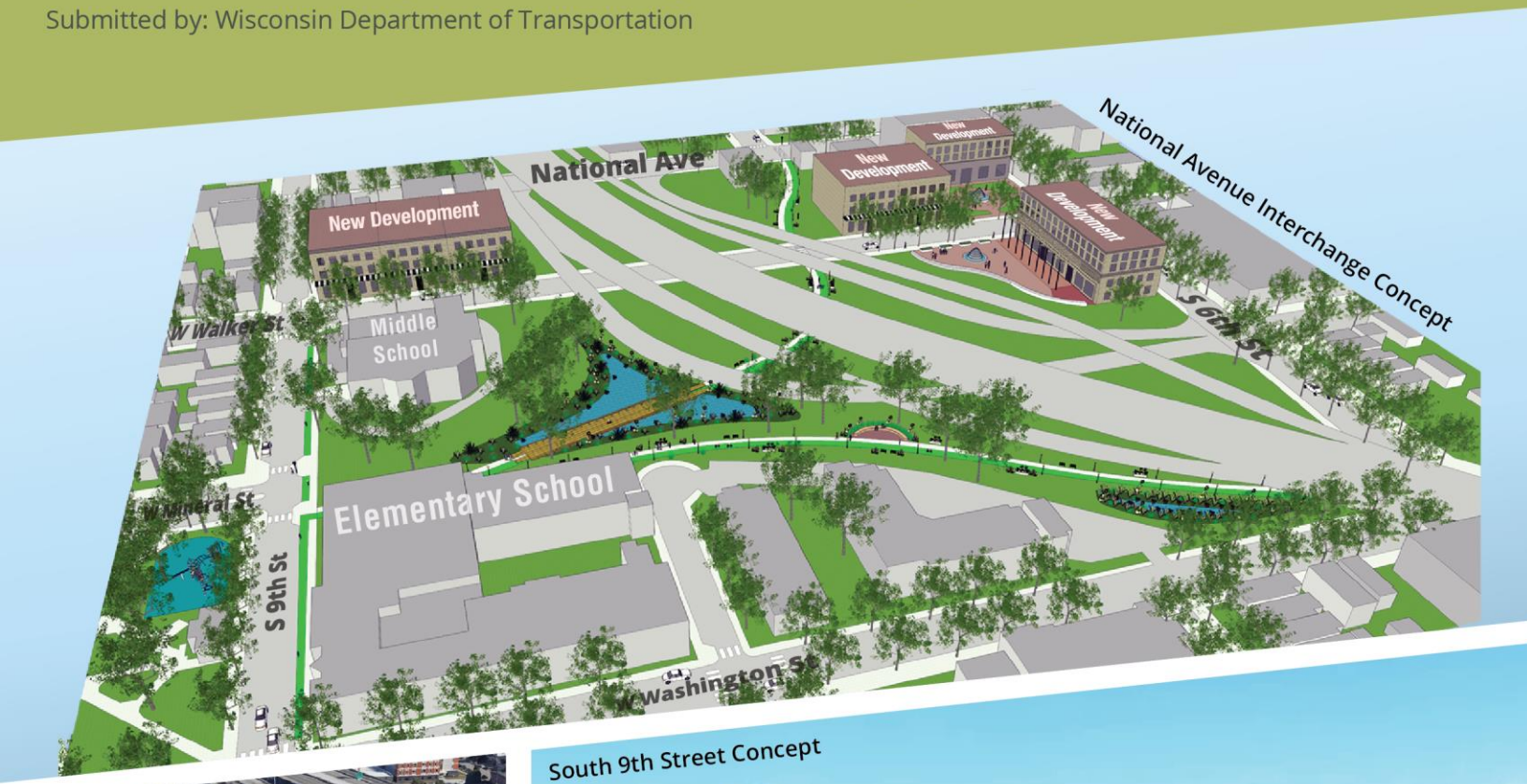
Administrator, Division of Transportation Investment Management

Wisconsin Department of Transportation

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



SUPPLEMENTAL ATTACHMENTS

SEPTEMBER 28, 2023

Table of Supplemental Attachments

Supplemental Attachment 1: Federal Environmental Justice Tools

U.S. DOT Equitable Transportation CEQ, Climate and Economic Justice Screening Tool A1-1

U.S. DOT Equitable Transportation Community (ETC) Results A1-2

EPA's Environmental Justice Screening and Mapping Tool Results A1-3

STEAP Project Buffer Analysis Report A1-7

Supplemental Attachment 2: Supporting Exhibits

Regional View Map A2-1

Peak Hour Trip Distribution A2-3

AADT A2-4

Employment and Jobs A2-5

Crash Locations A2-6

Study Area Photos A2-7

Supplemental Attachment 3: Conceptual Renderings

National Avenue Interchange Area Concept A3-1

Existing Interchange Area A3-2

South 9th Street Concept A3-3

Existing South 9th Street A3-4

Supplemental Attachment 4: Related Projects

WisDOT, National Avenue Complete Streets Project A4-1

Milwaukee Metropolitan Sewage District (MMSD), Mineral & 6th Street Overpass Project A4-6

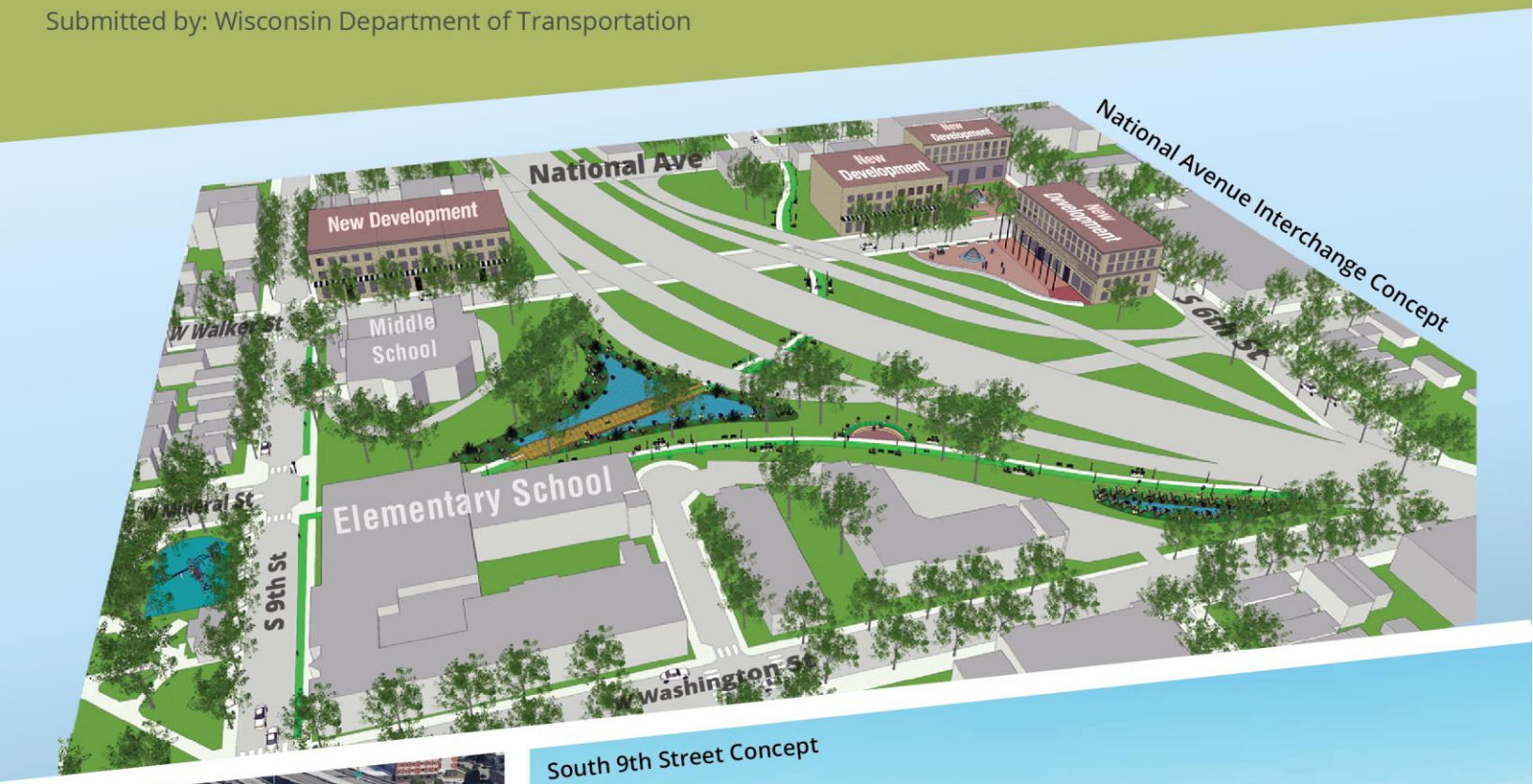
Southeast Wisconsin Regional Planning Commission (SEWRPC), Milwaukee County Transit Service (MCTS) Transportation Development Plan, 2010, Fondy-National Bus Rapid Transit Project A4-22

Supplemental Attachment 5: 2018 Safety Report A5-1

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



SUPPLEMENTAL ATTACHMENT 1:

FEDERAL ENVIRONMENTAL JUSTICE TOOLS

SEPTEMBER 28, 2023

CEQ, Climate and Economic Justice Screening Tool Results
National Avenue Interchange Study
[CEJST Tool Webpage]

Census Tract #	Climate Change Percentiles							Energy Percentiles		Health Percentiles			
	Dis-advantaged	Low Income	Agricultural Loss Rate	Building Loss Rate	Population Loss Rate	Flood Risk	Wildfire Risk	Energy Cost	PM2.5 in air	Asthma	Diabetes	Heart Disease	Low Life Expectancy
55-079-015700	**YES**	**97th**	N/A	28th	42nd	10th	33rd	**90th**	48th	77th	81st	41st	64th
55-079-186500	**YES**	**80th**	N/A	34th	43rd	**72nd**	33rd	77th	47th	49th	51st	27th	46th

Census Tract #	Housing Percentiles					Legacy Pollution Percentiles					Transportation Percentiles			Water/Wastewater Percentiles	
	Historic under-investment	Housing Cost	Lack of green space	Lack of Indoor Plumbing	Lead Paint	Abadoned Mine Land	Formerly Used Defence Site	Proximity to Hazerdous Waste Facilities	Proximity to RMP Facilities	Proximity to Superfund Sites	Diesel Particulate Matter Exposure	Transportation Barriers	Traffic Proximity and Volume	Underground Storage Tanks and Releases	Wastewater Discharge
55-079-015700	**YES**	**92nd**	**91st**	**98th**	**97th**	NO	N/A	88th	**99th**	46th	**90th**	48th	**94th**	**93rd**	16th
55-079-186500	**YES**	79th	**95th**	89th	**92nd**	NO	No	85th	98th	44th	79th	9th	**98th**	**95th**	72nd

Census Tract #	Workforce Development Percentiles				
	Lunguistic Isolation	Low Median Income	Poverty	Unemploy-ment	Less than High School Education
55-079-015700	**93rd**	**94th**	**95th**	88th	**37%**
55-079-186500	85th	78th	89th	17th	**22%**

U.S. DOT Equitable Transportation Community (ETC) Explorer Results
National Avenue Interchange Study
[ETC Tool Webpage]

Census Tract #	Climate & Disaster Risk Burden				Health Vulnerability						Transportation Insecurity			
	Anticipated Changes in Extreme Weather	Annualized Disaster Losses	Impervious Surfaces (from Land Cover)	OVERALL	Asthma Prevalence	Cancer Prevalence	High Blood Pressure Prevalence	Diabetes Prevalence	Low Mental Health Prevalence	OVERALL	Transportation Access	Transportation Cost Burden	Transportation Safety	OVERALL
55-079-015700	60%	24%	94%	**93%**	85%	36%	69%	89%	90%	**74%**	7%	96%	0%	**6%**
55-079-186500	28%	27%	95%	**83%**	33%	18%	29%	36%	35%	**29%**	24%	69%	0%	**22%**

Census Tract #	Social Vulnerability													
	200% Poverty Line	No HS Diploma	Unemployment	House Tenure	Housing Cost Burden	Uninsured	Lack of Internet Access	Endemic Inequality	65 or Older	17 or Younger	Disability	Limited English Proficiency	Mobile Homes	OVERALL
55-079-015700	98%	98%	92%	84%	81%	95%	98%	57%	26%	96%	76%	93%	0%	**98%**
55-079-186500	76%	81%	18%	89%	50%	80%	89%	30%	30%	14%	57%	83%	0%	**78%**

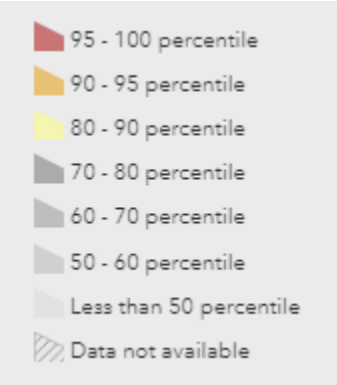
Census Tract #	Environmental Burden																
	Ozone Level	PM 2.5 Level	Diesel PM Level	Air Toxics Cancer Risk	Hazardous Sites Proximity	Toxics Release Site Proximity	Treatment & Disposal Fac Proximity	Risk Mgmt Sites Proximity	Coal Mine Proximity	Lead Mines Proximity	Pre-1980s Housing	High Volume Road Proximity	Railways Proximity	Airports Proximity	Ports Proximity	Impaired Surface Water	OVERALL
55-079-015700	**64%**	**49%**	**79%**	**18%**	**87%**	**93%**	**0%**	**99%**	**0%**	**0%**	**88%**	**86%**	**93%**	**72%**	**98%**	**69%**	**100%**
55-079-186500	66%	48%	80%	18%	91%	95%	0%	96%	0%	0%	75%	90%	95%	82%	99%	80%	**100%**

EPA's Environmental Justice Screening and Mapping Tool Results

National Avenue Interchange Study Area and Surrounding Neighborhood Comparisons

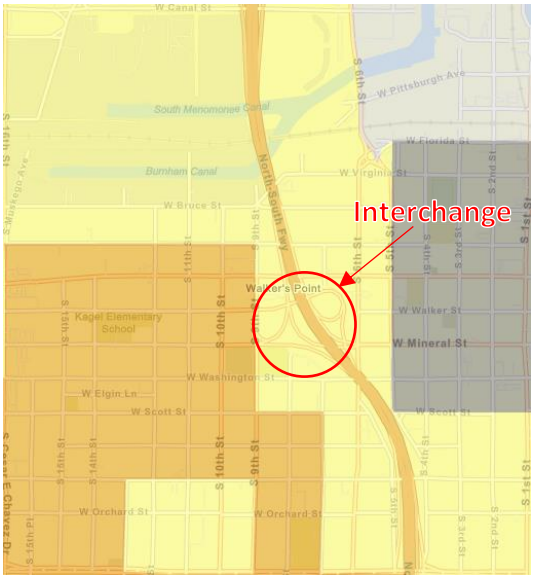
The following maps were gathered and analyzed from the EPA's EJScreen Tool. The maps show the 13 Environmental Justice Indexes compared to the United States. All maps follow the legend detailed below.

LEGEND

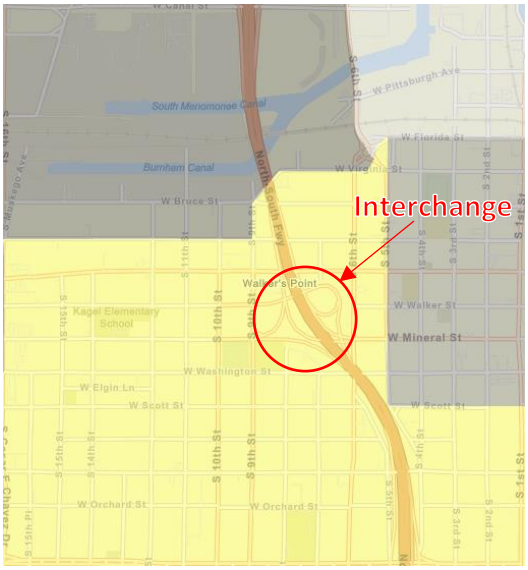


ENVIRONMENTAL JUSTICE INDEXES

Particulate Matter 2.5



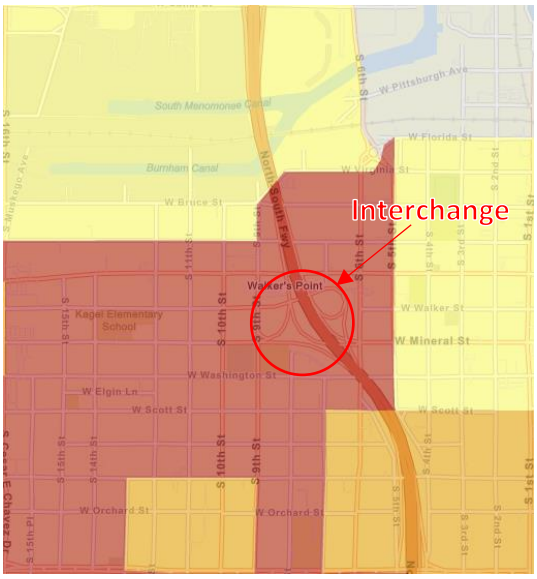
Ozone



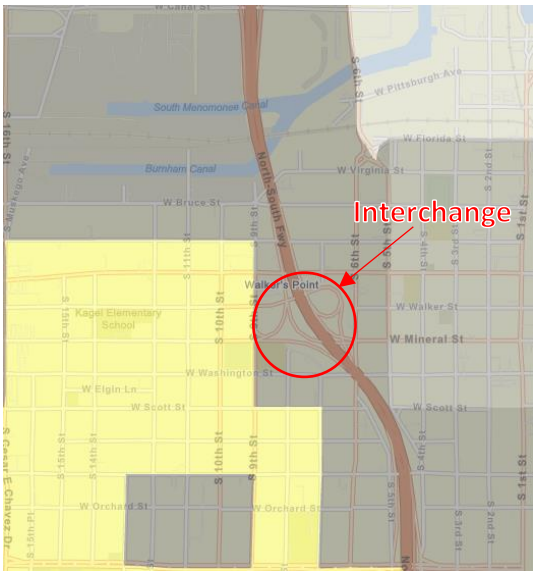
EPA's Environmental Justice Screening and Mapping Tool Results

National Avenue Interchange Study Area and Surrounding Neighborhood Comparisons

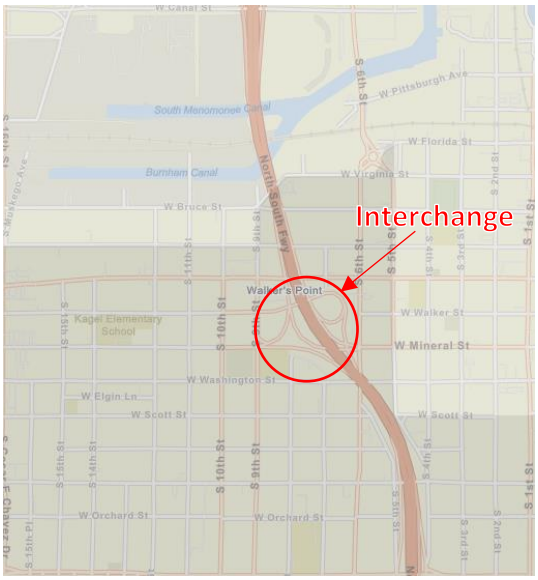
Diesel Particulate Matter



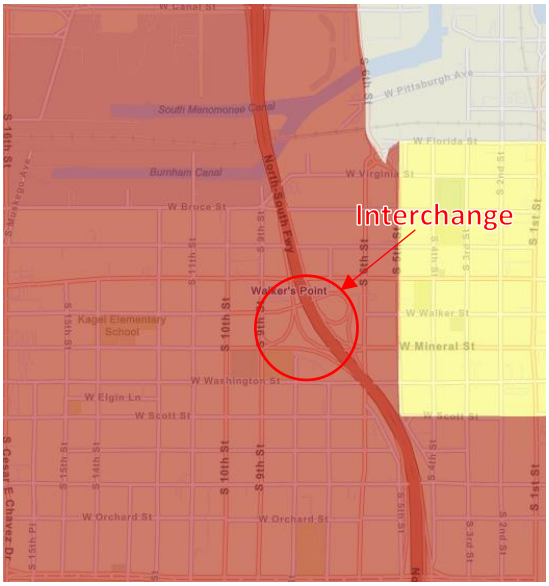
Air Toxics Respiratory HI

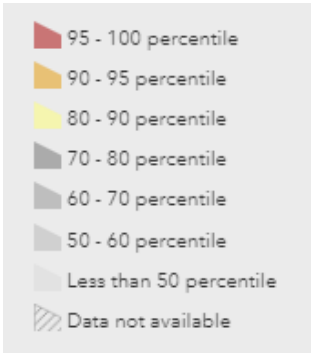


Air Toxics Cancer Risk



Toxic Releases to Air



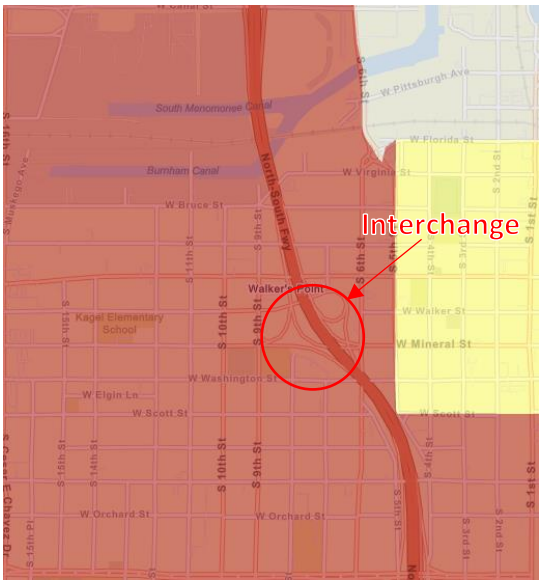


LEGEND

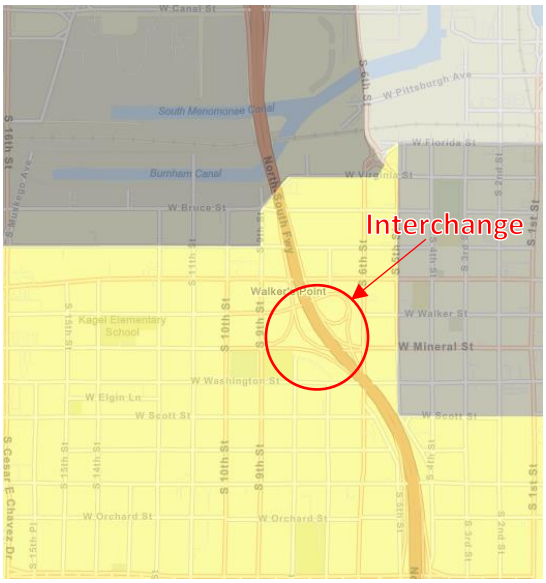
EPA's Environmental Justice Screening and Mapping Tool Results

National Avenue Interchange Study Area and Surrounding Neighborhood Comparisons

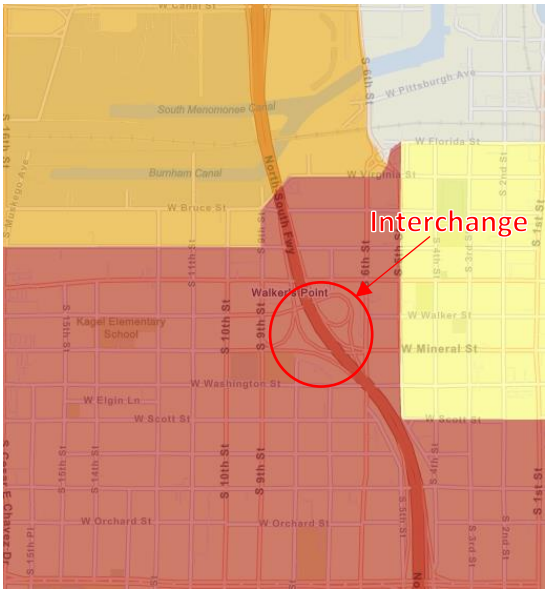
Traffic Proximity



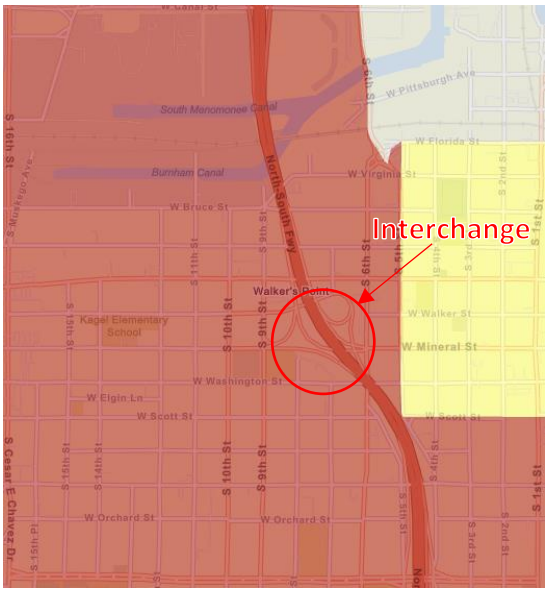
Superfund Proximity

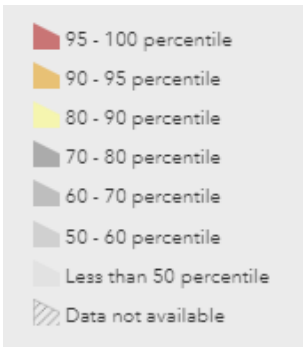


Lead Paint



RMP Facility Proximity



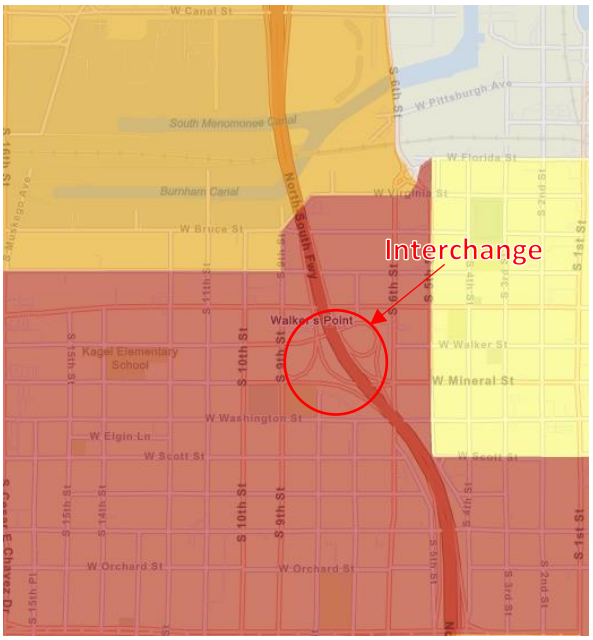


LEGEND

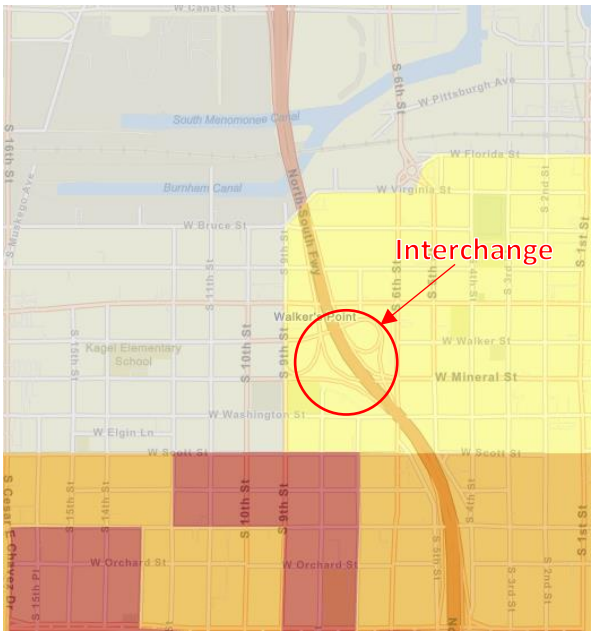
EPA's Environmental Justice Screening and Mapping Tool Results

National Avenue Interchange Study Area and Surrounding Neighborhood Comparisons

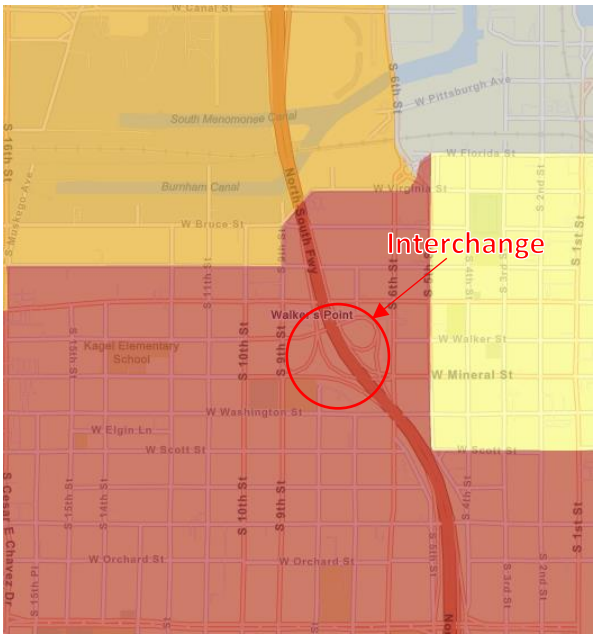
Hazardous Waste Proximity

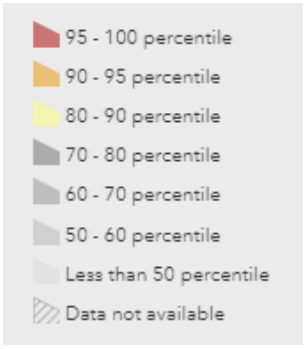


Wastewater Discharge



Underground Storage Tanks

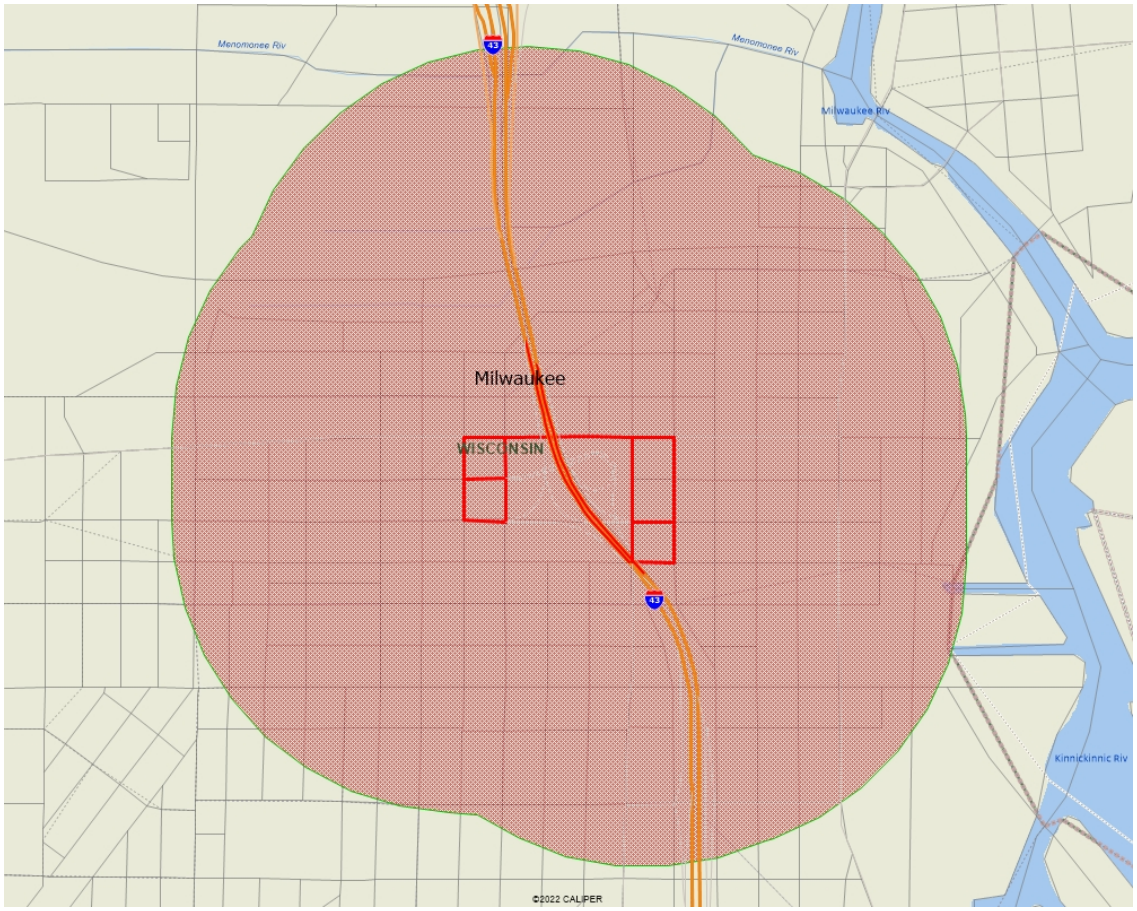




LEGEND

Screening Tool for Equity Analysis of Projects (STEAP)
Project Buffer Analysis Profile Report

Data Source: American Community Survey 2016-2020
Prepared by FHWA Office of Planning



Analysis of 1 Buffer of Size 0.5 Miles

Reference Layers
City/Town: Milwaukee WI
County: Milwaukee WI
State: Wisconsin

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

0.5 Miles Buffer Analysis Summary Report

	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
General Buffer Area Statistics					
Land Area (in square miles)	2		96	241	54,167
Population	10,934		592,649	949,180	5,806,975
Housing Units	4,592		256,856	419,310	2,709,444
Households	3,998		229,227	383,703	2,377,935
Families	1,908		122,404	210,959	1,479,364
Population by Race					
Total	10,934	100%	592,649	949,180	5,806,975
Population Reporting One Race	9,940	91%	94%	95%	97%
White	4,385	40%	42%	57%	84%
Black	1,000	9%	39%	26%	6%
American Indian	226	2%	1%	1%	1%
Asian	109	1%	5%	4%	3%
Pacific Islander		0%	0%	0%	0%
Some Other Race	4,220	39%	8%	6%	2%
Population Reporting Two or More Races	994	9%	6%	5%	3%
Population by Ethnicity					
Total	10,934	100%	592,649	949,180	5,806,975
Hispanic Origin	7,543	69%	19%	15%	7%
Not Hispanic	3,390	31%	81%	85%	93%
Total Non-Hispanic Population					
Total	3,390	100%	477,489	802,828	5,398,708
White Alone	2,036	60%	42%	59%	87%
Black or African American Alone	926	27%	48%	31%	7%
American Indian & Alaska Native Alone	66	2%	1%	1%	1%
Asian Alone	109	3%	6%	5%	3%
Native Hawaiian & Other Pacific Islander Alone		0%	0%	0%	0%
Some other Race Alone	8	0%	0%	0%	0%
Two or More Race	245	7%	4%	4%	2%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
Total Hispanic Population *					
Total	7,543	100%	115,160	146,352	408,267
Hispanic – Mexican	5,641	75%	68%	67%	71%
Hispanic – Puerto Rican	1,645	22%	24%	24%	15%
Hispanic – Cuban	104	1%	1%	1%	2%
Hispanic – Other	153	2%	6%	7%	13%
Total American Indian Population *					
Total	226	100%	3,165	5,049	48,674
American Indian-Cherokee		0%	1%	3%	2%
American Indian-Chippewa	30	13%	33%	29%	33%
American Indian-Navajo		0%	0%	0%	1%
American Indian-Sioux	107	47%	4%	3%	1%
Population by Sex					
Total	10,934	100%	592,649	949,180	5,806,975
Male	5,595	51%	48%	48%	50%
Female	5,339	49%	52%	52%	50%
Population by Age					
Total	10,934	100%	592,649	949,180	5,806,975
Age 0-17 (children)	3,655	33%	26%	24%	22%
Age 18-64 (Adult)	6,394	58%	63%	62%	61%
Age 65+ (Senior Population)	885	8%	11%	14%	17%
Age 5+ (used for “language spoken at home”)	9,811	90%	92%	93%	94%
Age 16+ (used for “Labor Forces”)	7,666	70%	76%	79%	81%
Age 18+ (Used for “voting age”)	7,279	67%	74%	76%	78%
Age 25+ (used for “Education Attainment”)	6,216	57%	62%	66%	69%
Employed Population Age 16+ Years					
Total	7,666	100%	453,059	745,469	4,682,533
In Labor Force	4,901	64%	64%	65%	66%
Civilian Unemployed in Labor Force	396	5%	4%	3%	2%
Not in Labor Force	2,765	36%	36%	35%	34%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
Population 25+ by Educational Attainment					
Total	6,216	100%	367,665	630,726	3,982,118
Less than 9th Grade	1,042	17%	6%	4%	3%
9th - 12th Grade, No Diploma	1,004	16%	10%	7%	5%
High School Graduate	1,845	30%	31%	29%	30%
Some College, No Degree	966	16%	21%	20%	21%
Associate Degree	284	5%	7%	8%	11%
Bachelor's Degree or more	1,074	17%	25%	31%	31%
Households by Household Size					
Total Households	3,998	100%	229,227	383,703	2,377,935
1-person households	1,701	43%	37%	36%	30%
2-person households	729	18%	29%	31%	37%
3-person households	441	11%	14%	13%	13%
4-person households	384	10%	10%	11%	12%
5-person households	460	12%	6%	5%	5%
6-person households	202	5%	2%	2%	2%
7+ person households	82	2%	2%	1%	1%
Households by Household Type (including Living Alone)					
Total Households	3,998	100%	229,227	383,703	2,377,935
Married-Couple family households	935	23%	27%	34%	48%
Male householder, no spouse present family households	225	6%	6%	5%	4%
Female householder, no spouse present family households	747	19%	21%	16%	9%
Householder living alone – nonfamily households	1,701	43%	37%	36%	30%
Householder not living alone – nonfamily households	390	10%	9%	9%	8%
Household Type for Children Under 18 years in Households *					
Total Population under 18 years in households (excluding householders, spouse and unmarried partners)	3,655	100%	154,558	227,281	1,272,219
Married-couple household	1,695	46%	39%	49%	68%
Cohabiting couple household	590	16%	12%	10%	9%
In male householder, no spouse/partner present household	194	5%	5%	5%	5%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
In female householder, no spouse/partner present household	1,175	32%	44%	35%	18%
Households by Household Income					
Household Income Base	3,998	100%	229,227	383,703	2,377,935
< $15,000	845	21%	17%	14%	9%
$15,000 - $25,000	697	17%	13%	11%	9%
$25,000 - $35,000	511	13%	12%	10%	9%
$35,000 - $50,000	661	17%	15%	14%	13%
$50,000 - $75,000	586	15%	18%	18%	19%
$75,000 +	698	17%	26%	34%	42%
Selected Monthly Owner Costs as a % of Household Income in the past 12 months (with or without mortgage)					
Total Owner-Occupied Housing Units	1,172	100%	93,301	188,430	1,596,500
Less than 10.0%	212	18%	15%	16%	20%
10.0 to 14.9%	166	14%	18%	19%	21%
15.0 to 19.9%	244	21%	17%	19%	19%
20.0 to 24.9%	209	18%	13%	13%	13%
25.0 to 29.9%	49	4%	9%	10%	8%
30.0 to 34.9%	50	4%	6%	6%	5%
35.0 to 39.9%	36	3%	4%	3%	3%
40.0 to 49.9%	8	1%	5%	5%	4%
50.0% or more	168	14%	11%	9%	7%
Not computed	31	3%	1%	1%	1%
Gross Rent as a % of Household Income in the past 12 months					
Total Renter-Occupied Housing Units	2,827	100%	135,926	195,273	781,435
Less than 10.0%	99	3%	4%	4%	4%
10.0 to 14.9%	239	8%	9%	10%	12%
15.0 to 19.9%	380	13%	11%	12%	14%
20.0 to 24.9%	225	8%	12%	12%	13%
25.0 to 29.9%	360	13%	10%	10%	11%
30.0 to 34.9%	230	8%	8%	8%	8%
35.0 to 39.9%	183	6%	6%	6%	6%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
40.0 to 49.9%	268	9%	8%	8%	7%
50.0% or more	661	23%	27%	24%	20%
Not computed	183	6%	6%	5%	6%
Monthly Housing Cost *					
Total Occupied Housing Units	3,998	100%	229,227	383,703	2,377,935
Less than $199	11	0%	1%	1%	1%
$200 to $399	554	14%	5%	4%	6%
$400 to $599	546	14%	11%	10%	13%
$600 to $799	995	25%	20%	18%	16%
$800 to $999	718	18%	22%	19%	15%
$1000 to $1499	764	19%	27%	27%	25%
$1500 to $1999	190	5%	9%	12%	12%
$2000 to $2499	94	2%	3%	4%	5%
$2500 to $2999	31	1%	1%	2%	2%
$3000 or more	54	1%	1%	2%	2%
No Cash Rent	42	1%	1%	1%	1%
Population in Poverty by Race *					
Total (Population for whom poverty status is determined)	10,875	100%	576,594	927,928	5,659,485
People in Poverty - White Alone	1,525	14%	7%	6%	7%
People in Poverty - Black or African American Alone	455	4%	13%	8%	2%
People in Poverty - American Indian & Alaska Native Alone	120	1%	0%	0%	0%
People in Poverty - Asian Alone	36	0%	1%	1%	0%
People in Poverty - Native Hawaiian & other Pacific Islander Alone		0%	0%	0%	0%
People in Poverty - Some Other Race Alone	1,631	15%	2%	2%	1%
People in Poverty - Two or More Race	361	3%	1%	1%	1%
Population in Poverty by Age *					
Total (Population for whom poverty status is determined)	10,875	100%	576,594	927,928	5,659,485
People in Poverty – Age 0-5	690	6%	3%	2%	1%
People in Poverty – Age 6-17	1,021	9%	6%	4%	2%
People in Poverty – Age 18-24	557	5%	3%	2%	2%
People in Poverty – Age 25-64	1,524	14%	10%	8%	5%
People in Poverty – Age 65+	336	3%	2%	2%	1%

Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
Vehicle Ownership					
Total Households	3,998	100%	229,227	383,703	2,377,935
Zero Vehicle Households	815	20%	17%	13%	7%
One Vehicle Households	1,846	46%	44%	41%	32%
Two Vehicle Households	1,029	26%	29%	34%	40%
Three or More Vehicle Households	308	8%	10%	11%	22%
Foreign Born Population *					
Total (regardless of citizenship status)	2,546	100%	60,518	88,086	291,187
Foreign Born – Europe	47	2%	7%	14%	16%
Foreign Born – Asia	93	4%	29%	35%	37%
Foreign Born – Africa	34	1%	8%	7%	5%
Foreign Born – Oceania		0%	0%	0%	1%
Foreign Born – Latin America	2,372	93%	55%	43%	39%
Foreign Born – Northern America	1	0%	1%	1%	2%
Population Age 5+ Years by Ability to Speak English					
Total	9,811	100%	547,348	884,066	5,475,909
Speak only English	3,885	40%	79%	82%	91%
Non-English at Home	5,926	60%	21%	18%	9%
Speak English "very well"	3,508	36%	13%	11%	6%
Speak English "well"	1,039	11%	4%	3%	2%
Speak English "not well"	913	9%	3%	2%	1%
Speak English "not at all"	467	5%	1%	1%	0%
Linguistically Isolated Households (Household Limited English Speaking Status)					
Total Households	3,998	100%	229,227	383,703	2,377,935
Speak Spanish	2,194	55%	13%	10%	5%
Speak Other Indo-European Languages	51	1%	3%	3%	2%
Speak Asian-Pacific Island Languages	31	1%	2%	2%	2%
Speak Other Languages	18	0%	2%	1%	1%

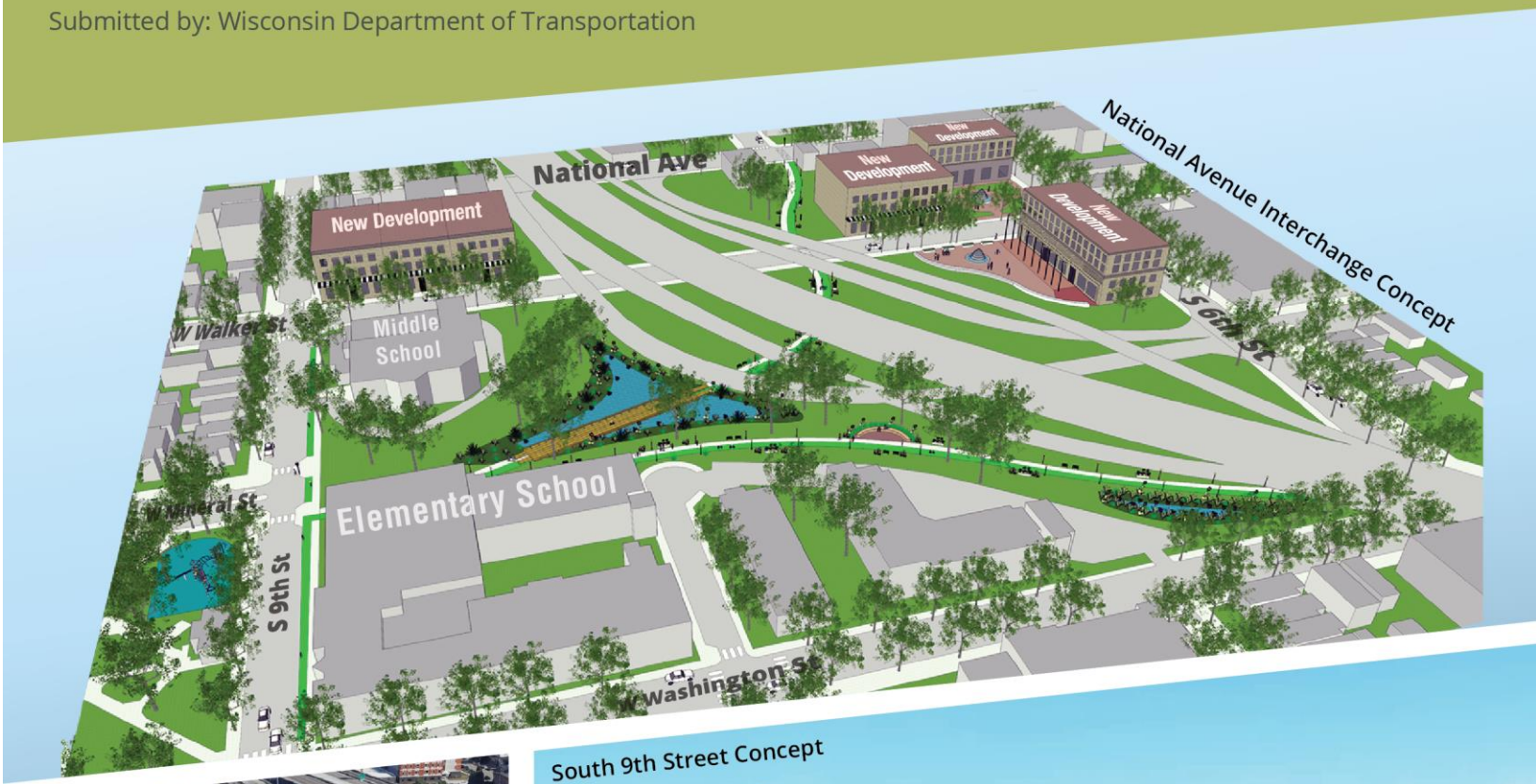
Note:, *: The variables marked with an asterisk are estimated from Census Tract data. More information on the disaggregation method can be found on the "Help" tab of the Screening Tool for Equity Analysis of Projects webpage.

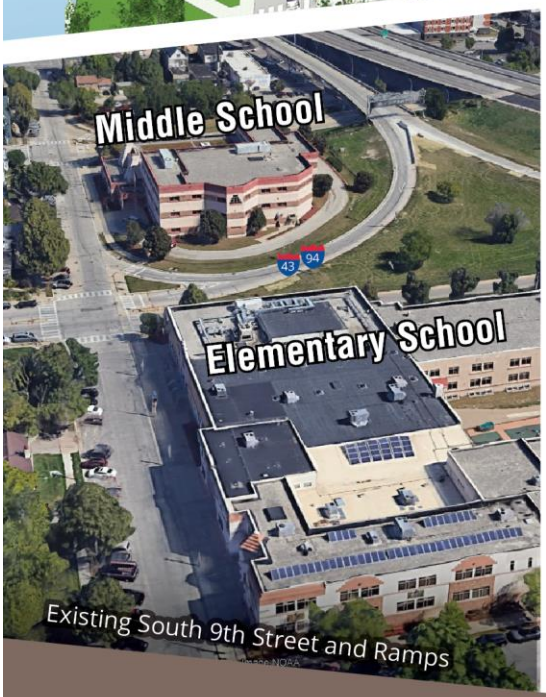
	Buffer Estimates	Percent	City/Town Milwaukee WI	County Milwaukee WI	State Wisconsin
Other Vulnerable Populations or Households					
Total Population	7,279	100%	437,717	721,228	4,529,321
Number of Veterans (18+)	222	3%	4%	5%	7%
Number of People with Disabilities (Civilian Non-Inst) *	1,429	20%	17%	16%	15%
Total Households	3,998	100%	229,227	383,703	2,377,935
Number of Households with no Computers	715	18%	13%	11%	9%
Number of Households with no Internet Connection	1,238	31%	19%	16%	12%

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



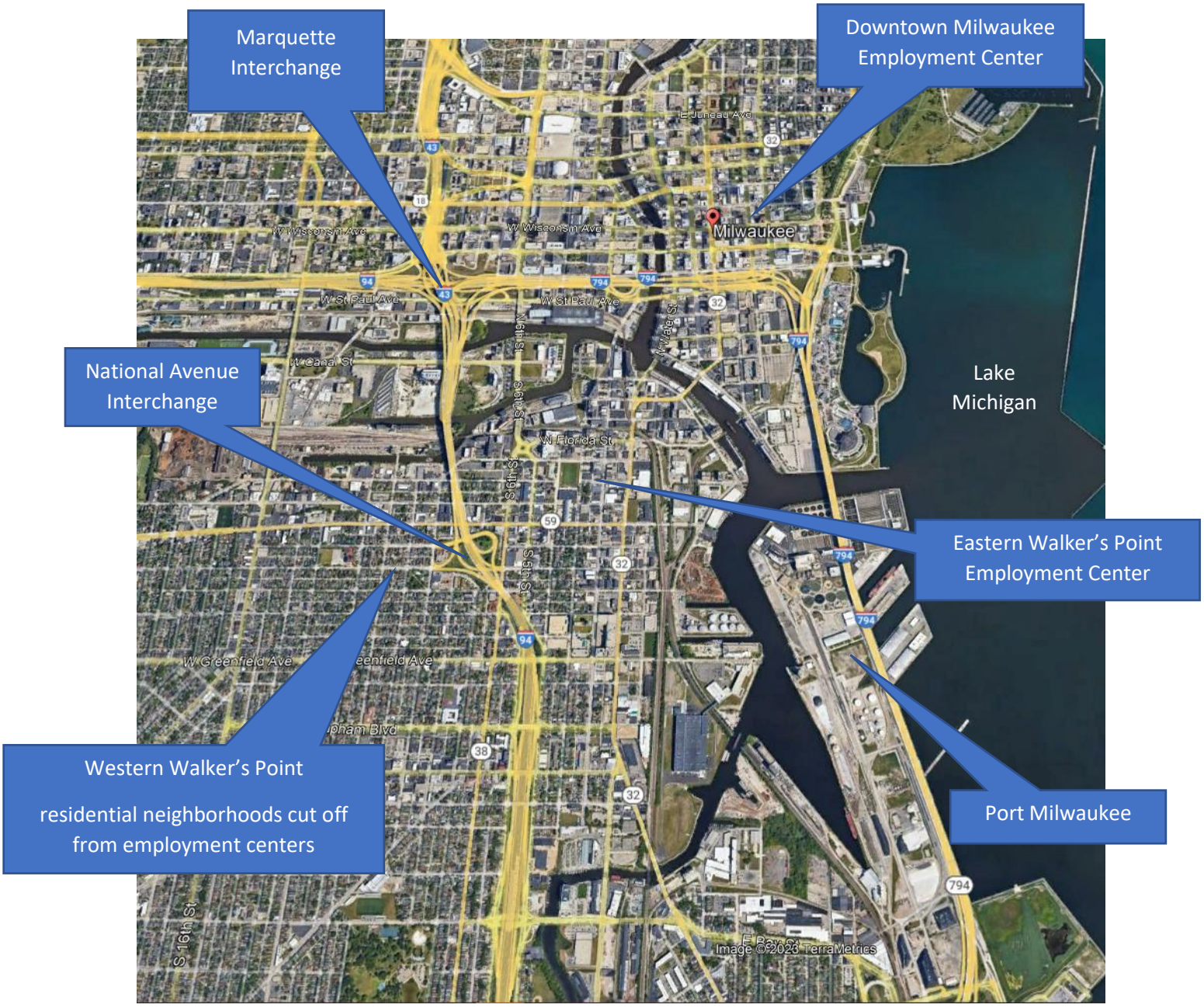


SUPPLEMENTAL ATTACHMENT 2:

SUPPORTING EXHIBITS

SEPTEMBER 28, 2023

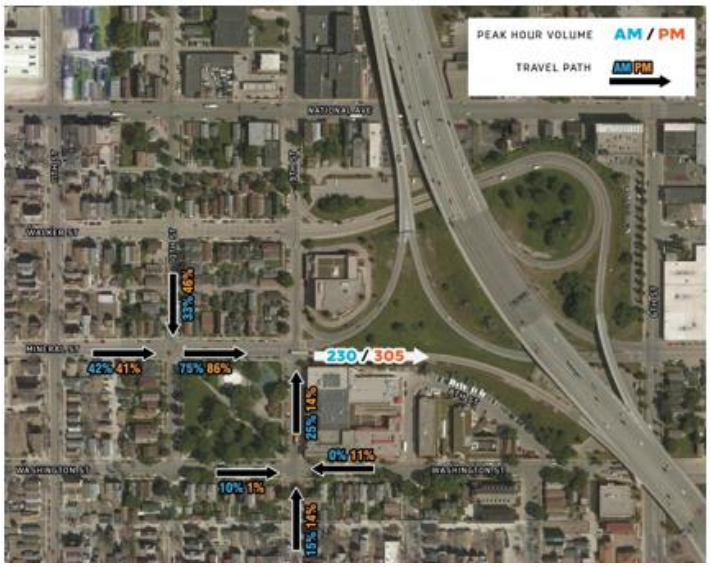
Regional View Map: Walker's Point Neighborhood and the Employment Center Divide.



Regional View Map: Walker's Point Neighborhood and the Employment Center Divide.

Exhibit 1: Peak Hour Trip Distribution within National Avenue Interchange Study Area, 2017

Travel Distribution from SB Exit to 9th St. and Mineral St.



Travel Distribution for SB Entrance from 9th St. and Mineral St.

Travel Distribution for NB Entrance from 9th St. and Mineral St.

Exhibit 2: Average Annual Daily Traffic (AADT) Volume within Study Area, 2017

Exhibit 3: Employment (Number of Jobs) - 2020

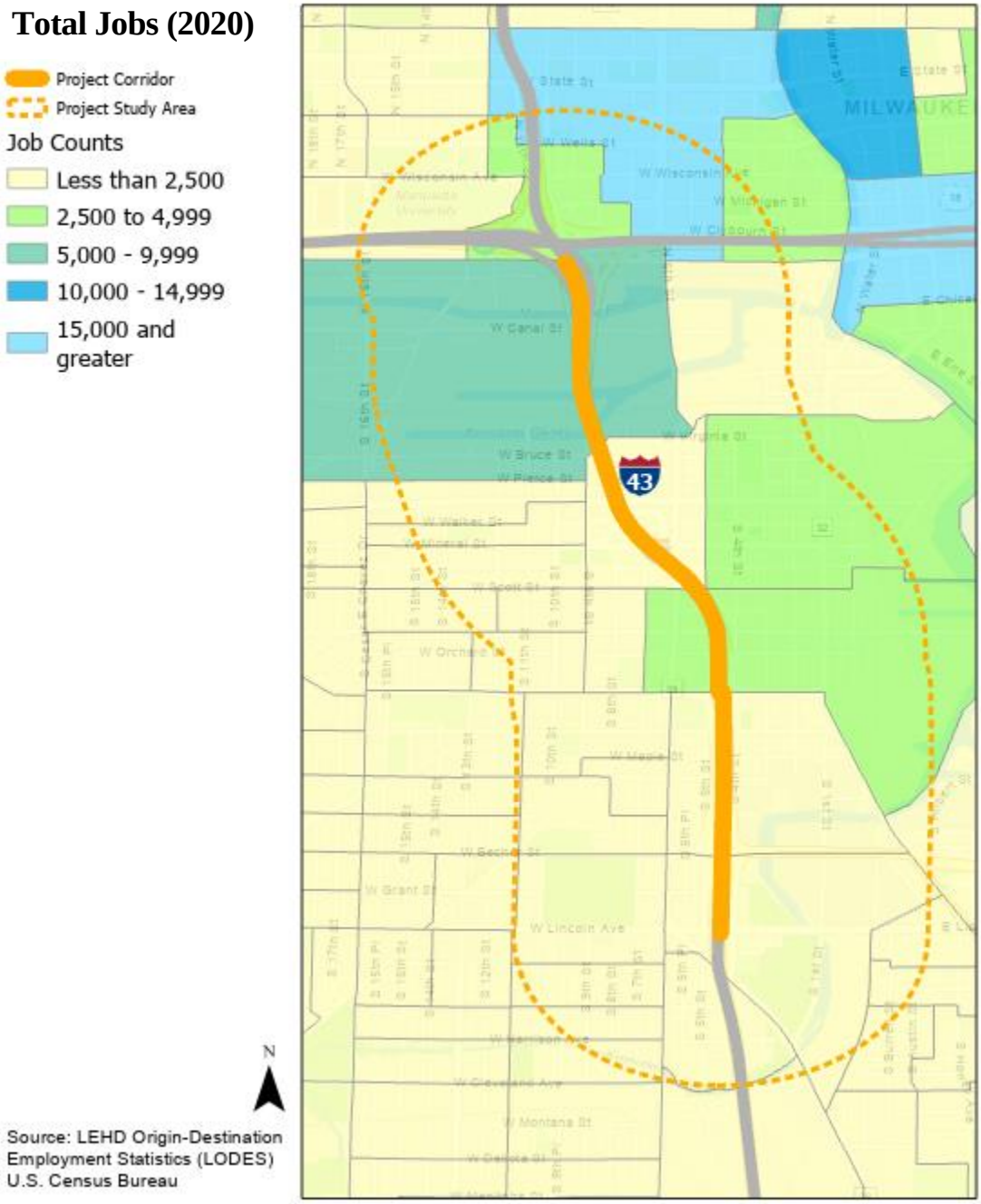
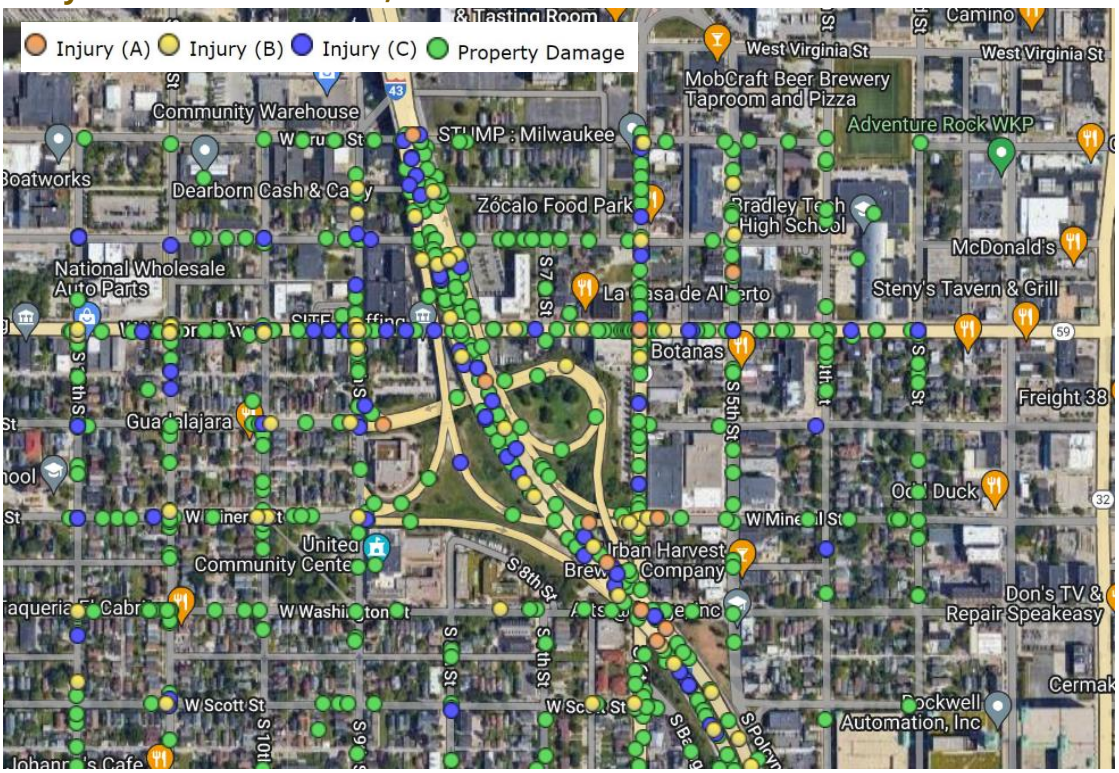


Exhibit 4: Crash Locations, 2018-2022

Study Area Crash Locations, 2018-2022



Crash Locations – 9th and Walker, 2018-2022

Crash Locations – 9th and Mineral, 2018-2022

Crash Locations – 6th and Mineral, 2018-2022

Injury (A) Injury (B) Injury (C) Property Damage

Study Area Crash Data, 2018-2022

Area	Total Crashes	Total Injured
Total Study Area	1,191	363
9th and Walker	14	7
9th and Mineral	8	2
6th & Mineral St	52	21

Source: Community Maps, 2018-2022

Exhibit 5: Looking Northeast at Ramp Terminal During School Drop-Off

Exhibit 6: National Avenue Interchange Ramps, Crosswalks, and Key Land Uses

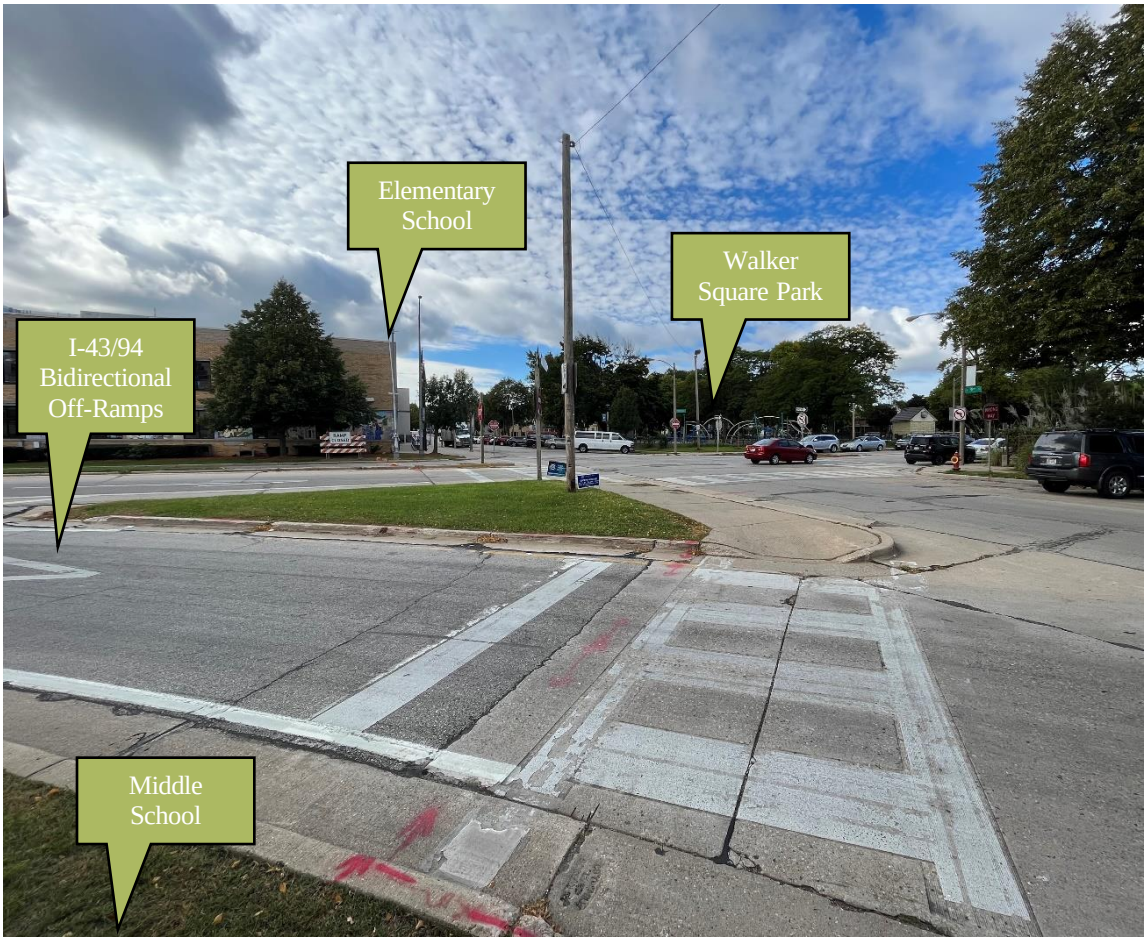
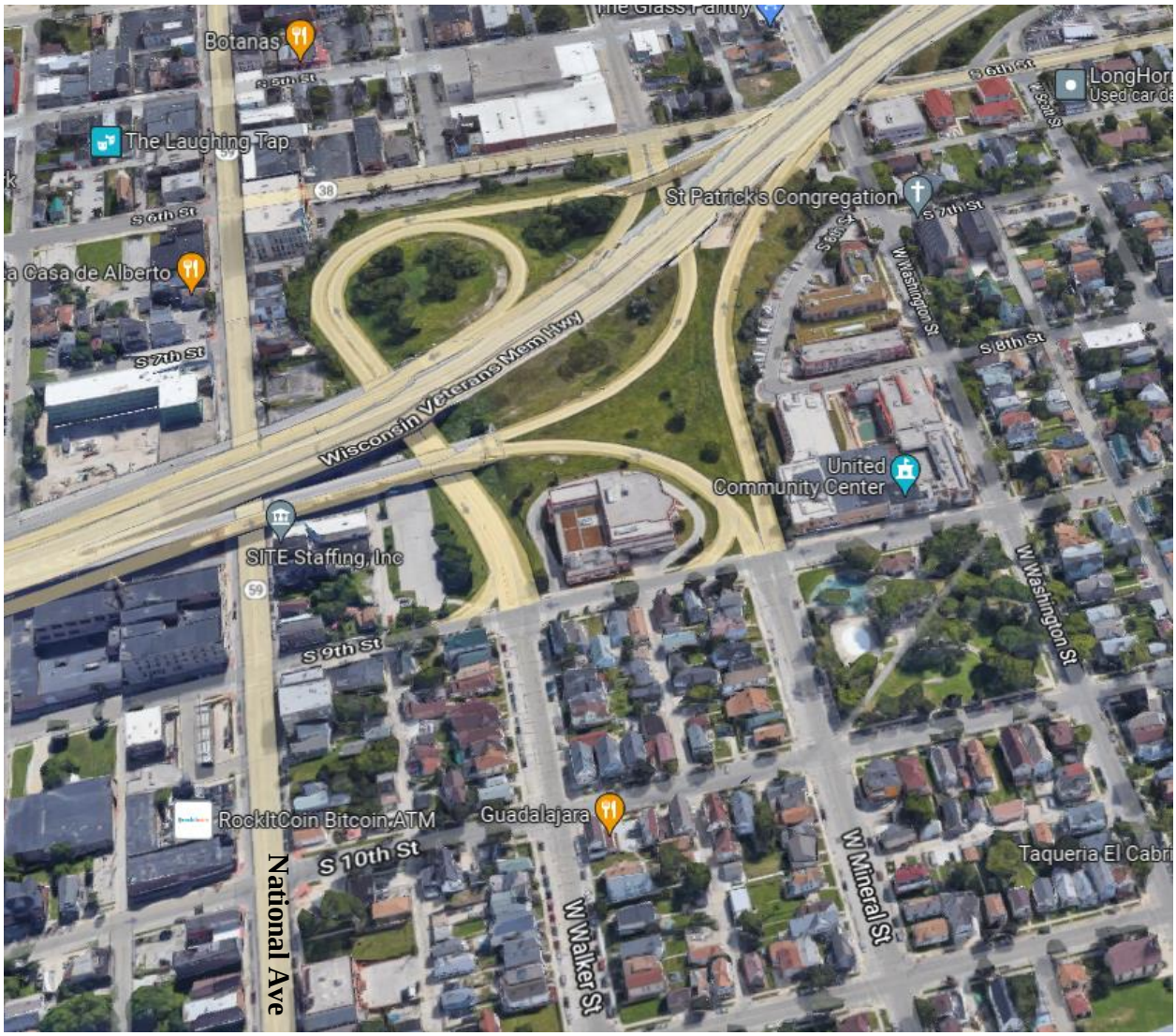


Exhibit 7: Lack of Street Grid Connectivity and Investment on National Avenue

Exhibit 8: Intersection with Ramp Entrances Immediately North of Middle School

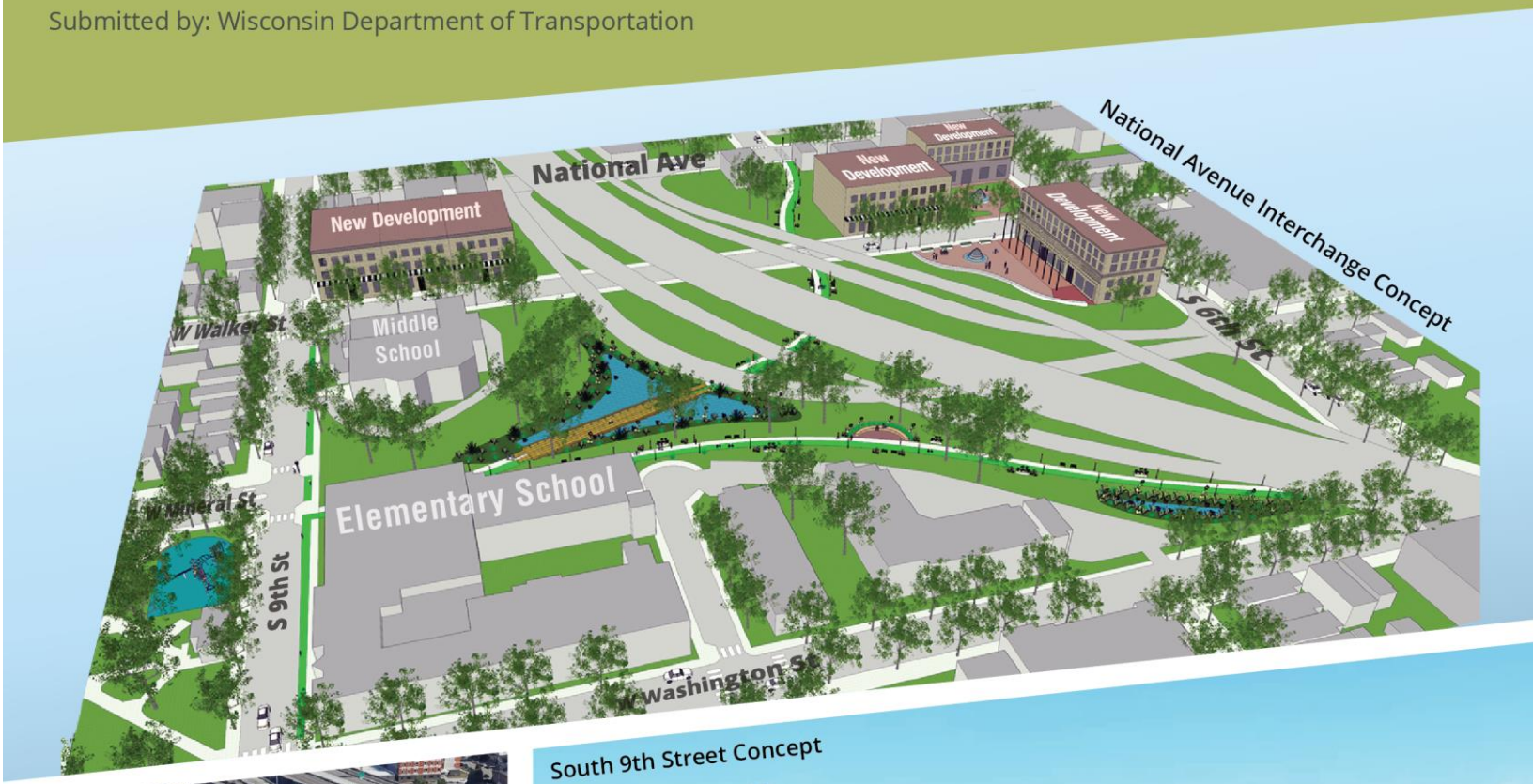
Exhibit 9: Birds Eye-View of National Avenue Interchange Ramps and Neighborhood

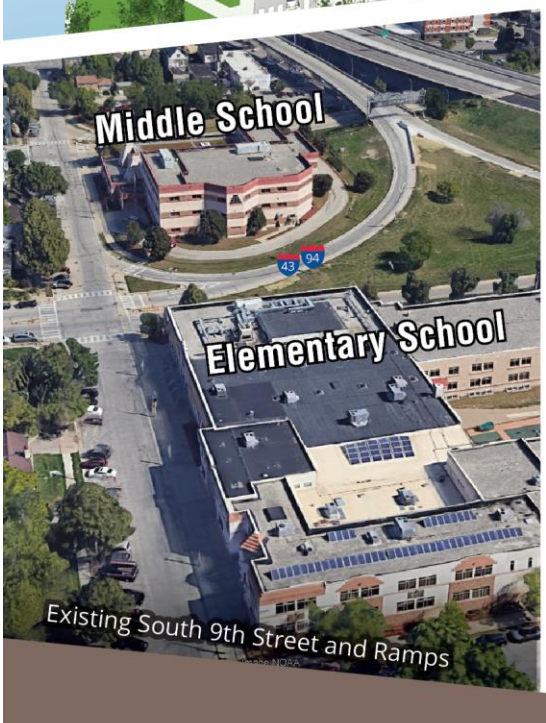


REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



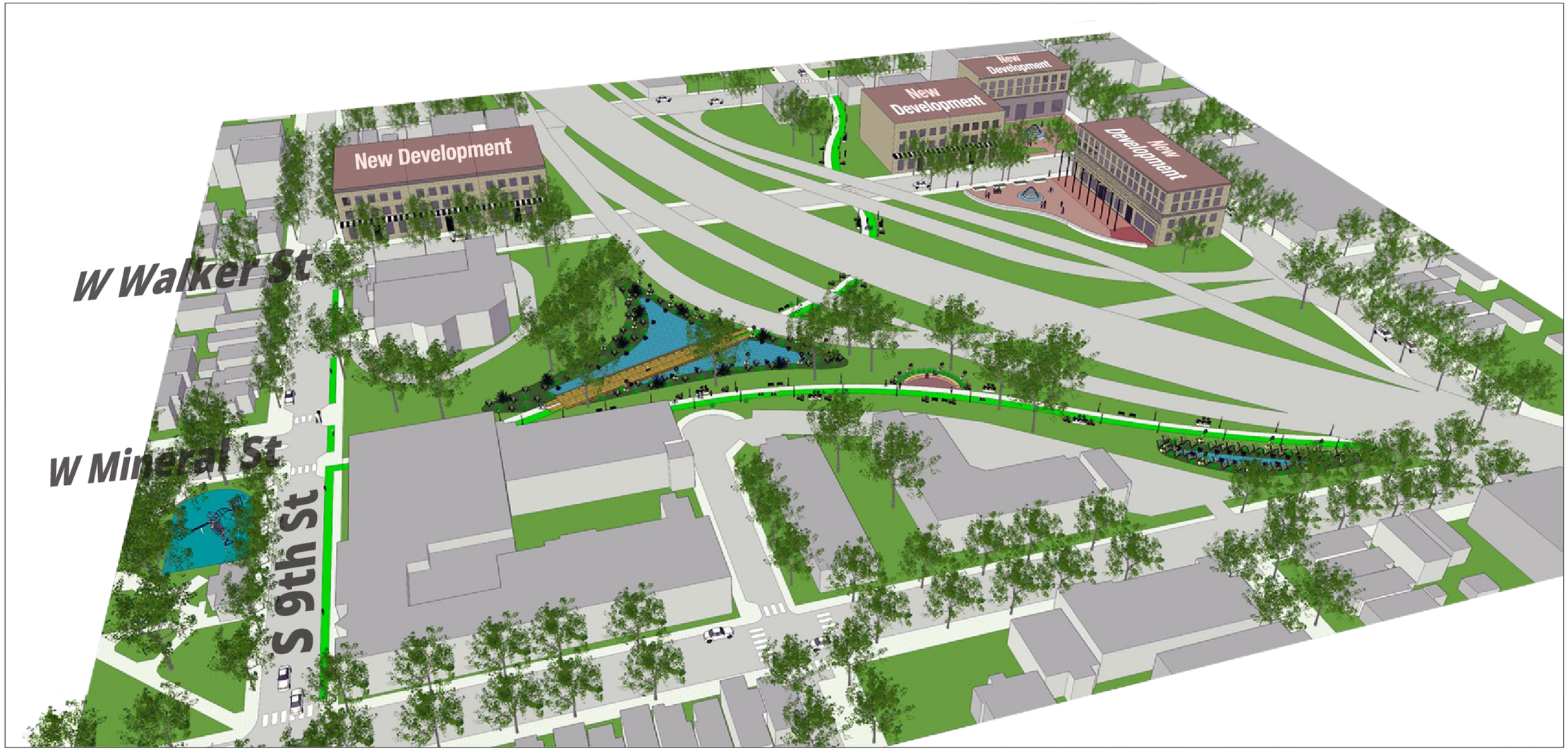


SUPPLEMENTAL ATTACHMENT 3:

CONCEPTUAL RENDERINGS

SEPTEMBER 28, 2023

National Avenue Interchange Area Concept



Existing Interchange Area

South 9th Street Concept

Existing S. 9th Street

Between W. Washington Street and W. Mineral Street

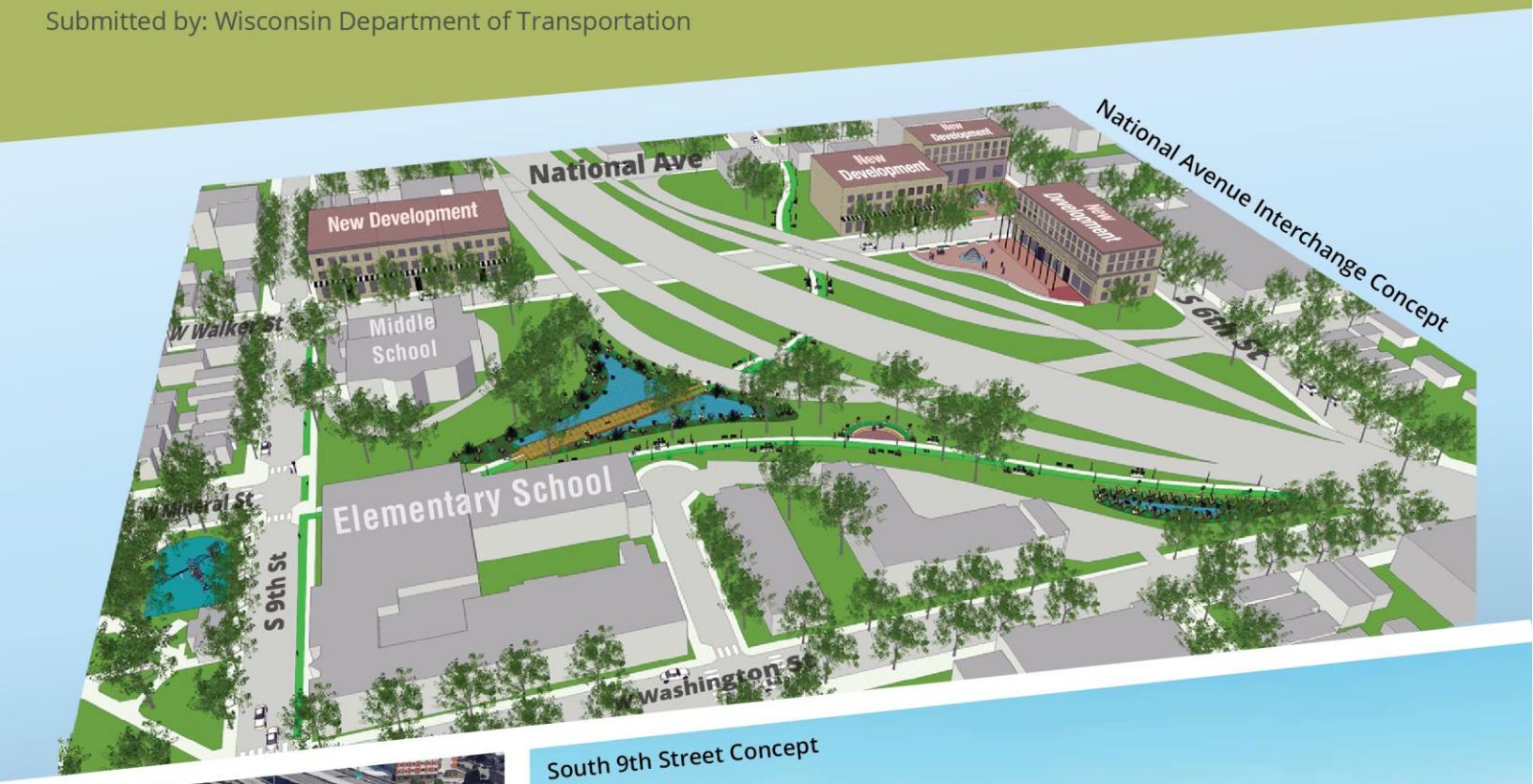
Existing S. 9th Street

Between W. Mineral Street and W. Walker Street

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



SUPPLEMENTAL ATTACHMENT 4:

RELATED PROJECTS

SEPTEMBER 28, 2023

National Avenue Reconstruction

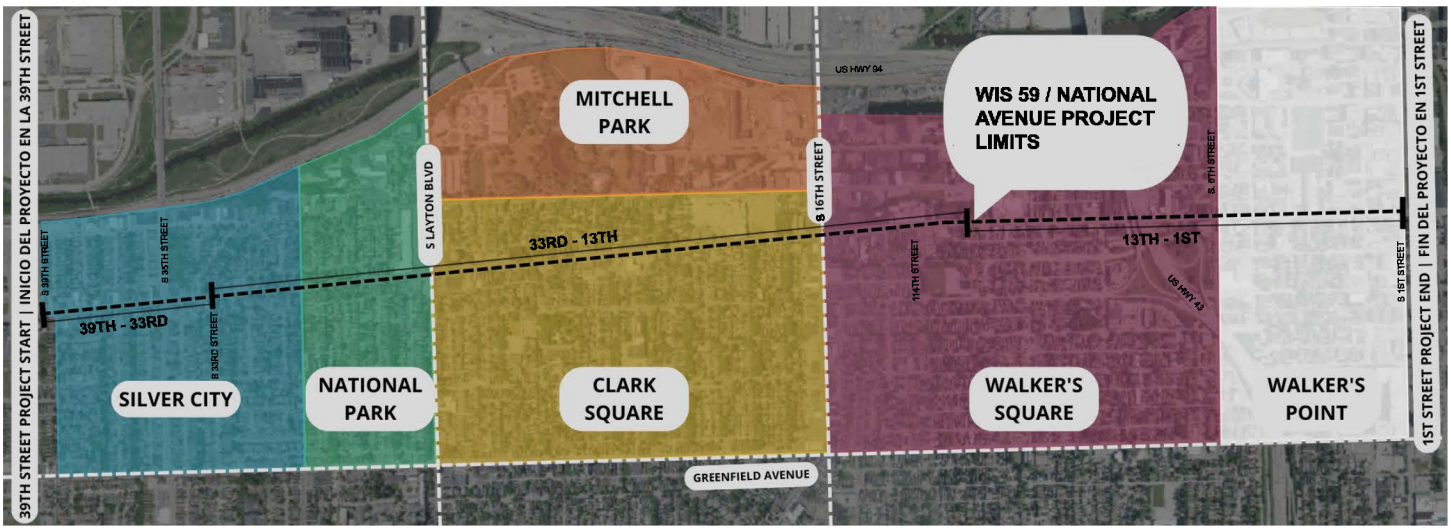
National Avenue Project

(2410-10-00/70)

The Wisconsin Department of Transportation and the City of Milwaukee Department of Public Works plans to rebuild 2.6-mlles of W. National Avenue (WIS 59) between 1st Street and 39th Street. National Avenue Is currently an urban 4-lane, undivided principal arterial roadway and connecting highway. The proposed rebuild consists of improving safety measures for all modes of transportation, including walking and biking. Improvements will Include reducing the number of travel lanes from 4-lanes to 2-lanes along the majority of the project limits, adding safer pedestrian and bicycle accommodations, perpetuating mass transit, installing ADA curb ramps and improved street lighting, and updating traffic signals. Included in the project is replacement of all roadway pavement, curb, some sidewalk segments and driveway approaches, as well as replacing storm sewers.

PROJECT SCOPE | ALCANCE DEL PROYECTO

PROJECT AREA | ÁREA DEL PROYECTO



PROJECT DESCRIPTION

- Wisconsin Department of Transportation (WisDOT) and the City of Milwaukee Department of Public Works plan to rebuild 2.6 miles of W. National Avenue (WIS 59) between S. 1st Street and S. 39th Street.
- The roadway rebuilding project proposes to implement modern transportation features so people can move from one place to another quickly and safely.
- Proposed improvements will include;
  - Reduced number of travel lanes from 4-lanes to 2-lanes over the majority of the corridor
  - Addition of raised protected bike track
  - Addition of pedestrian roadway crossing safety features like curb extension, raised crosswalks, flashing beacons, high visibility crosswalk marking, and reduce access conflicts where possible
  - Replacing all pedestrian curb ramps with improved features
  - Improving street lighting, and updating traffic signals
  - Replacing all roadside pavement, curb, and driveway approaches, as well as replacing storm sewers and sidewalks at select locations
  - Maintain MCTS transit operations and improve stop features

DESCRIPCIÓN DEL PROYECTO

- El Departamento de Transporte de Wisconsin (WisDOT) y el Departamento de Obras Públicas de la Ciudad de Milwaukee planean reconstruir 2.6 millas de W. National Avenue (WIS 59) entre S. 1st Street y S. 39th Street.
- El proyecto de reconstrucción vial propone implementar elementos modernos de transporte para que las personas puedan trasladarse de un lugar a otro de forma rápida y segura. Las mejoras incluirán:
- Las mejoras propuestas incluirán:
  - Reducción del número de carriles de circulación, de 4 a 2 carriles en la mayor parte del corredor vial
  - Adición de un carril para bicicletas elevado y protegido
  - Adición de características de seguridad en los cruces peatonales, como extensión de la acera, cruces peatonales elevados, balizas intermitentes, marcado de cruces peatonales de alta visibilidad y reducción de conflictos de acceso cuando sea posible.
  - Reemplazo de todas las rampas para peatones en las aceras con características mejoradas
  - Mejoramiento del alumbrado público y actualización de semáforos
  - Reemplazo del pavimento de las carreteras, bordillos y vías de acceso de vehículos, así como reemplazo de alcantarillas pluviales y aceras en ubicaciones selectas
  - Mantenimiento de las operaciones de tránsito de MCTS y mejoramiento de las paradas de autobús

PEDESTRIAN & BIKE FACILITY INFORMATION
INFORMACIÓN SOBRE LAS INSTALACIONES PARA PEATONES Y BICICLETAS

PROTECTED BIKE LANES | CARRILES PROTEGIDOS PARA BICICLETAS

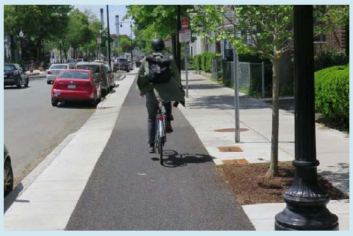
A low-stress bicycle network is one that is designed to be safe and comfortable for all users. Low-stress networks rely on separating bicyclists from traffic using separated bike lanes. There are a variety of options for providing a low-stress bicycle network including bike lanes, buffered bike lanes, protected bike lanes and raised bike lanes.

The following examples illustrate the characteristics and benefits of different types of bike facilities.

Las redes viales para bicicletas de bajo estrés están diseñadas para la seguridad y comodidad de todos los usuarios. Estas zonas consisten en separar a los ciclistas del tránsito, usando carriles separados para biciclietas. Hay diversas opciones para crear una red vial para bicicletas, incluyendo carriles bici, carriles bici protegidos y carriles bici elevados.

El siguiente cuadro ilustra las características y beneficios de los diferentes tipos de infraestructura para bicicletas.

RAISED BIKE LANES | CARRILES BICI ELEVADOS



- Often same height as sidewalk
- Vary surface or designate bike lane with markings to separate cyclists from pedestrians
- Higher than roadway height

- A menudo de igual altura que la acera
- Su superficie varía o son carriles bici designados y demarcados para separar a los ciclistas de los peatones
- Más altos que la altura de la carretera

PARKING PROTECTED BIKE LANES | CARRILES BICI PROTEGIDOS DE ESTACIONAMIEN-

- Street height
- Parked cars for physical separation
- Separation between bikes and moving cars

- De igual altura que la calle
- Autos estacionados para separación física
- Separación entre bicicletas y autos en movimiento

BUFFERED BIKE LANES | CARRILES BICI PROTEGIDOS

- Street height
- Separation distance between travel lane and bike lane
- Vary surface or designate bike lane with markings to separate cyclists from pedestrians

- De igual altura que la calle
- Distancia de separación entre carril de circulación y carril bici
- Su superficie varía o son carriles bici designados y demarcados para separar a los ciclistas de los peatones

RAISED CROSSWALKS | CRUCES PEATONALES ELEVADOS

- Ramped crossing spanning the entire width of the roadway
- The crosswalk is demarcated with paint and/or special paving materials
- Function as traffic calming measure by slowing vehicles prior to crossing

- Cruce en rampa que abarca todo el ancho de la calzada
- El cruce peatonal está demarcado con pintura y/o materiales de pavimentación especiales.
- Funciona como medida para calmar el tráfico al reducir la velocidad de los vehículos antes de cruzar

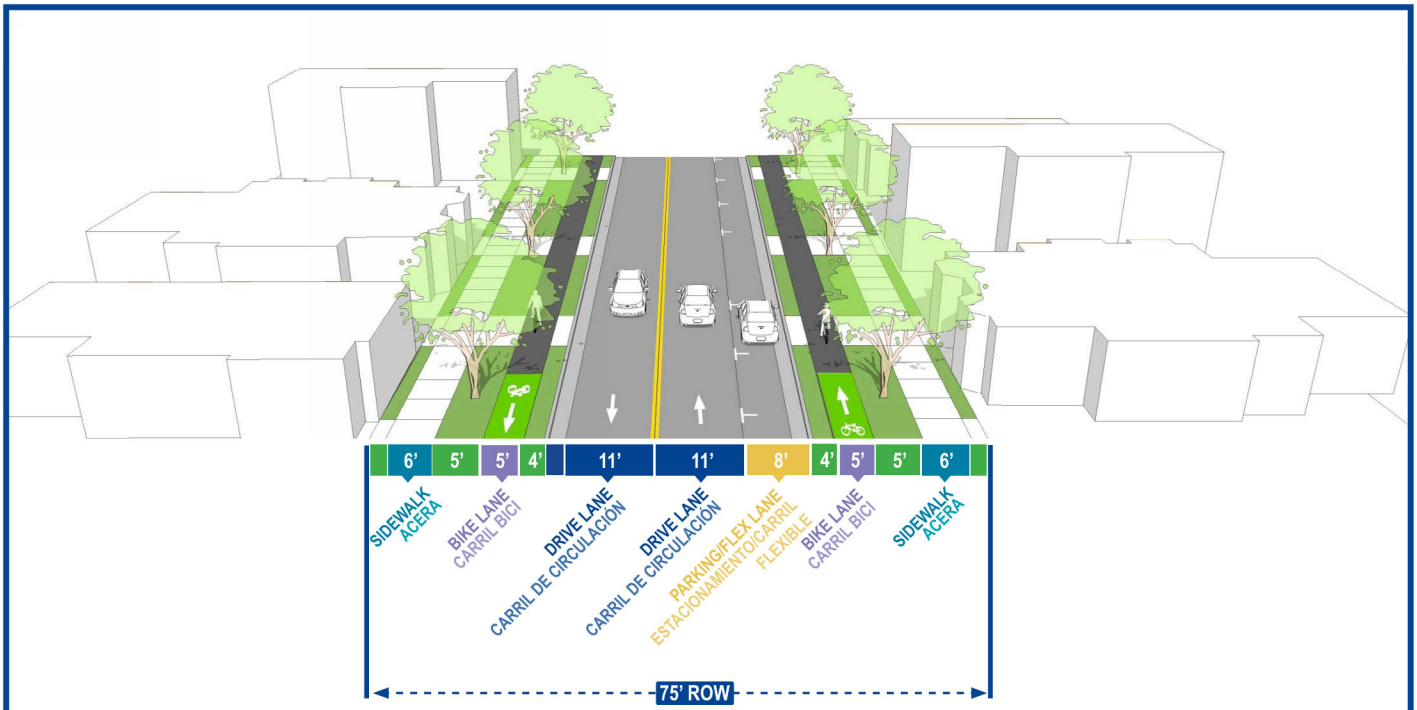
S. 13TH STREET - S. 1ST STREET

75’ WIDE RIGHT OF WAY | DERECHO DE PASO DE 75’ DE ANCHO

PROPOSED PREFERRED ALTERNATIVE | ALTERNATIVA PREFERIDA PROPUESTA

SECTION 10 - TWO TRAVEL LANES WITH ONE FLEX LANE AND RAISED BIKE LANES

SECCIÓN 10 - DOS CARRILES DE CIRCULACIÓN CON UN CARRIL FLEXIBLE Y CARRILES BICI ELEVADOS



COMMENTS
COMENTARIOS

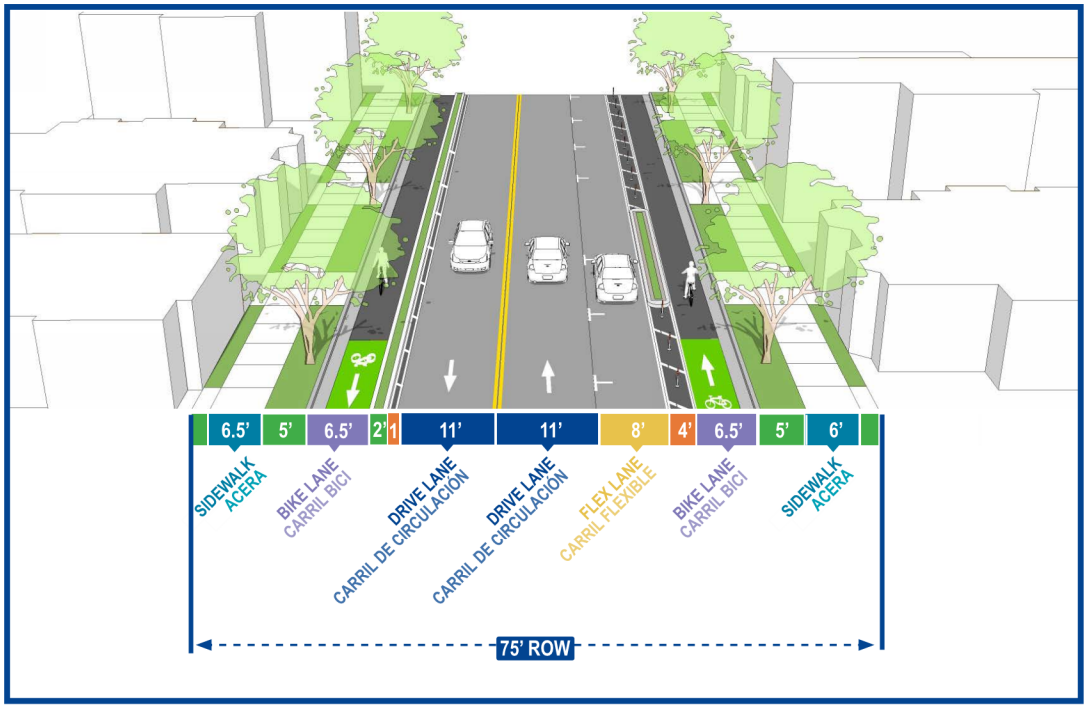
S. 13TH STREET - S. 1ST STREET

75’ WIDE RIGHT OF WAY | DERECHO DE PASO DE 75’ DE ANCHO

ALTERNATIVES CONSIDERED | ALTERNATIVAS CONSIDERADAS

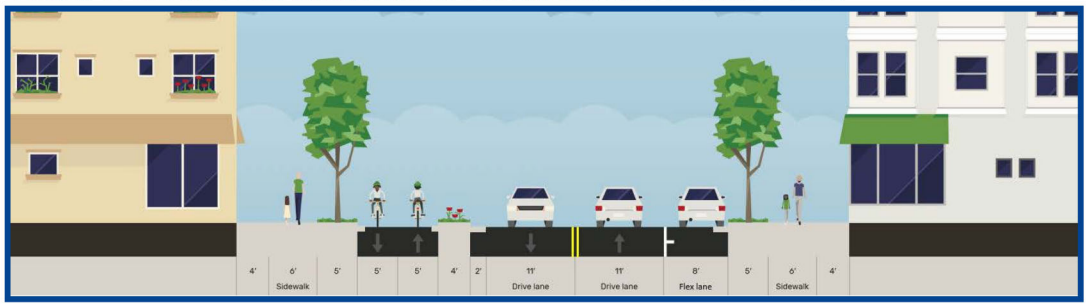
SECTION 11 - TWO TRAVEL LANES WITH FLEX LANE AND PROTECTED BIKE LANES

SECCIÓN 11 - DOS CARRILES DE CIRCULACIÓN CON ESPACIO FLEXIBLE Y CARRILES BICI PROTEGIDOS



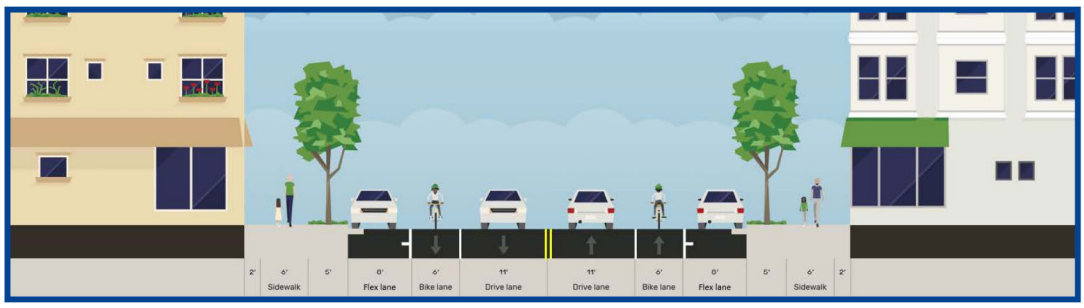
SECTION 12 - TWO TRAVEL LANES WITH CYCLE TRACK AND ONE FLEX LANE

SECCIÓN 12 - DOS CARRILES DE CIRCULACIÓN CON PISTA PARA BICICLETAS Y UN CARRIL FLEXIBLE



SECTION 13 - TWO TRAVEL LANES WITH CONVENTIONAL BIKE LANES AND TWO FLEX LANES

SECCIÓN 13 - DOS CARRILES DE CIRCULACIÓN CON CARRILES BICICLETA CONVENCIONALES Y DOS CARRILES FLEXIBLES



COMMENTS
COMENTARIOS

MINERAL AND 6TH STREET OVERPASS PROJECT

Project Update

Mineral St Overpass Project is in the final stages of design. A final public meeting will be held late in 2023. Check back to this page this fall for information about the public meeting.

Project Overview

This project is the third to be constructed as part of the Green Highways initiative. The project will address pollution from highway runoff. A variety of green infrastructure practices could be included such as stormwater trees, rain gardens or bioswales, native plantings, and porous pavement surfacing materials.

Pollution from the Interstate Highway I-94 flows untreated into a branch of the Milwaukee River. The highway also passes over the Walkers Point neighborhood and the National Ave. business district. The long stretch of unused land under the overpass is visually unappealing and invites unwanted behavior. The Mineral and 6th St. Overpass Project will address both of these concerns.

The project has three main sections: the overpass between National Avenue. and W. Virginia Street, the area of the on and off ramps between W. Walker and W. Washington Streets, and a smaller area at W. Washington and S. 5th Streets.

Key neighborhood stakeholders and amenities border the project area. These include Arts @ Large, St. Patrick's Congregation, the United Community Center, Walker Square Park and Playground, Acosta Middle School, Bruce Guadalupe Community, and Bruce Guadalupe Middle School.

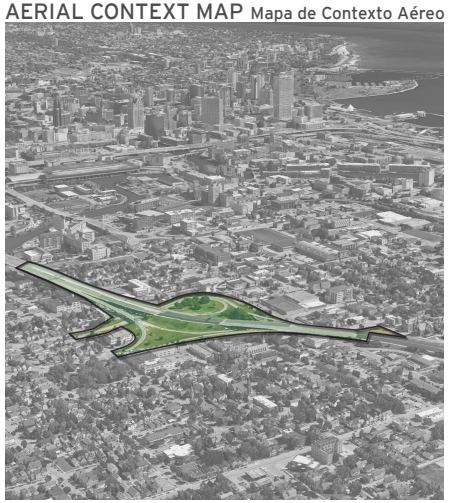
Project Map

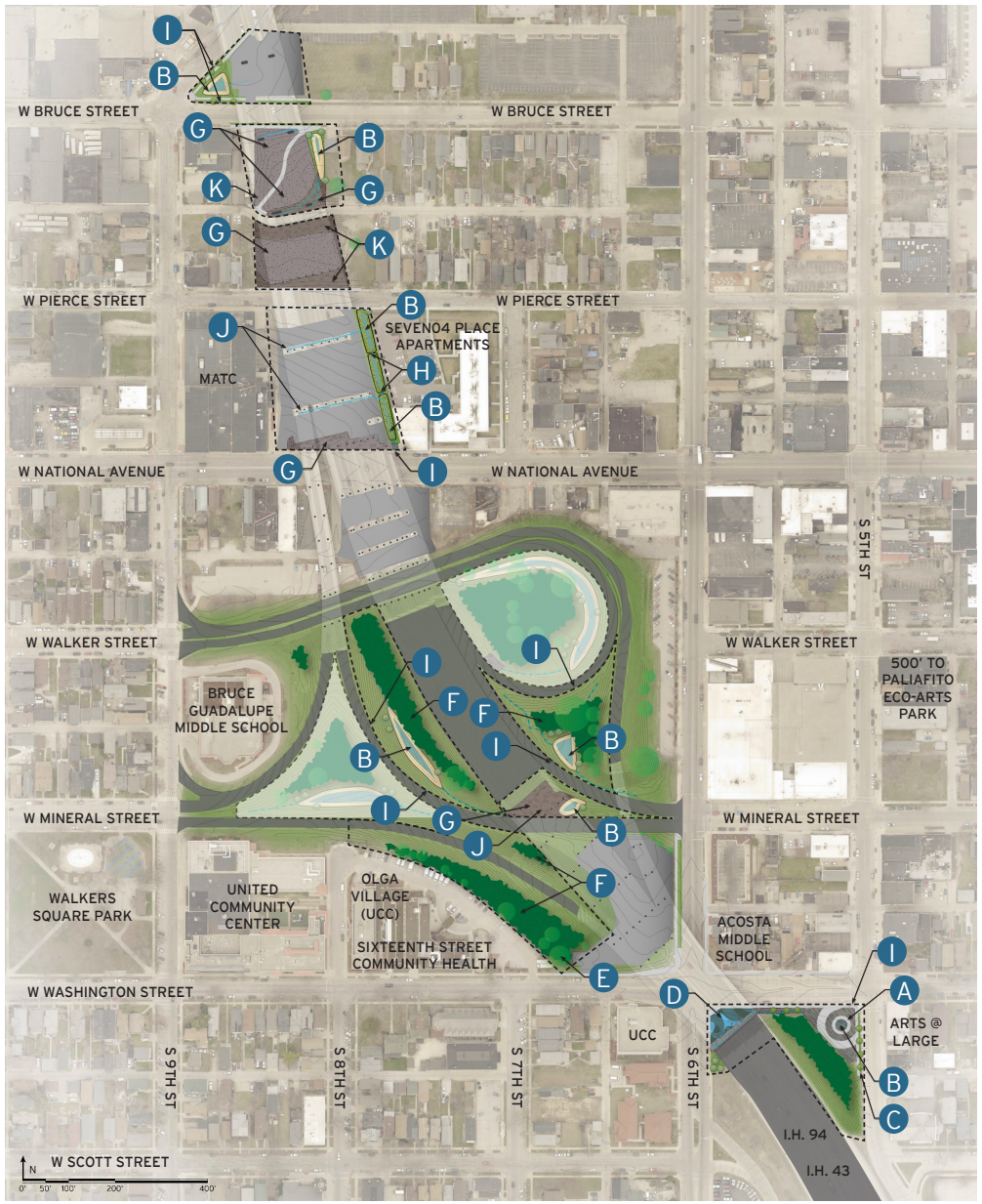
OVERVIEW PLAN
Descripción Resumida del Plan

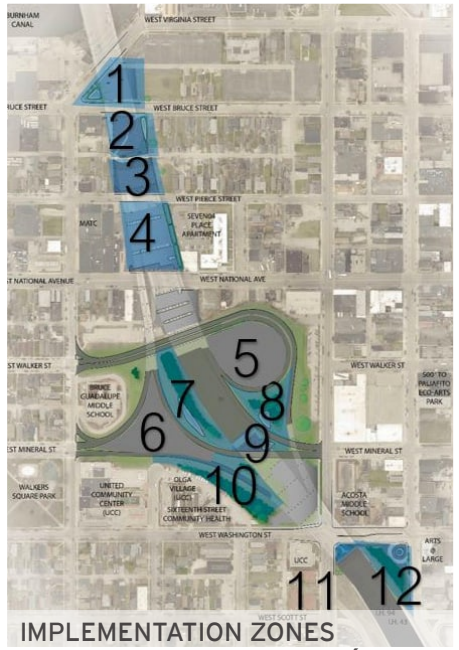
LEGEND

- **A** Art Plaza with Pervious Pavement — Plaza de arte con pavimento permeable
- **B** Bioretention Basin — Cuenca de bioretención
- **C** Stormwater Tree Wells — Pozo de árbol para las aguas pluviales
- **D** Cistern — Cisterna
- **E** Existing Trees — Árboles existentes
- **F** New Tree Plantings — Nueva siembra de árboles
- **G** Decorative/Erosion Control Stone Channels — Piedra Decorativa para el control de la erosion
- **H** Check Dams Between Bioretention Basins — Represas de control en medio de las cuencas de bioretención
- **I** Curb Cuts — Cortes en el bordillo
- **J** Filter Chamber at Downspouts — Sistema de Filtración para bajantes de agua
- **K** Bollards — Bolardos

AERIAL CONTEXT MAP Mapa de Contexto Aéreo



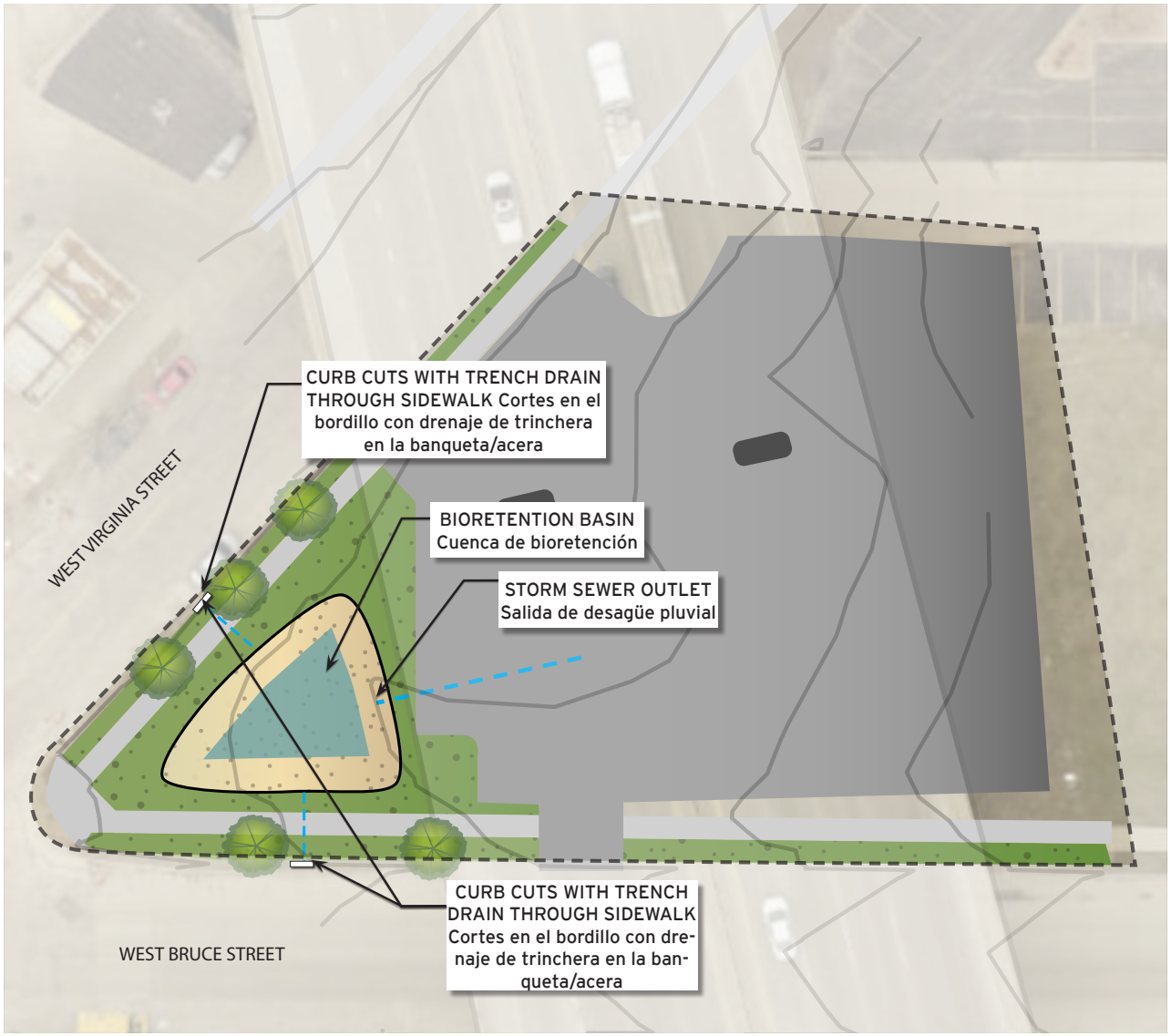




IMPLEMENTATION ZONES
ZONAS DE IMPLEMENTACIÓN

The graphic above depicts the implementation zones in the Mineral and 6th Street Overpass GI Project. Areas 5 and 6 are not included in this project.

La gráfica de arriba muestra las zonas de implementacion en el ProyectodePasoElevadoDeMineral Street Y 6th Street. Las areas 5 & 6 no estan incluidas en este proyecto.

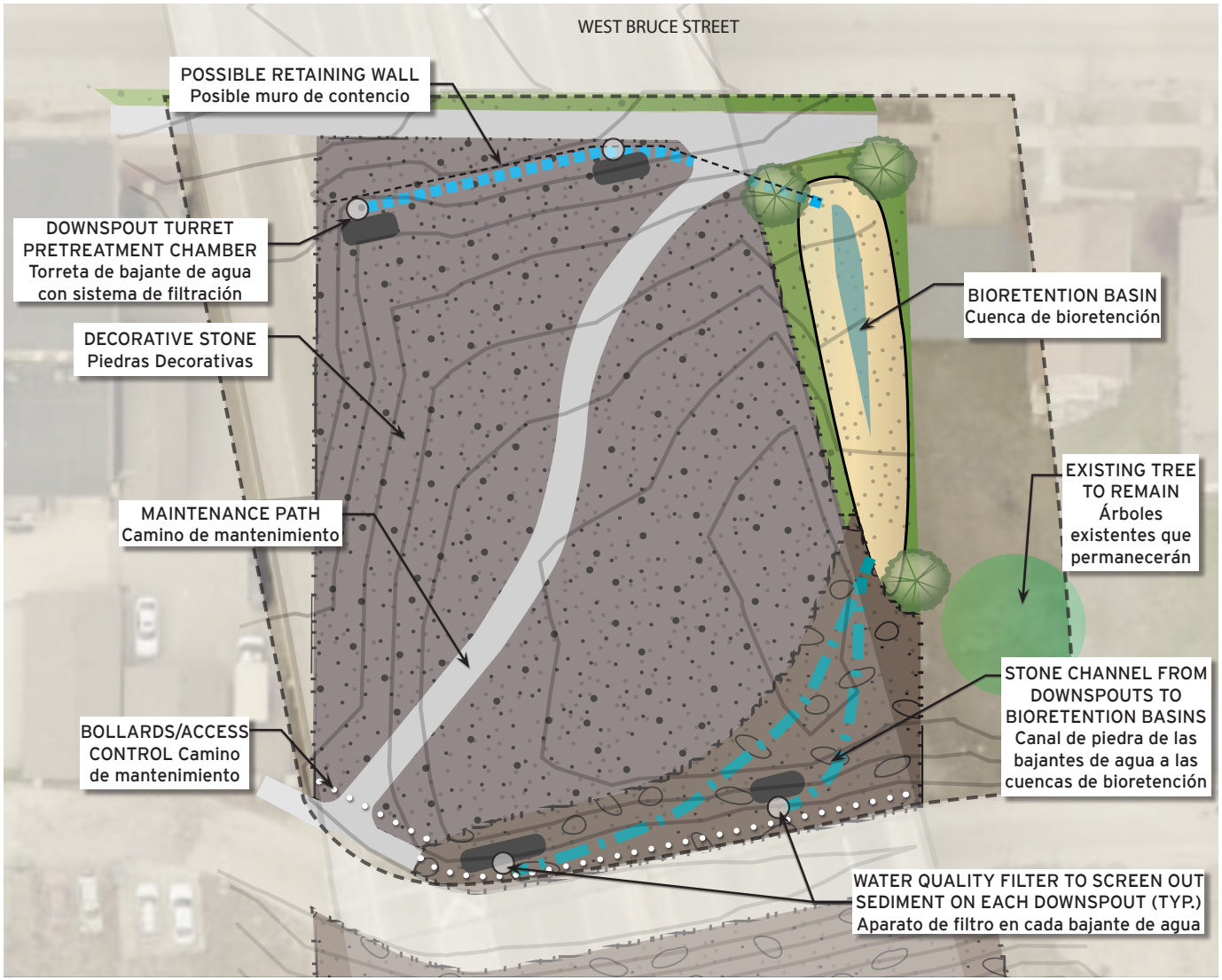


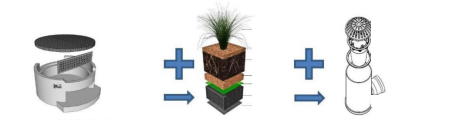

BIORETENTION BASIN Cuenca de bioretención


BIORETENTION BASIN Cuenca de bioretención


BIORETENTION BASIN Cuenca de bioretención


CURB CUTS WITH TRENCH DRAINS Cortes en el bordillo con drenaje de trinchera en la banqueta/acera

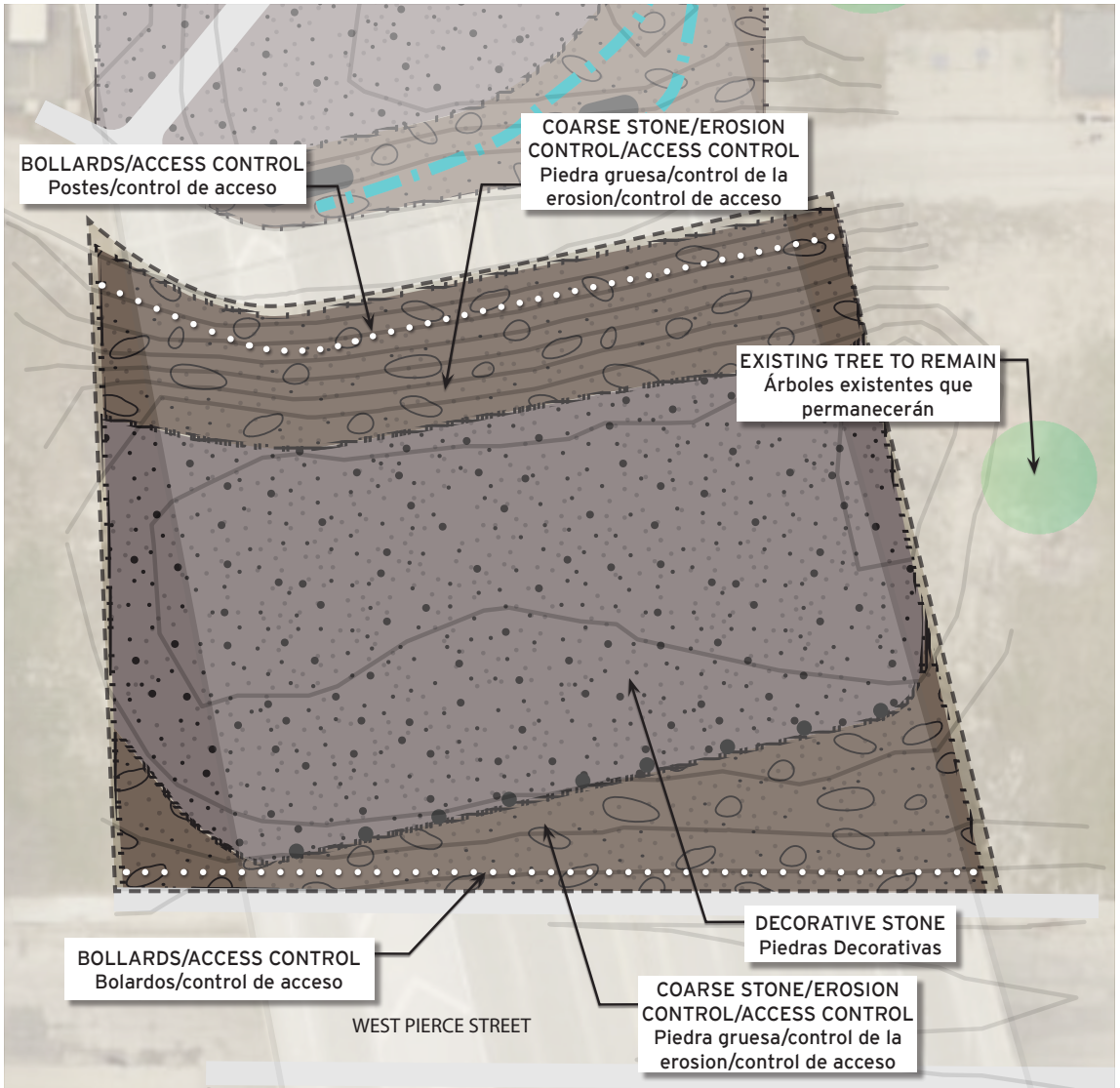




DOWNSPOUT TURRET Torreta de bajante de agua con sistema de filtración


BOLLARDS & ACCESS CONTROL
Bolardos/control de acceso


STONE CHANNEL canal de piedra

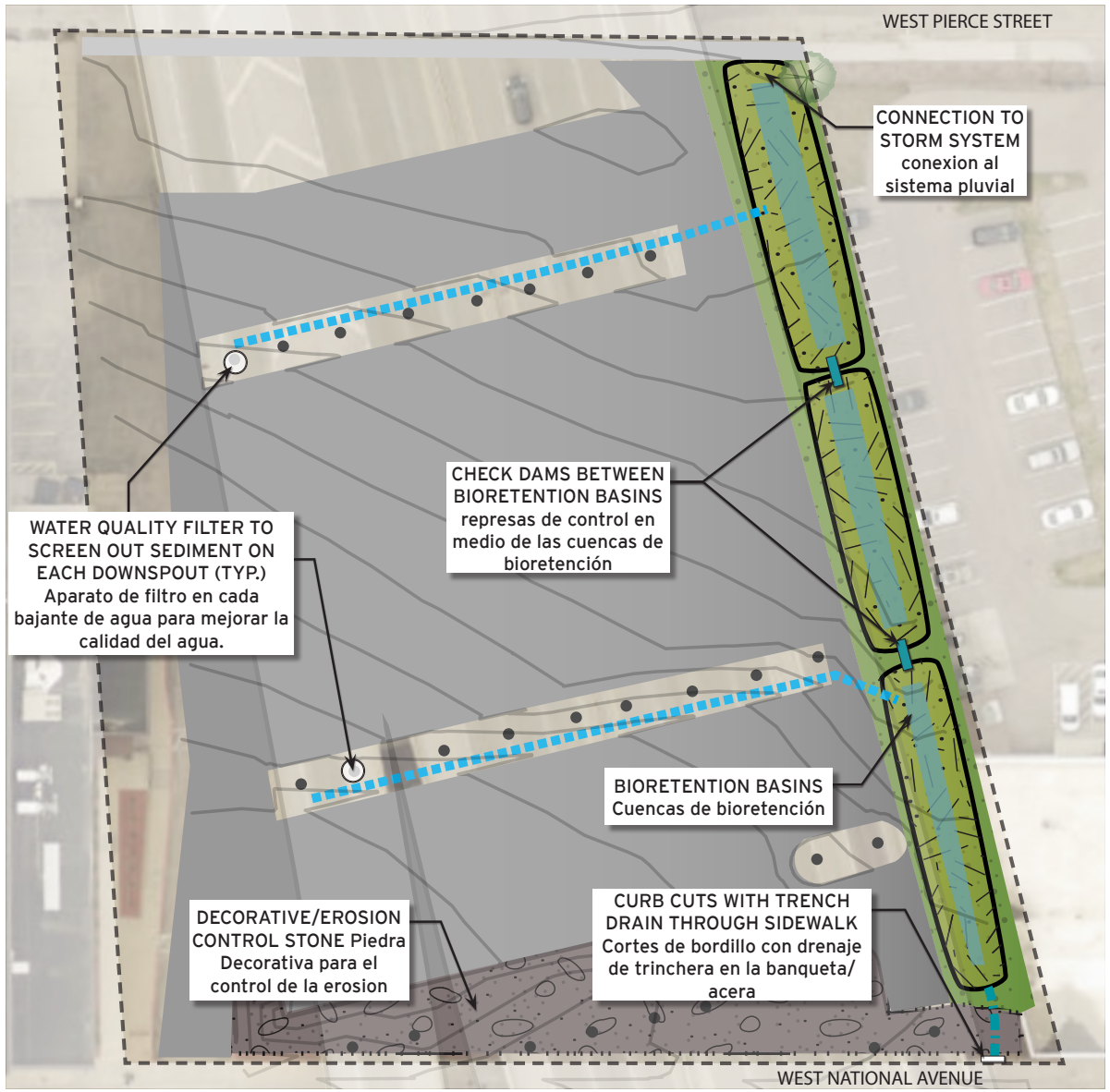



BOLLARDS & ACCESS CONTROL
Bolardos/control de acceso


DECORATIVE STONE Piedras Decorativas


COARSE EROSION CONTROL STONE
Piedra gruesa de biorretencion

IMPLEMENTATION ZONE 4
Zona de Implementación 4

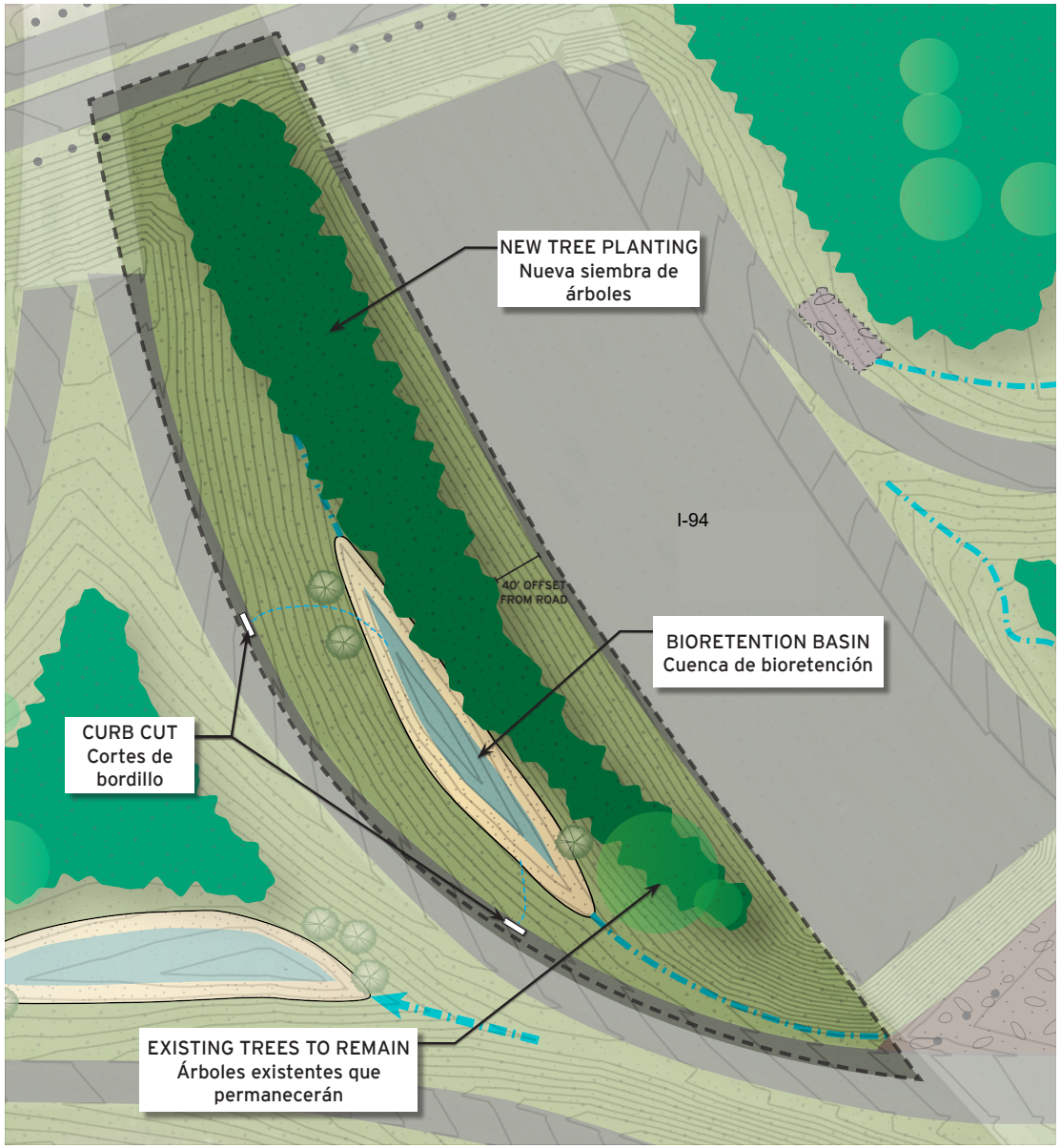



BIORETENTION BASIN Cuenca de bioretención


DECORATIVE/EROSION CONTROL STONE Piedras Decorativas para control de la erosion


CHECK DAMS represas de control


CURB CUTS WITH TRENCH DRAINS Cortes de bordillo con drenaje de trinchera en la banqueta/acera




ROADSIDE NEW TREE PLANTING
Nueva siembra de árboles al lado de las calles


CURB CUTS Cortes de bordillo


BIORETENTION BASIN Cuenca de bioretención


BIORETENTION BASIN Cuenca de bioretención

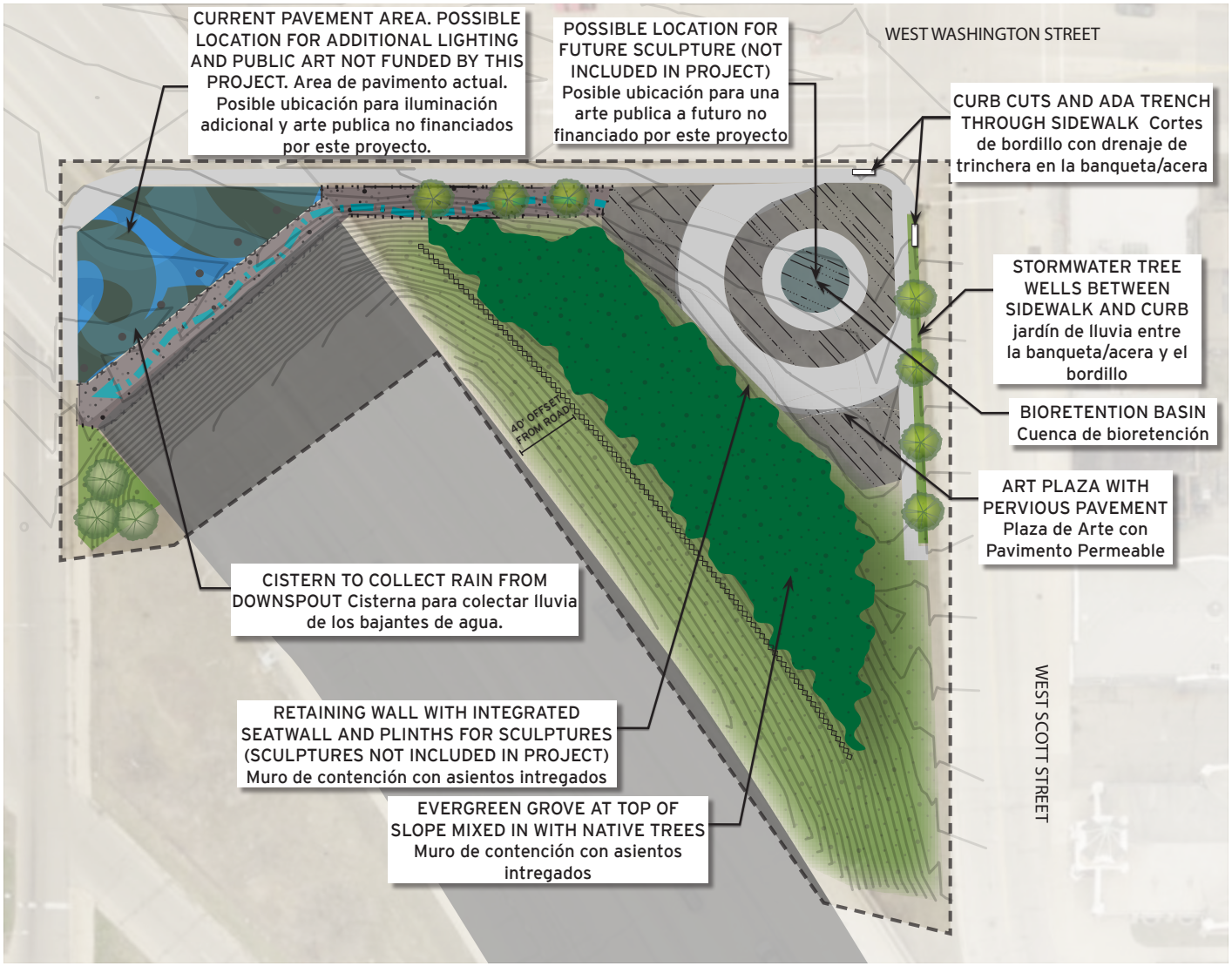

BIORETENTION BASIN Cuenca de bioretención


STONE CHANNELS canal de piedra


CURB CUTS Cortes de bordillo


ROADSIDE NEW TREE PLANTING Nueva plant-acion de árboles al lado de las calles


ROADSIDE NEW TREE PLANTING
Nueva siembra de árboles al lado de las calles



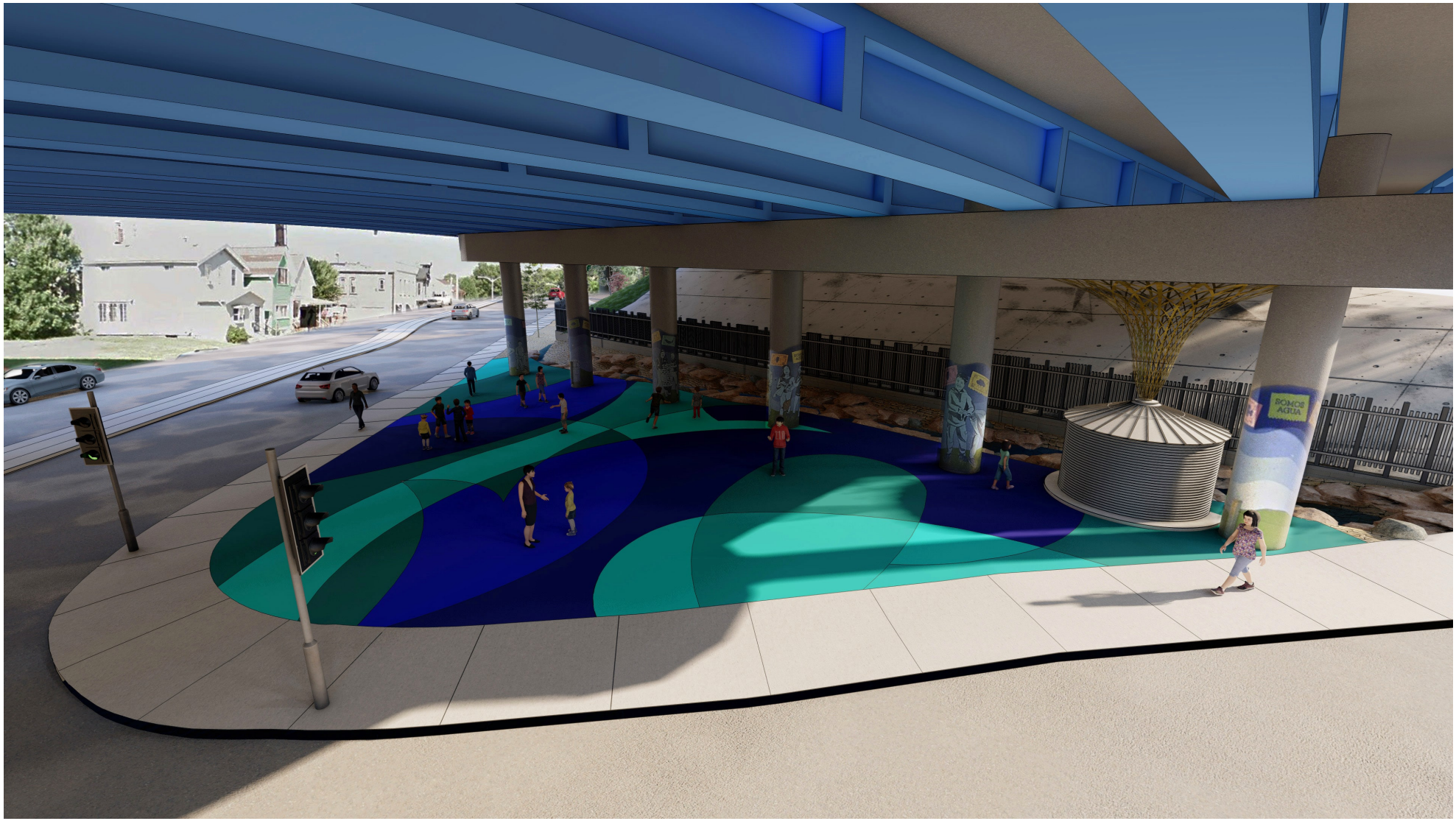

ART PLAZA & BIORETENTION BASIN
Plaza de Arte y cuenca de bioretención


PERMEABLE PAVERS adoquines permeables


PEDESTRIAN PATHS caminos peatonales


STORMWATER TREE WELLS jardín de lluvia

ZONE 11 CONCEPT RENDERING
Representación de la Zona 11



*GROUND MURAL/ARTWORK IS NOT INCLUDED IN PROJECT - El mural/arte del suelo no está incluido en el proyecto

ZONE 12 CONCEPT RENDERING
Representación de la Zona 12

*SCULPTURE AND PLINTH ARE NOT INCLUDED IN PROJECT - La escultura y el zocalo no están incluidos en el proyecto

ZONE 12 CONCEPT RENDERING
Representación de la Zona 12

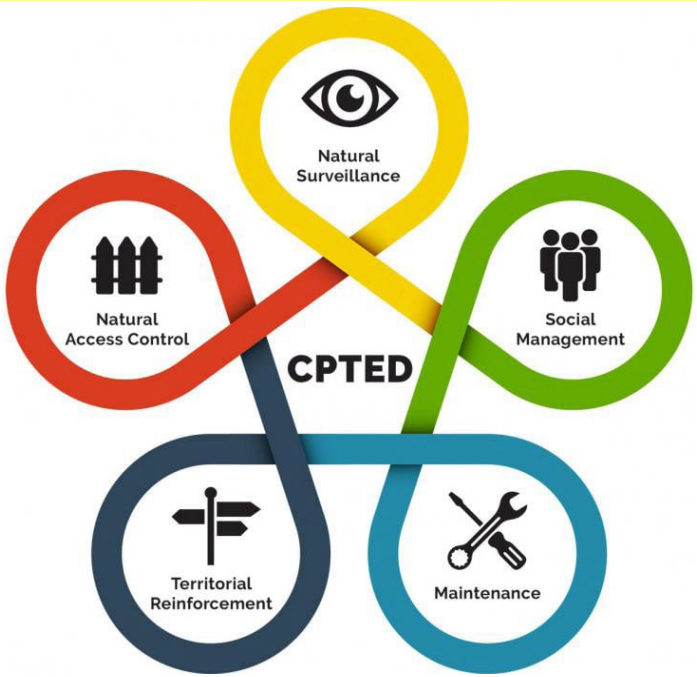
*SCULPTURE AND PLINTH ARE NOT INCLUDED IN PROJECT - La escultura y el zocalo no están incluidos en el proyecto

Crime Prevention Through Environmental Design (CPTED)

Prevencion del Delito a Traves del Diseño Ambiental (CPTED por sus siglas en Ingles)

INDIVIDUALS ARE LESS LIKELY TO ATTEMPT A CRIME IF THEY ARE AT RISK OF BEING SEEN. LIKEWISE, WE ARE LIKELY TO FEEL SAFER WHEN WE CAN SEE AND BE SEEN. ANY ARCHITECTURAL DESIGN THAT ENHANCES THE CHANCE OF BEING SEEN, IS A FORM OF NATURAL SURVEILLANCE.

Vigilancia Natural - Hay menor riesgo que las personas intenten cometer un delito si corren riesgo de ser vistos. Asimismo, es mas probable que nos sientamos seguros cuando tenemos mejor visibilidad y podemos ser vistos. Cualquier diseño arquitectonico que mejore la visibilidad, es una forma de vigilancia natural.



PART OF CREATING A CONTROLLED SPACE IS FOCUSING ON ENTRY AND EXIT POINTS INTO BUILDINGS, PARKS, PARKING LOTS, AND NEIGHBORHOODS.

Control de Acceso Natural - El crear un espacio controlado significa enforcarse en los puntos de entrada y salida de los edificios, parques, estacionamientos, y vecindades.

ACTIVITY FOSTERS COMMUNITY INTERACTION. CRIMINAL ACTS CAN BE DISCOURAGED IN PUBLIC SPACES WHEN WE ENCOURAGE ACTIVITIES IN THOSE SPACES BY RESIDENTS, VISITORS, AND OTHER LEGITIMATE USERS.

Gestión Social - Actividad fomenta la interaccion comunitaria. Los actos criminales pueden ser desalentados en las areas publicas cuando fomentamos actividades en esos espacios por residentes, visitantes, u otros usuarios legitimos.

THE USE OF PHYSICAL ATTRIBUTES TO CREATE DEFINED LINES BETWEEN OWNED AND PUBLIC SPACES, SUCH AS FENCES, SIGNAGE, LANDSCAPING, LIGHTING, ETC.

Refuerzo Territorial - El uso de atributos físicos para crear líneas definidas entre espacios propios y públicos, como cercas, señalización, paisajismos, iluminación, etc.

A WELL-MAINTAINED PROPERTY CREATES A SENSE OF TERRITORY FOR LEGITIMATE USERS OF THAT SPACE AND SHOWS THAT THE OWNER OR MANAGER CARES FOR AND WILL DEFEND THE PROPERTY AGAINST CRIME.

Mantenimiento - Una propiedad bien mantenida crea un sentido de territorio para los usuarios legítimos de ese espacio y muestra que el dueño o gerente cuida y defenderá la propiedad contra el crimen.

SURVEY QR CODE
Código QR Para Encuesta

SCAN ME
Escanéame

-DESIGN PHASE: MAY - DECEMBER 2023
-FASE DE DISEÑO: MAYO - DICIEMBRE 2023

-PUBLIC INFORMATION MEETING 2: DECEMBER 2023
-REUNIÓN DE INFORMACIÓN PÚBLICA 2: DICIEMBRE 2023

-CONSTRUCTION: 2024
-CONSTRUCCIÓN: 2024

COMMUNITY ASSISTANCE
PLANNING REPORT NO. 279

MILWAUKEE COUNTY TRANSIT SYSTEM DEVELOPMENT PLAN

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 279

MILWAUKEE COUNTY TRANSIT SYSTEM DEVELOPMENT PLAN

Prepared by the

Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, Wisconsin 53187-1607
www.sewrpc.org

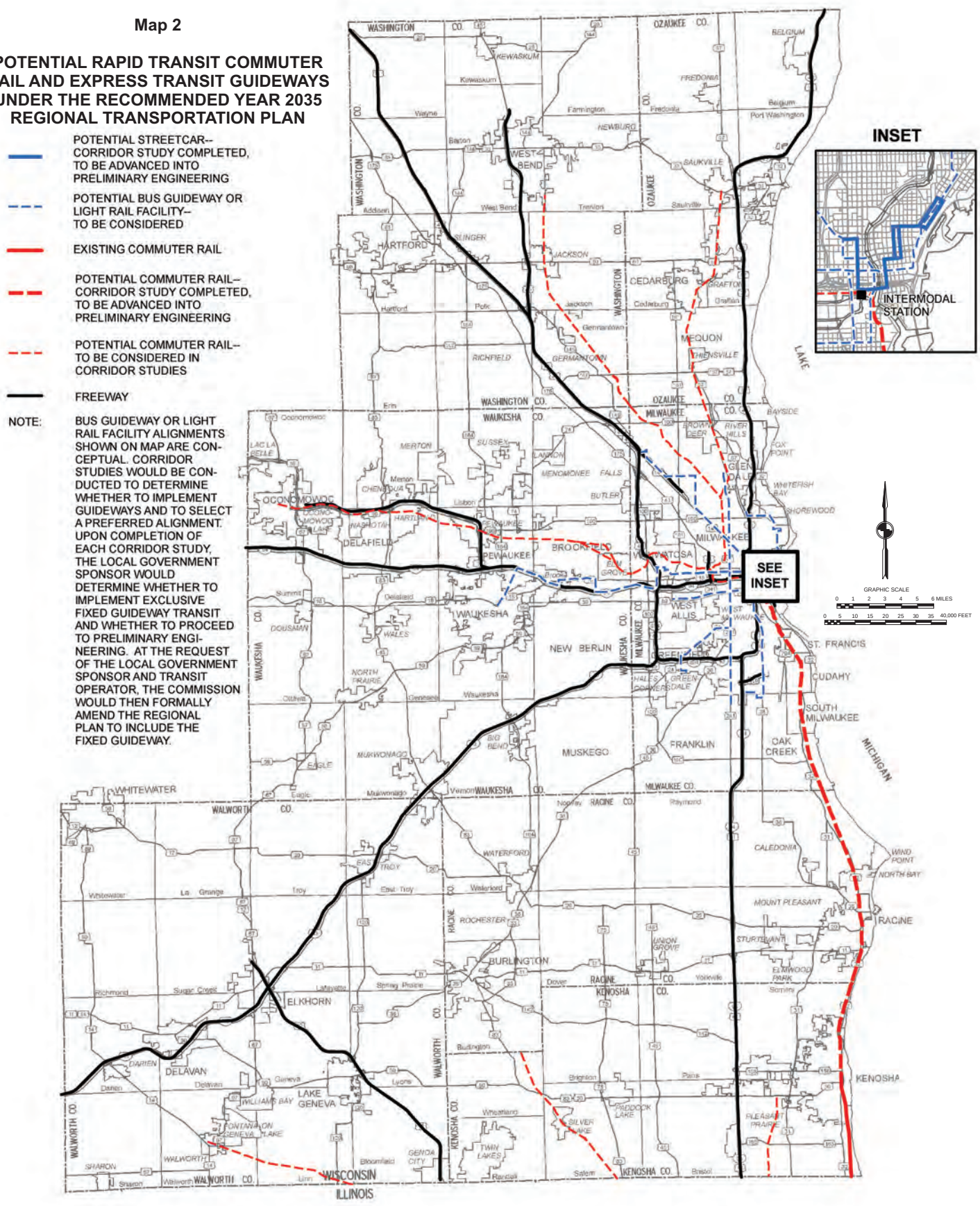
The preparation of this publication was financed in part through planning funds provided by the Wisconsin Department of Transportation and the U.S. Department of Transportation, Federal Transit Administration.

October 2010

$10.00

Map 2

POTENTIAL RAPID TRANSIT COMMUTER RAIL AND EXPRESS TRANSIT GUIDEWAYS UNDER THE RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN

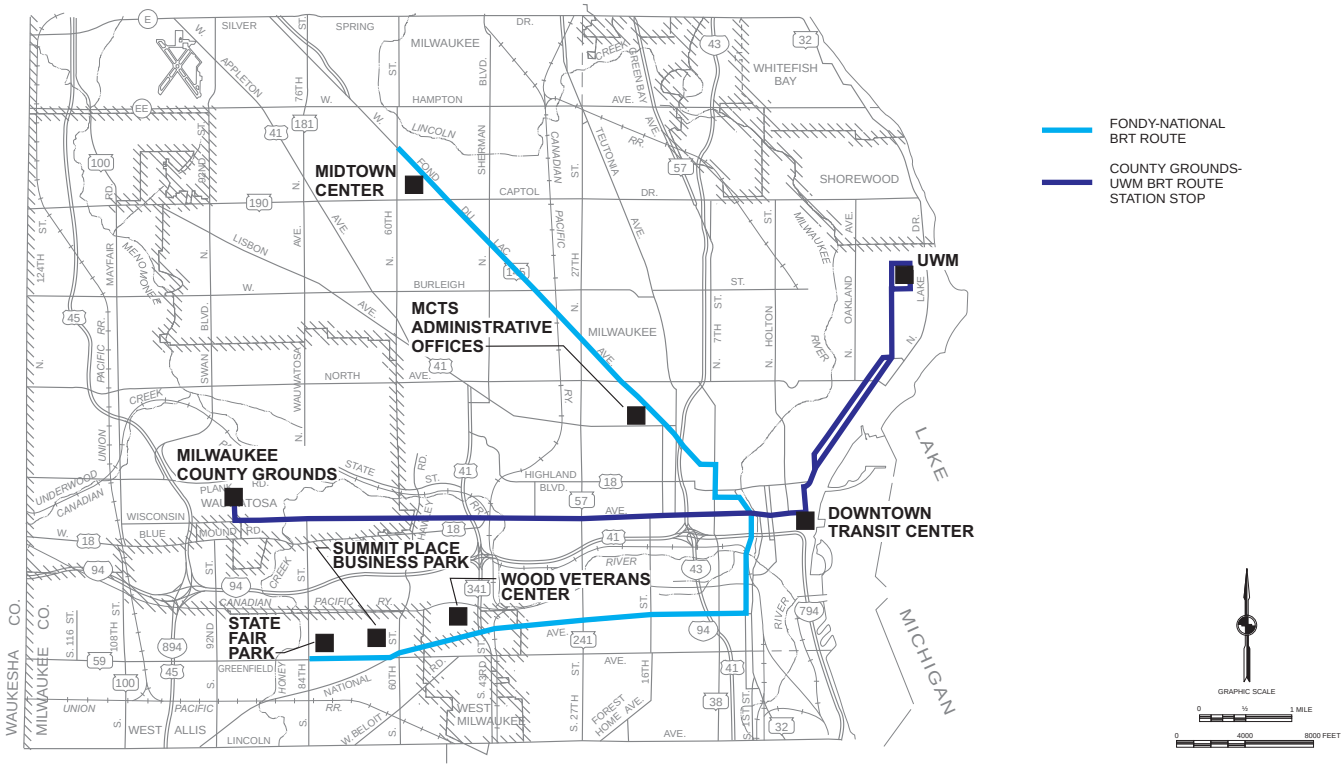


Source: SEWRPC.

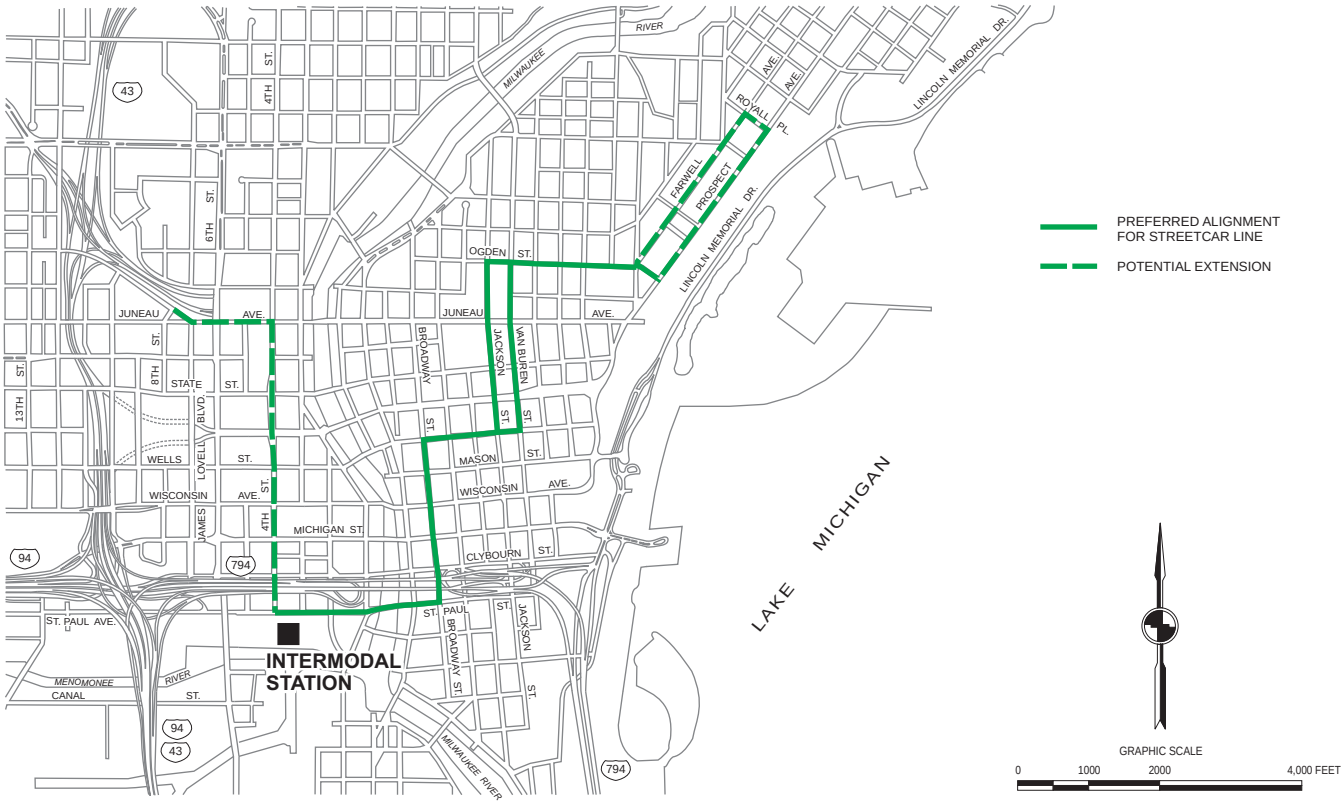
Map 4

POTENTIAL BUS RAPID TRANSIT (BRT) ROUTES AND STREETCAR LINE UNDER CONSIDERATION IN MILWAUKEE COUNTY

PROPOSED BUS RAPID TRANSIT LINES



PROPOSED STREETCAR LINE



Source: SEWRPC.

from the State general fund and used for funding transit. It was concluded that this funding source was not likely to be viable. The other proposal was to levy a 0.5 percent additional local sales tax for transit. The Commission concluded in the 2035 regional transportation system plan that a sales tax would be a necessary funding source to maintain and improve and expand transit service in southeastern Wisconsin. In November of 2008, an advisory referendum held in Milwaukee County passed approving a 1 percent County sales tax increase, which included an anticipated 0.5 percent sales tax for transit. Also in November of 2008, the former "temporary" and "limited authority" Southeastern Wisconsin Regional Transit Authority recommended that authority be given by the Wisconsin Legislature to enact up to a 0.5 percent sales tax for transit systems in southeastern Wisconsin. In the spring of 2009, Wisconsin Governor James Doyle proposed legislation during the preparation of the 2009-2011 State budget that would have created a regional transit authority in southeastern Wisconsin, with the authority to enact up to a 0.5 percent sales tax for transit. The State Legislature rejected the Governor's proposal, and proposed legislation for a Kenosha-Racine-Milwaukee (KRM) commuter rail authority and for a Milwaukee County transit authority. Governor Doyle vetoed the Milwaukee County transit authority, which would have permitted a 0.5 percent sales tax. In April of 2010, another attempt to pass State legislation to create a regional transit authority in southeastern Wisconsin was made, but the legislation was not passed by the State Legislature.

Comments Specific to the Alternative Transit Service Improvement Plans

A total of 90 comments were received on the transit service changes and improvements proposed under the alternative plans. These comments can be summarized as follows:

- Thirty-one comments expressed support for the improvement alternatives or specific service changes. The majority of these comments were in favor of the proposed new local routes and route extensions, the addition of express or bus rapid transit (BRT) routes, increases in service frequencies, and expanded service hours.
- Thirty-five comments suggesting additional routing and/or service changes or changes to fares and operating policies which were not included in the improvement alternatives including:
  - Twelve comments identifying/requesting changes for local bus routes including:
    - Reestablish Route No. 11 service over Vliet Street (two comments);
    - Change Route No. 18 to make the route branches more understandable to riders (one comment);
    - Extend Route No. 28 to provide service to the Village of Hales Corners and to Boerner Gardens in Whitnall Park (three comments);
    - Improve weekend service on Route No. 57 (one comment);
    - Extend service hours on the system on Fridays and Saturday nights, potentially until 3:00 or 3:30 a.m. with Route No. 10 specifically identified as needing longer weekend service hours (two comments); and
    - In designing routing changes, keep route lengths and running times to what operators can do without "cutting corners" (one comment).

    Response

    The comments and suggestions regarding additional local routing and/or service changes have been provided to the MCTS staff for consideration. Local bus service over Vliet Street was re-established in March 2009 when Milwaukee County Transit System Route No. 33 began operation. Many of the other suggested changes have been considered by the transit system in the past but did not meet warrants for transit service. Others could not be implemented within the transit system's constrained operating budget but could potentially be implemented in the future if additional funding is made available to the transit system. The County Board created the Transit Services Advisory Committee (TSAC) to advise the Milwaukee County Committee on Transportation, Public Works, and Transit on transit service issues. The TSAC would likely advise the County on the merits of the service changes identified above and in the other public comments should additional local funding become available.

- Thirteen comments on the proposed express bus services and BRT routes or stops including:
  - Use the express bus route alignments operated in the year 2000 (one comment);
  - Consider creating additional express bus routes over Route Nos. 15, 31, and 62 and to serve the Southridge Mall in the City of Greenfield and the Brookfield Square Shopping Center in the City of Brookfield (two comments);
  - Route the BRT service over Wisconsin Avenue in downtown Milwaukee and include a stop at Water Street and Wisconsin Avenue (one comment);
  - The BRT route should serve the Social Security Office at 6300 W. Fond du Lac Avenue and the Intermodal Transit Station in downtown Milwaukee (two comments);
  - Support was expressed for BRT service for the southern part of Milwaukee County (one comment);
  - Use bus shelters for BRT that do not obscure passenger views of approaching buses (one comment);
  - It may be possible to extend the service life of buses in the fleet by assigning buses to operate on an express route (one comment); and
  - Light rail transit service should be considered as an alternative to BRT service (four comments).

  Response

  The express bus alignments identified in the Alternative Improvement Plans were drawn from the routes previously operated by the MCTS between 1992 and 2002 including Route Nos. 1 (Metrolink Northwest Express) and 3 (Metrolink Bluemound Express). The express routes serve corridors with high ridership local routes and represent the services which have the best potential for implementation within the five-year planning period for the transit system development plan. The express routes represent an initial stage of a network of express routes serving Milwaukee and Waukesha Counties that have long been identified under the Commission's regional transportation system plans. Other express bus routes such as those suggested in the public comments can be advanced for implementation in the future.

  Comments on the routing, stops, and shelters for the Fondy-National BRT line have been provided to the Milwaukee County and transit system staff for consideration in refining the BRT service. The County has no intention at this time of converting the BRT service to light rail transit.

- Two comments specific to freeway flyer routes or service:
  - Consider creating a new freeway flyer route operating between the State Fair Park park-ride lot and new development along S. 27th Street in the City of Franklin including the new Northwestern Mutual Life campus and Wheaton Franciscan Healthcare (one comment); and
  - Consider providing freeway flyer service in the non-peak direction to serve reverse commute travel (one comment).

  Response

  The new Northwestern Mutual Life campus and Wheaton Franciscan Healthcare facility would not be expected to generate enough transit ridership to make a special freeway flyer route dedicated to those centers financially viable during the five year planning period. Instead, the alternative plans propose serving these centers with an extension of the express bus service to be operated over S. 27th Street.

  The transit system currently provides limited reverse commute service over several freeway flyer routes but this service attracts very little ridership. An expansion of freeway flyer service to provide for both traditional commuter and reverse-commute service is recommended under the Commission's adopted regional transportation system plan for the year 2035. In comparison to the other service improvements identified under the alternative improvement plans, expansion of reverse commute service was considered to have a low priority for the next five years.

– Four comments requesting changes to passenger fares:

  - A suggestion to operate the service improvements without charging users a fare for a trial period (one comment); and
  - Consider fares that provide incentives to ride such as deeply discounted passes and tickets, free ride days, a free ride zone in downtown Milwaukee (three comments).

  Response
  These suggestions have been incorporated into the final recommended transit system development plan which recommends that Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds be sought to offset the loss of revenues from such reduced and free fare initiatives.

– Six comments regarding transfers:

  – Maintaining or improving transfer connections should be considered in implementing the proposed service changes (two comments);
  – Consider extending the one-hour period that transfers can be used; one-hour is not long enough (two comments); and
  – Improve connections with transit services operated by adjacent counties and for passengers at the Intermodal Transit Station after 10:00 p.m. (two comments).

  Response
  Alternative Improvement Plans 1 and 2 both propose increasing service frequencies on the highest ridership routes in the system, reducing headways to no more than 10 minutes during peak periods and no more than 20 minutes during off-peak periods on weekdays, and to no more than 30 minutes on weekends. The increases in service frequency will reduce waiting times and improve the convenience of transferring between routes.

- A total of 13 comments were made opposing specific service changes. Ten of these comments opposed the BRT service due to elimination of all local bus service in the BRT corridors, the perception that travel times with the BRT service would increase due to the need to transfer to a connecting shuttle route at the end of the BRT line, and a perception that the long length of the BRT route would result in unreliable service. Two comments indicated that the alternative plans were not bold enough and should have proposed larger increases in service. One comment was made in opposition to equipping all buses with bicycle racks.

  Response
  Transit system ridership records indicate that 75 to 85 percent of all passenger boardings and alightings along the Fondy-National BRT alignment currently occur at bus stops that would be served by the proposed BRT line. While some passengers may need to transfer to connecting local and shuttle routes at the ends of the BRT line, efforts will be made to coordinate the schedules for the BRT line and shuttle services at the end of the line to keep transfer times low. Despite the long length of the proposed BRT route, the transit system anticipates it will be able to maintain schedules and provide reliable service through the use of traffic signal prioritization and automated vehicle location technologies.

  Alternative Improvement Plans 1 and 2 propose increases of 22 and 15 percent, respectively, over the 1.34 million annual revenue vehicle hours of service budgeted for the year 2008. These increases are both significant and achievable over the planning period.

  Strong support was expressed for installing bicycle racks on MCTS buses in the public comments received during the initial set of public informational meetings held in early 2007. In response to those comments, a project to purchase and install the bicycle racks was approved and completed by Milwaukee County in 2009.

- Eleven comments that expressed concerns over the negative impacts which some of the service changes could have on people with disabilities. These included seven concerned about the accessibility of the BRT

service and the impact of its wide stop spacing on riders using wheelchairs; two requesting that paratransit service be expanded along with fixed-route bus services and consideration be given to the accessibility needs of people with disabilities in implementing service improvements; one requesting that a weekly pass for disabled riders be offered by the transit system.

Response

All vehicles and stops/stations used in providing the BRT service will include features to make them accessible to people with disabilities. The wide stop spacing for the proposed express bus and BRT routes is essential to increasing operating speeds and reducing travel times over those for local bus service. The stops that will be retained are used by 75 percent or more of passengers along the existing local bus routes that will be affected. Disabled passengers who believe the wide stop spacing prevents them from using the express bus or BRT services can request paratransit service through the Transit Plus program. No significant changes are envisioned for the Transit Plus Program under the alternative improvement plans as the paratransit service area includes all of Milwaukee County and the current paratransit service hours cover the expanded service hours proposed for the bus system. The suggestion that the transit system offer a weekly pass for disabled riders has been incorporated into the final recommended transit system development plan.

RECOMMENDED SHORT-RANGE TRANSIT SERVICE PLAN

The public comments received on the alternative plans indicated strong support for making improvements to the MCTS. The final recommended short-range transit system development plan for the MCTS is based on the transit service improvements proposed under Alternative Improvement Plan 1, Extensive Service Expansion. This alternative plan was selected as the basis for the recommended plan as it proposed the broadest level of service improvement, about a 22 percent expansion of transit service over year 2010 levels. It would restore the service which was eliminated over the last several years returning systemwide service levels to about 1 percent below the year 2000 service level, and further improve the convenience and speed of transit service. To implement this plan, dedicated local funding such as the proposed 0.5 percent sales tax will be necessary. The recommended plan serves to identify the transit improvement and expansion which could occur in the short term—about a five-year period—upon enactment of dedicated local transit funding.

Proposed Service Changes

The recommended plan focuses on transit improvements that would restore service that was eliminated over the last several years, expanding access to transit service throughout more of Milwaukee County. It would also reduce travel times, making transit more competitive with travel by private automobile and increasing transit ridership. This would be accomplished by extending routes to unserved areas in Milwaukee County with significant population or employment concentrations; eliminating bus turn-back points so the same service level is provided over the entire lengths of each route including at the ends of the routes; expanding weekday and weekend service periods to provide for desirable hours of service on more routes; increasing the frequency of service to provide for desirable headway levels on more routes; and reducing transit travel times by adjusting Freeway Flyer service and by converting major local routes to express routes. The specific improvements to MCTS bus services that are recommended under the plan are identified below and in Table 53.

New Local Bus Routes and Adjust Alignments of Existing Local Bus Routes

To address the unmet needs for service in the far northern, western, and southern portions of the County, the plan proposes to extend or add several bus routes, restoring service that was eliminated over the last several years (see Map 57). The proposed changes to the local bus routes will provide:

- An east-west route to serve the commercial and office development along Brown Deer Road;
- Better transit service coverage in north-central and western Milwaukee County;
- An extension of local bus service to the Village of Hales Corners;
- An extension of local bus service to industrial and office parks in Franklin and Oak Creek;

FONDY-NATIONAL BUS RAPID TRANSIT PROJECT

January 2009

Milwaukee County is proposing to construct and have the MCTS operate a 12-mile long street-running Bus Rapid Transit (BRT) running over Fond du Lac Avenue, downtown streets, National Avenue, and Greenfield Avenue. This proposed transit improvement, called the, ***Fondy-National Bus Rapid Transit (BRT) Project***, will connect the Midtown Center at 60th Street and Capitol Drive to Downtown Milwaukee and continue through Downtown to operate over National and Greenfield Avenues to Wisconsin State Fair Park. The proposed BRT route is shown below and closely follows the alignment of express bus Route 18/23X shown in Map 2 of the second Newsletter for the Milwaukee County Transit System

The existing local bus routes serving the corridor along Fond du Lac, National, and Greenfield Avenues (e.g. Routes 23 and 18) make frequent stops every two or three blocks to accommodate passenger demand and carry approximately 15,000 passengers each weekday. The Fondy-National BRT project will feature stops spaced about 1/3 of a mile apart with no other underlying local bus service and would operate with 10-minute headways or better during peak-periods and 15-minute headways during the weekday off-peak.

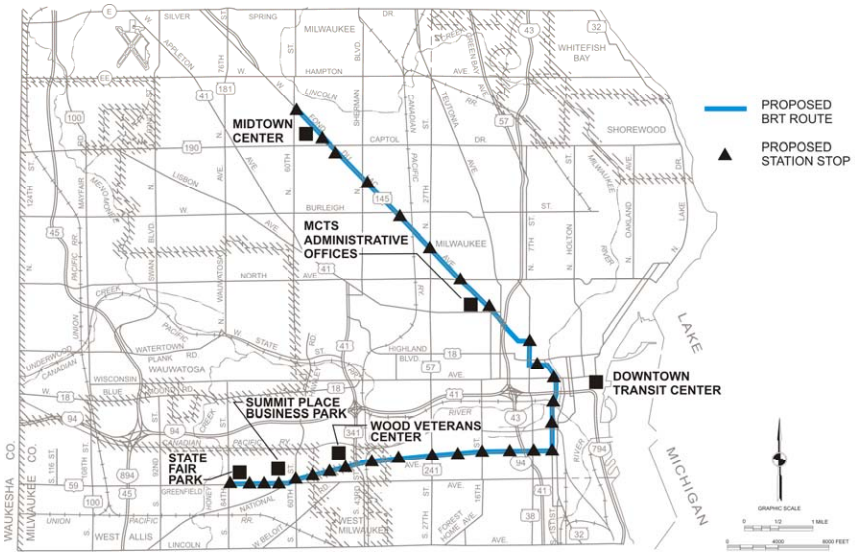
Every bus stop/station along the Fondy-National BRT line is proposed to include a shelter and "real-time" (next bus) passenger information displays. Traffic signal prioritization which will speed up the time to a green signal or reduce the time of a red signal whenever buses approach the intersection will also be considered. New buses will be used to provide the new BRT service and consideration will be given to using state-of-the art 60-foot buses. The vehicles will be equipped with new fare boxes that take a variety of fare forms, possibly including daily passes, weekly passes, monthly passes, credit cards, etc. The vehicles will also be equipped with wheel-chair ramps, bus stop announcements, security cameras, and bike racks.

The Fondy-National BRT service will provide much faster transit service with greatly improved passenger amenities in a more user-friendly environment for a large number of existing MCTS transit riders. The project is designed to achieve the following goals:

- Improve Mobility
- Reduce Travel Time to Down-town Milwaukee
- Attract Increased Ridership
- Enhance the Community and Local Economy
- Preserve and Protect the Environment

Other BRT projects across the nation have produced gains of over 20 percent in transit ridership for the respective systems. Similarly, the Fondy-National BRT Project is expected to generate increased ridership on, and attract new riders to, the MCTS. The County anticipates submitting a funding application to the FTA for the project in Spring 2009.

FONDY-NATIONAL BUS RAPID TRANSIT (BRT) PROJECT



FOR MORE INFORMATION

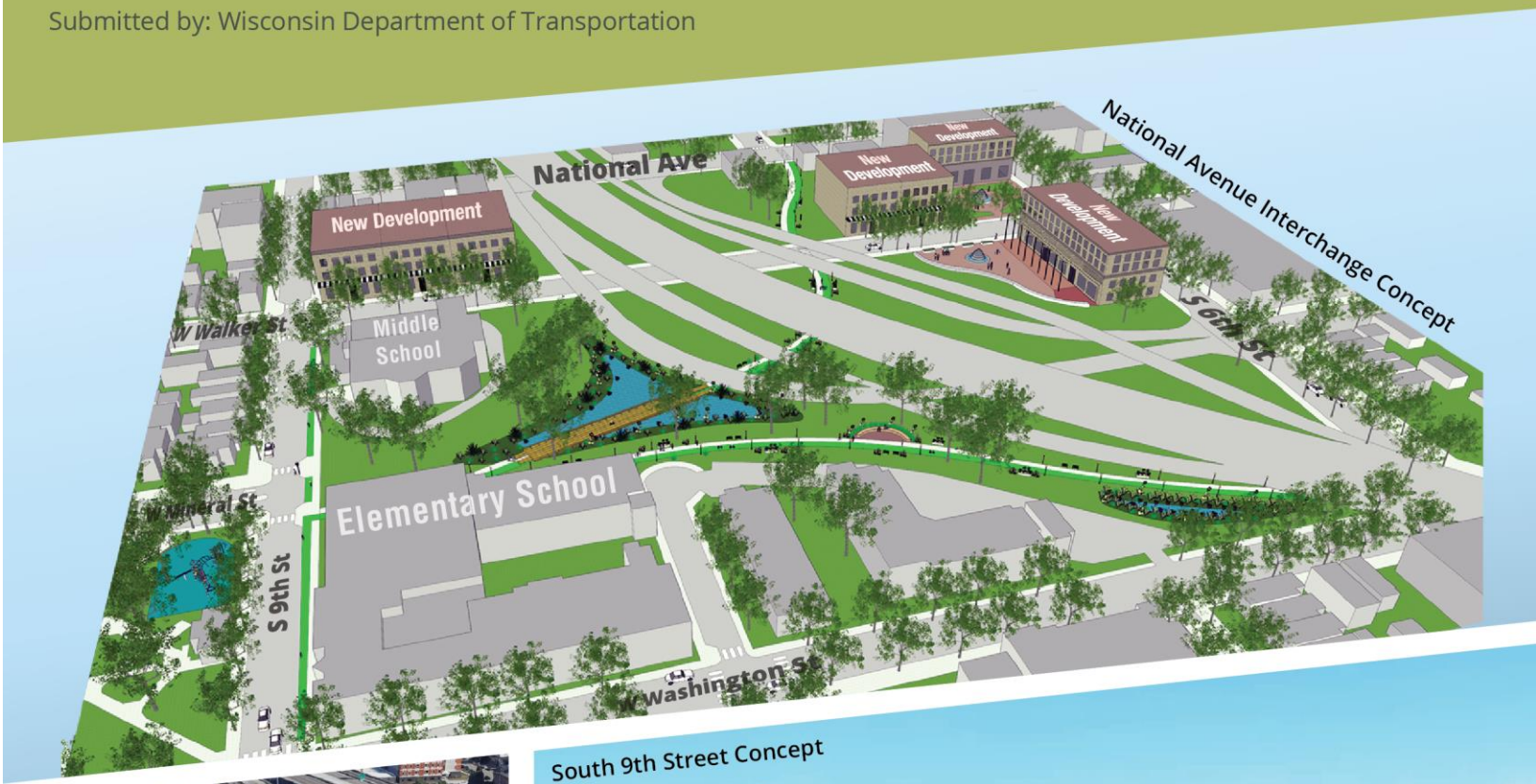
Website:www.sewrpc.org/milwcotdp
E-mail:milwcotdp@sewrpc.org
Phone(262) 547-6721
Fax:(262) 547-1103
Mail: P.O. Box 1607
W239 N1812 Rockwood Drive
Waukesha, WI 53187

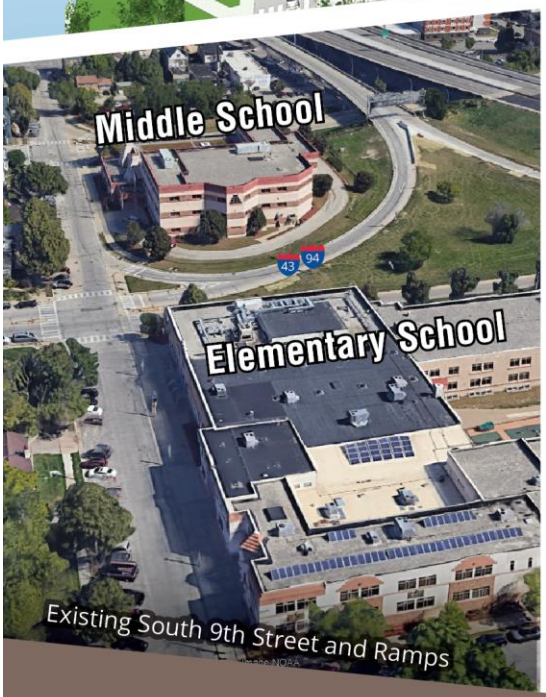
A mailing list has been developed of individuals and organizations interested in receiving summary information. If you would like to directly receive such materials in the future, please contact us.

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation

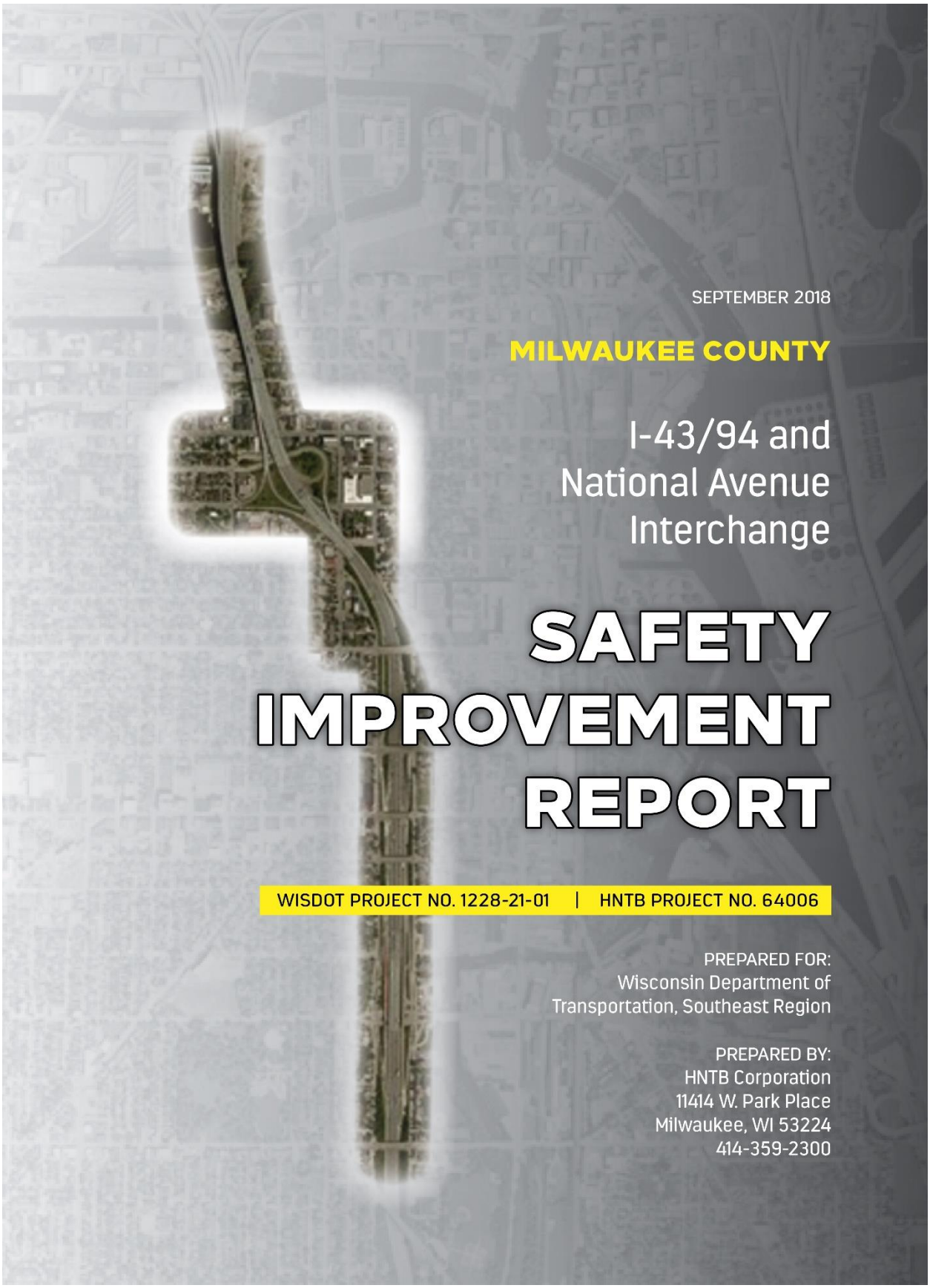




SUPPLEMENTAL ATTACHMENT 5:

2018 SAFETY REPORT

SEPTEMBER 28, 2023


SEPTEMBER 2018
MILWAUKEE COUNTY
I-43/94 and
National Avenue
Interchange
SAFETY
IMPROVEMENT
REPORT
WISDOT PROJECT NO. 1228-21-01 | HNTB PROJECT NO. 64006
PREPARED FOR:
Wisconsin Department of
Transportation, Southeast Region
PREPARED BY:
HNTB Corporation
11414 W. Park Place
Milwaukee, WI 53224
414-359-2300

I-43/94 and National Avenue Interchange Safety Improvement Report

Project ID 1228-21-01

Table of Contents:

List of Tables iii

List of Figures iv

List of Attachments v

1. Project Study & Findings Summary 1

   1.1 Interchange Summary 1

   1.2 Report Methodology 6

   1.3 Improvement Alternatives 7

   1.4 Report Findings and Recommendations 8

2. Existing Geometric and Structural Deficiencies 10

   2.1 Roadway Geometric Deficiencies 10

   2.2 Structural Deficiencies 11

3. Safety Analysis 12

   3.1 Freeway Mainline 12

   3.2 Freeway Ramps 15

   3.3 Ramp Terminal Intersections 16

4. Existing and Future No-build Traffic Operations 17

   4.1 Existing Traffic Operations 18

   4.2 Year 2027 No-build Traffic Operations 20

   4.3 Year 2050 No-build Traffic Operations 22

   4.4 Existing and No-build Traffic Operations Summary 24

5. Short Term Improvements - Freeway Restriping Alternatives 27

   5.1 I-43/94 Restriping Alternative 27

   5.2 Restriping Alternative + Improvements at Becher Street Entrance Ramp 31

6. Long Term Improvements - National Avenue Interchange Alternatives 35
6.1 Alt 1: U-Ramp Interchange at National Avenue 35
6.2 Alt 2: Split Diamond Interchange at National Avenue/Mineral Street 39
6.3 Alt 3: Traditional Diamond Interchange at Walker Street 44
6.4 Alt 4: Hybrid Diamond Interchange at National Avenue/6th Street 47
6.5 National Ave Alternatives Comparison 50

List of Tables

Table 3-1: Existing Crashes by Severity – I-43/94 Mainline 13
Table 3-2: Existing Crashes by Road Condition & Crash Type – I-43/94 Mainline 13
Table 3-3: Existing Crash Rates – I-43/94 Mainline 14
Table 3-4: Existing Crashes by Severity – I-43/94 Ramps 15
Table 3-5: Existing Crashes by Road Condition & Crash Type – I-43/94 Ramps 15
Table 3-6: Exiting Crashes by Severity – I-43/94 Ramp Terminal Intersections 16
Table 3-7: Existing Crashes by Road Condition & Crash Type – I-43/94 Ramp Terminal Intersections 16
Table 3-8: Existing Crash Rates – I-43/94 Ramp Terminal Intersections 16
Table 4-1. Level of Service Criteria – Freeways 18
Table 4-2. Level of Service Criteria – Intersections 18
Table 4-3: SB I-43/94 Existing Vissim Model Results 19
Table 4-4: Existing Intersection Level of Service 20
Table 4-5: SB I-43/94 2027 No Build Vissim Model Results 21
Table 4-6: 2027 No Build Intersection Level of Service 22
Table 4-7: SB I-43/94 2050 No Build Vissim Model Results 23
Table 4-8: 2050 No Build Intersection Level of Service 24
Table 5-1: 2027 Build Restriping Level of Service 29
Table 5-2: 2050 Build Restriping Alternative Level of Service 30
Table 5-3: 2027 Build Restriping + Becher Street Improvements Level of Service 32
Table 5-4: 2050 Build Restriping + Becher Street Improvements Level of Service 33
Table 6-1: 2050 Intersection Traffic Operations – U-Ramp Interchange 37
Table 6-2: 2050 Intersection Traffic Operation – Split Diamond Interchange 42
Table 6-3: 2050 Intersection Traffic Operations – Walker Diamond Interchange 46
Table 6-4: 2050 Intersection Traffic Operations – Modified Split Diamond Interchange 49
Table 6-5: AM Travel Time Comparsion for the Local Roads 53
Table 6-6: PM Travel Time Comparsion for the Local Roads 54

List of Figures

Figure 1-1: Plan view of I-43/94 Mainline Lanes 3
Figure 1-2 : I-43/94 and National Avenue Interchange Overview and Daily Traffic Volumes 4
Figure 1-3: Existing Crash Density for I-43/94 Mainline 5
Figure 1-4: Southbound I-43/94 Average Corridor Speed 6
Figure 4-1: Comparison of PM Peak Period Model Speeds 25
Figure 5-1: I-43/94 Restriping Alternative Overview 27
Figure 5-2: Proposed I-43/94 Cross Section A (at National Avenue) 28
Figure 5-3: Proposed I-43/94 Cross Section B (National to Lapham Weave) 28
Figure 5-4: Proposed I-43/94 Cross Section C (between Lapham Boulevard and Becher Street) 28
Figure 5-5 – Proposed Becher St Entrance Ramp Improvements 31
Figure 5-6: Comparison of Year 2027 PM Peak Period Speeds 33
Figure 6-1: Alternative 1 Overview 35
Figure 6-2: Alternative 1 PM Peak Period – National Ave/6th St EBR turn queue 38
Figure 6-3: Alternative 1 PM Peak Period – National Ave/East Ramp Terminal NB Queue 39
Figure 6-4: Alternative 2 Overview 40
Figure 6-5: Alternative 2 Option A Configuration for Mineral Street 41
Figure 6-6: Alternative 2 Option B Configuration for Mineral Street 42
Figure 6-7: Alternative 2 AM Peak - 9th and Walker Street Queues 43
Figure 6-8: Alternative 2 PM Peak - 6th and Mineral Street Queues 44
Figure 6-9: Alternative 3 Overview 45
Figure 6-10: Alternative 3 PM Peak - 6th and Walker Street Queues 47
Figure 6-11: Alternative 4 Overview 48
Figure 6-12: Alternative 4 PM Peak - 6th and Mineral Street Queues 50

List of Attachments

A. Overview Exhibit of Project Study Area
B. Conceptual Mainline Restriping Designs
C. Conceptual National Avenue Interchange Designs
D. Alternative Matrix
E. Traffic Safety Memorandum
F. Structural Memorandum
G. Environmental Screening Memorandum
H. Hazardous Material Memorandum
I. Utilities Memorandum
J. Geometric Deficiencies Memorandum
K. Drainage Assessment Memorandum
L. Traffic Forecasts
M. Travel Time Memorandum
N. Origin-Destination Reports (Freeway and Local Roads)
O. Vissim Validation and Result Tables
P. Traffic Operations – HCS Freeway Summary
Q. Signal Warrant Analysis
R. Vissim Peer Review
S. HCS Worksheets
T. Cost Estimates
U. ICE Report and Brainstorming Worksheets

1. Project Study & Findings Summary

The purpose of this project is to evaluate short-and long-term safety improvements to the I-43/94 mainline and National Avenue Interchange. Short term improvements are considered for southbound I-43/94 mainline. Long term improvements are considered for the National Avenue Interchange with year 2050 traffic evaluated for the interchange designs.

This report provides a high-level overview of the multidiscipline evaluation for the existing project corridor and the safety improvement alternatives. 21 supporting attachments accompany this report and provide in-depth analysis and project details in topics including: environmental screening, geometric deficiencies, drainage, utilities, hazardous material, structures, traffic, cost estimates, and design. The main body of this report focuses most extensively on the safety, design, and traffic operations of the existing conditions and alternatives with reference to the supporting work as needed.

1.1 Interchange Summary

The National Avenue Interchange at Interstate Highway 43/94 (I-43/94) is a full access service interchange located in Milwaukee, WI. The interchange is located one mile south of the Marquette Interchange (I-43/94/794 System Interchange). I-43/94 access at the National Avenue Interchange occurs along 6th and 9th Street south of National Avenue:

- 9th Street and Walker Street Intersection
    - Northbound I-43/94 Exit
    - Northbound I-43/94 Entrance
- 9th Street and Mineral Street Intersection
    - Southbound I-43/94 Exit
    - Southbound I-43/94 Entrance
- 6th Street and Mineral Street
    - Northbound I-43/94 Entrance
    - Southbound I-43/94 Exit

The intersections at 9th Street/Walker Street and 9th Street/Mineral Street are stop controlled, while the intersection at 6th Street/Mineral Street is signalized. The local road network is disconnected around the Interchange with Walker and Mineral Street having T-intersections at 6th and 9th Street. The predominant movements for the Interchange are traffic coming from the north and heading east (NE) and traffic from the east to heading north (EN) onto I-43/94. Roughly 40% of the traffic heading to the interchange is NE traffic and 44% of the traffic entering the freeway from the interchange is EN traffic. The interchange is unique with properties that surround it:

- United Community Center - northeast quadrant of 9th and Washington Street
- Bruce Guadalupe Middle School - along 9th Street between I-43/94 ramps at Mineral and Walker Street
- Bruce Guadalupe Elementary School – 9th Street south of Mineral Street.

- Various businesses along National Avenue between 9th and 6th Street.

Due to the location of the Guadalupe Elementary and Middle schools there is very high pedestrian traffic along 9th Street at the ramp terminal intersections at Mineral Street and Walker Street. The project traffic counts covering a 10-hour period counted the following pedestrians at 9th Street Intersections:

- 1340 pedestrian crossings at Mineral/9th Street
- 1100 pedestrian crossings at Washington/9th Street
- 355 pedestrian crossing at National/9th Street.
- 275 pedestrian crossings at Walker/9th Street

The Interchange surrounds a multimodal area with bike lanes, sidewalks, and transit routes. Transportation improvements in the area will need to consider the multimodal nature of the area. The City of Milwaukee bike plan[1] proposes bike lanes on Washington Street south of the Interchange and 6th Street along the eastern edge of the Interchange. Bus routes adjacent to the interchange include routes 19, 23, and Blue Line along National Avenue and route 80 along 6th Street. A detailed map of bus routes and stops is in Attachment G Environmental Screening Memo.

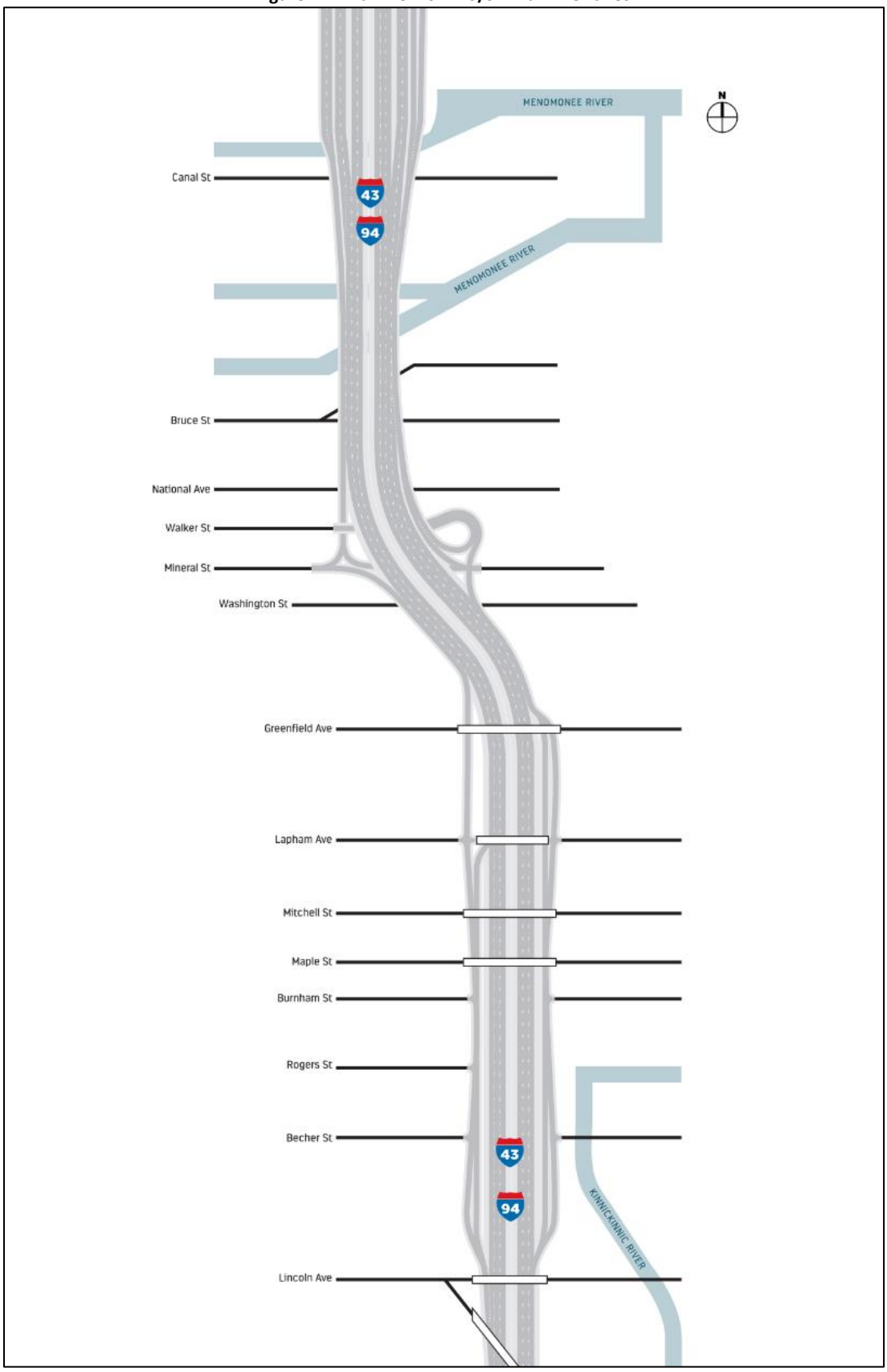
I-43/94 is an urban cross section freeway with six lanes of capacity (three in each direction) plus auxiliary lanes at:

- Southbound I-43/94 between the Marquette Interchange and National Avenue Interchange
- Southbound I-43/94 between National Avenue Interchange and Lapham Avenue Interchange
- Northbound I-43/94 between the collector-distributor (CD) entrance near Greenfield Avenue and the Marquette Interchange.

In addition to the freeway mainline, a CD road runs along I-43/94 in both directions of travel between Lapham and Becher Street Interchanges. A plan view of the I-43/94 mainline lanes are shown in Figure 1-1.

[1] Milwaukee Bike Plan for the National Avenue Interchange area: https://city.milwaukee.gov/ImageLibrary/Groups/cityBikePed/Milwaukee-by-Bike-Plan/MKE_Bike_Alder12.pdf

Figure 1-1: Plan view of I-43/94 Mainline Lanes



The area around the project corridor is a densely populated urban neighborhood with a high concentration of minority and low-income populations. Environmental justice and Title VI considerations will be required during subsequent project phases. For more details on the environmental considerations see Attachment G.

Figure 1-2 below shows the location of the interchange along with 2018 daily traffic volumes available through the WisDOT roadrunner website.

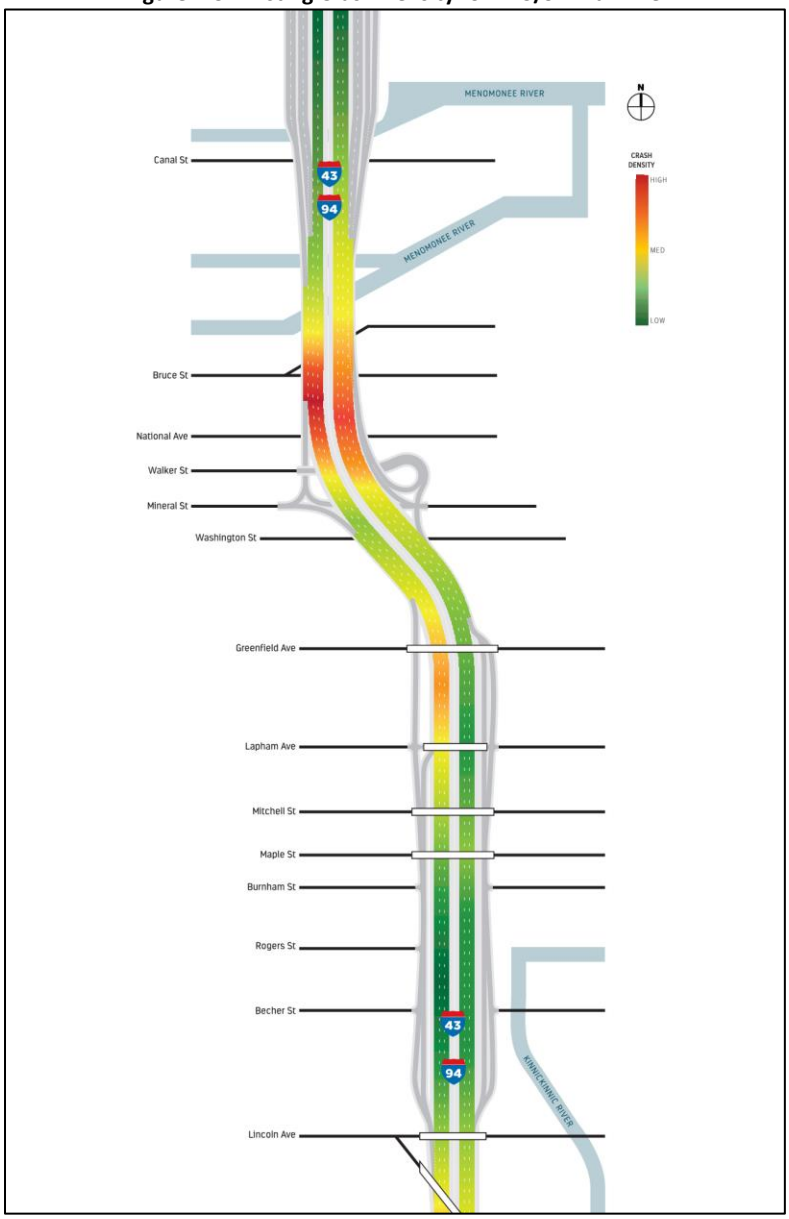
Figure 1-2 : I-43/94 and National Avenue Interchange Overview and Daily Traffic Volumes

From an operational standpoint, the National Avenue Interchange is acceptable at the ramps and ramp terminal intersections. However, the ramp geometrics, ramp proximity to the schools on 9th Street, and the high pedestrian activity presents safety concerns. An improved interchange design is desirable for the neighborhood to enhance pedestrian safety, improve local connectivity, and open land for development.

The I-43/94 mainline adjacent to the National Avenue Interchange has high crash rates. Southbound I-43/94 between the Marquette Interchange and Lapham Boulevard has a crash rate about 50% greater than the statewide average. The historical crash data suggests a high percentage of those crashes occur

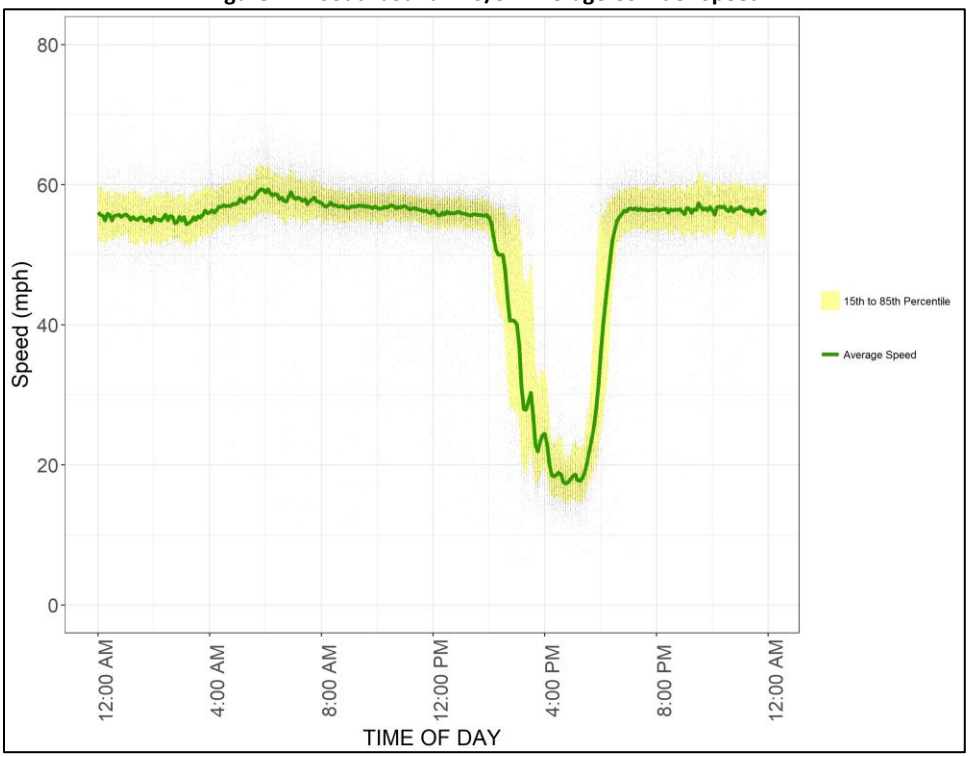
surrounding the SB Exit ramp to National Avenue Interchange (see crash density analysis in Figure 1-3). At this location the 4th mainline lane drops with the exit ramp. This location is the primary focus of the freeway short term improvements.

Figure 1-3: Existing Crash Density for I-43/94 Mainline



The I-43/94 mainline operations between the Marquette Interchange and Becher Street are undesirable, particularly in the southbound direction during the PM peak where there is reoccurring congestion spanning from 3 PM to 6 PM. The average corridor speed for SB I-43/94 between the Marquette Interchange and Becher Street as calculated from the NPMRDS (National Performance Management Research Data Set) is shown in Figure 1-4. As shown in the figure the average speeds through the project corridor dips below 20 mph between about 4 and 5:30 pm.

Figure 1-4: Southbound I-43/94 Average Corridor Speed



1.2 Report Methodology

This study evaluates the alternatives based on many factors including safety, traffic operations, constructability, and construction costs. The safety of the corridor is quantitatively analyzed for the existing condition using 5-years of historical crash data. The safety of the short term and long-term improvements are evaluated qualitatively using the existing crash data, traffic operation results, and design features for each alternative.

Freeway and local road operations are analyzed using Vissim microsimulation model. The freeway is also analyzed with HCS 7 Facilities software. The traffic analysis considers a 4-hour AM Peak (6-10AM) and 5-hour PM peak (2-7PM). The traffic volumes are developed from year 2017 project counts (Skycomp Aerial Imagery, Miovision turning movement counts, and ramp tube counts), and WisDOT ATR counts. The balanced counts are forecasted to year 2027 and 2050. The forecasts use the 2017 base counts and a uniform growth rate of 0.5%/year. The growth rate is based on WisDOT and SEWRPC coordination.

Both short-term and long-term conceptual designs use CADD software. All improvement alternatives have conceptual level cost estimates. The conceptual level designs include geometric and structural considerations. The report has 21 supporting attachments, including: overview exhibits, conceptual design plans, survey, utilities, supporting data tables amongst many other relevant and important pieces of information.

1.3 Improvement Alternatives

The report provides design, safety, and operational information for six improvement alternatives. The summary below includes a high-level scope of work for each alternative and the total project cost estimate (including delivery) in 2018 dollars. The design schematics are in Attachment B and the cost estimates are detailed in Attachment T.

1.3.1 Short Term Freeway Alternatives

- **Alternative 1: I 43/94 Restriping ($7.4M) –** Short Term Alternative 1 restripes SB I-43/94 to continue a 4th Southbound lane through the National Avenue Interchange to a location just past the Becher Street exit ramp after which the lane will drop and merge into a three-lane section; auxiliary lane between National Avenue Interchange and Lapham Interchange is maintained and becomes the 5th lane; expand SB I-43/94 mainline bridge over Washington street by 8 feet. The restriping reduces the lane widths to have 1- 12' foot lane and 3 – 11' foot lanes. In the narrowest section the inside shoulder is reduced to 2' and outside shoulder to 4'. Attachment B shows the plan view conceptual design for this alternative.
- **Alternative 2: Becher Street Entrance Ramp Improvements($1M) –**Short Term Alternative 2 restripes SB I-43/94 at the Becher Street entrance ramp to lengthen the acceleration lane by 1050' to a total length of 1600'. The restriping reduces the inside and outside shoulder widths from a total of 20-24' to 10-14' adjacent to the extended acceleration lane. This alternative also increases ramp meter storage on the CD road by relocating the ramp meter stop bar and widening the CD road by 10' along a 350' foot section. The widening has no bridge impacts. The additional storage capacity for the Becher Street entrance ramp allows for improved ramp meter operations. Attachment B shows the plan view conceptual design for this alternative.

1.3.2 Long Term - National Avenue Interchange Alternatives

- **Alternative 1: U-Ramp Interchange at National Avenue ($35.7M) –** Alternative 1 consolidates I-43/94 access to/from National Avenue via U-ramps and two ramp terminal intersections located between 9th and 6th Street. The west ramp terminal provides access to both the NB and SB I-43/94 entrance ramps. The east ramp terminal provides access to National Avenue from NB and SB I-43/94 exit ramps. The NB and SB exit ramps combine into a two-lane ramp approximately 230 feet south of National Avenue. The NB I-43/94 entrance ramp and SB exit ramp utilize U-ramps south of National Avenue passing under the Interstate between existing piers.
- **Alternative 2: Split Diamond Interchange at National Avenue/Mineral Street – ($20.2 – 21.1M)** Alternative 2 is a split diamond interchange with service ramps to/from the south at National Avenue and service ramps to/from the north at Mineral street. Mineral Street is extended beneath I-43/94 between 6th and 9th Street. The Mineral Street horizontal alignment was developed to avoid existing pier locations. There are two options for this alternative labeled as 2A and 2B. The only variation is the horizontal alignment on Mineral Street between 6th and 9th Street.

  - Option 2A minimizes the structural impacts to the existing NB I-43/94 exit ramp bridge and is estimated at $20.2 M.
  - Option 2B, offers a simpler and safer geometric configuration on Mineral Street but requires additional replacement of the existing NB I-43/94 exit ramp structure. Option B is estimated to cost $21.1 M.
- **Alternative 3: Traditional Diamond Interchange at Walker Street ($38.4M) -** Alternative 3 is a typical tight diamond interchange with I-43/94 service ramps at Walker Street. Walker street is extended beneath I-43/94 and provides a new connection between 6th St and 9th Street.
- **Alternative 4: Hybrid Diamond Interchange at National Avenue/6th Street ($20.7)** - Alternative 4 is a hybrid diamond interchange with service ramps to/from the north forming the west leg of Mineral Street/6th Street intersection and service ramps to/from the south at the new ramp terminals on National Avenue. The service ramps to/from the north follow the same alignment as the existing ramps they would replace. This configuration maintains ramp access at Mineral Street; removes all ramp access at 9th Street; and forms 2 new intersections on National Avenue between 6th and 9th Street.

1.4 Report Findings and Recommendations

This study reviews safety and operational needs for I-43/94 mainline and the National Avenue Interchange. Short term alternatives are evaluated for the I-43/94 mainline and long-term alternatives for the National Avenue Interchange.

The short-term improvement alternatives for the I-43/94 mainline include restriping and minor widening SB I-43/94 to accommodate a 4th lane through the National Avenue Interchange to Becher Street, while maintaining the auxiliary lane between National Avenue and Lapham Boulevard. The study concludes that this alternative provides safety benefits by reducing the required number of lane maneuvers in the weave between the Marquette Interchange and National Avenue Interchange. To maximize the safety and operational benefits this alternative is best paired with additional improvements at Becher Street. When these two improvements are coupled together the Level of Service is dramatically improved with LOS F in the No Build improving to LOS D. These improvements lead to travel time reductions of up to 10 minutes during the PM peak from the Marquette Interchange to Becher Street. Road user costs (RUC)[2] based on Vissim analysis for the 2027 Interim year indicates the combined Build Alternative 1 and 2 creates $9M in road user savings per year. These operational improvements create more stable travel speeds which have a direct impact on the corridor safety. The restriping alternative reduces lane widths and shoulder widths. According to predictive safety analysis software (ISATe) the reduction in lane widths from 12’ to 11’ feet has no measurable impact to the anticipated crash rate while the shoulder width reductions do impact safety. However, it is expected that the safety benefit from operational improvements and reduction of required weave lane maneuvers significantly outweigh the safety impact from reducing the shoulder widths.

[2] RUC calculation uses PM period (5 hours) VHT differences between No Build and Build (Alt 1 + Alt 2) and multiplies by value of time for cars ($18.84) and trucks ($31.40). The daily RUC is expanded to the year based on 247 days of PM congestion observed in the year 2017 NPMRDS travel time dataset.

Four long-term Interchange improvements are evaluated for National Avenue. The study reveals 2 of those alternatives to be most practical in comparison with the criteria of this study:

- Split Diamond Interchange at National Avenue/Mineral Street (Alternatives 2A and 2B), and
- Hybrid Diamond Interchange at National Avenue/6th Street (Alternative 4).

These alternatives each have their advantages and disadvantages but both offer distinct improvements over the existing Interchange design. Summary of these improvements are listed below.

Alternative 2 - Split Diamond Interchange at National Avenue/Mineral Street

- Vehicular Traffic – acceptable operations at ramp terminal intersection and local street network, minimal improvements are needed on the city streets outside the ramp terminal intersections.
- Pedestrian Safety – improved along 9th Street with direct ramp access removed at Walker and Mineral Street
- Vehicular Safety – improved with better ramp geometrics.
- Local connectivity – improved with consolidated ramp access at National Avenue and new Mineral Street connection.
- Developable Land
    - A small parcel along 9th Street north of the Bruce Guadalupe Middle School is vacated from the removal of the Walker Street ramp.
    - Land is vacated between the proposed NB exit ramp to National Avenue/7th Street and 6th Street.

Alternative 4 - Hybrid Diamond Interchange at National Avenue/6th Street

- Vehicular Traffic – acceptable operations, increased traffic movements at the 6th and Mineral Street Intersection due to the ramp removals at 9th Street need to be managed, improvements likely needed at 6th/National to efficiently route traffic
- Pedestrian Safety – improved near the elementary and middle school with all ramp access removed to 9th Street, this leads to less vehicular traffic on 9th Street which has high pedestrian traffic
- Vehicular Safety – improved geometrics for 3 of 4 ramps, the southbound exit ramp maintains a configuration like existing conditions
- Local Connectivity – some improvement with relocating ramps to National Avenue and consolidating ramp movements at 6th/Mineral
- Developable Land-
    - Closure of the Walker Street and Mineral Street ramps at 9th Street vacates land north and south of the Bruce Guadalupe Middle School, this creates open space between the middle school and elementary school which is more available land compared to alternative 2
    - Land is vacated between the proposed NB exit ramp to National Avenue/7th Street and 6th Street which is comparable to alternative 2

2. Existing Geometric and Structural Deficiencies

This section presents the existing roadway geometric and structural deficiencies at the National Avenue Interchange and on I-43/94 mainline between the Marquette Interchange and Becher Street.

2.1 Roadway Geometric Deficiencies

Because the I-43/94 Mainline Freeway and National Avenue interchange were designed more than 50 years ago, there are several roadway deficiencies when compared to existing design standards. All roadway deficiencies identified in this section do not meet the WisDOT FDM standards, including minimum standards, if applicable. See Attachment J for the Geometric Deficiencies Overview.

2.1.1 I-43/94 Freeway

The following are the existing I-43/94 freeway roadway deficiencies:

- Paved inside shoulder is 2’ wide – 12’ paved required
- Paved outside shoulder varies from 2’ wide to 11.5’ wide – 12’ paved required
- Vertical clearance of W. Greenfield Avenue over freeway, B-40-170, is 15.57’, 16’4” minimum and 16’9” desirable
- Vertical clearance of W. Mitchell Avenue over freeway, B-40-172, is 15.0’, 16’4” minimum, 16’-9” desirable
- Vertical Clearance of W. Lincoln Avenue over freeway, B-40-178, is 14.95’, 16’4” minimum, 16’9” desirable
- Sag and vertical curve stopping sight distance (SSD) deficiencies at 10 locations in the corridor

2.1.2 National Avenue Interchange Ramps

The section below summaries the design deficiencies of the National Avenue Interchange ramps. The K-value mentioned below is defined as the rate of vertical curvature. Designing to the appropriate K-value based on the design speed ensures adequate stopping sight distance (SSD). Additional deficiencies are listed based on the horizontal geometry.

<u>Northbound Entrance ramp from Walker Street</u>

- Sag vertical curve has K-value of 36 and meets 25 mph minimum category 3 for SSD minimum; 30 mph Category 3 SSD is required
- Does not meet horizontal geometry standards for the 3 loop curves

<u>Northbound Exit Ramp to Walker Street</u>

- Sag vertical curve has K-value of 41 and meets 30 mph minimum Category 3 for SSD minimum; 40 mph category 3 SSD is required
- Does not meet horizontal geometry standards for 3 curves

Northbound Entrance Ramp from Mineral Street

- Sag vertical curve has K-value of 33 meets 25 mph minimum category 3 for SSD minimum, 40 mph category 3 SSD required
- Does not meet horizontal geometry standards for 2 curves

Southbound Exit Ramp to Mineral Street Eastbound

- Sag vertical curve has K-value of 23 does not meet 25 mph minimum category 3 for SSD minimum, 40 mph category 3 SSD required
- Does not meet horizontal geometry standards for 2 curves

Southbound Entrance Ramp from Mineral Street

- Sag vertical curve has K-value of 40 meets 30 mph minimum Category 3 for SSD minimum, 40 mph Category 3 SSD required
- Crest vertical curve has K-value of 39 meets 30 mph minimum Category 3 for SSD minimum, 50 mph category 3 SSD required

Southbound Exit to Mineral Street Westbound

- Does not meet horizontal geometry standards for 3 curves and 1 loop curve

2.2 Structural Deficiencies

The following bridges all have HS 18 inventory ratings, (HS20 minimum), and are proposed to be modified as part of discussed alternatives indicated in Section 6 of this report:

- B-40-285-27A
- B-40-286-21
- B-40-286-24A
- B-40-286-26

See Attachment F, Structural Memorandum, for additional information.

3. Safety Analysis

This section presents the existing safety analysis along I-43/94 mainline between the Marquette Interchange and Becher Street, and National Avenue Interchange ramps and ramp terminals. The Wisconsin Department of Transportation (WisDOT) provided crash data over a five-year period from 2010-2012 & 2015-2016. Years 2013 and 2014 were not used because of bridge rehab and resurfacing work on I-43/94. The analysis does not include deer, other animals, and other erroneous crash data. This chapter summarizes the data by crash severity, crash types, road conditions, and crash rates.

The crash severity listed in the section is defined as:

- K – Fatal Injury
- A – Suspected Serious Injury
- B – Suspected Minor Injury
- C – Possible Injury
- PD – Property Damage only, No injury

For additional details on the crash analysis and for additional topics not covered in this report see the Safety Memorandum in Attachment E. This memorandum covers an extended study area, evaluates alcohol related crashes, and contains a case study for safety benefits of the freeway restriping alternative.

3.1 Freeway Mainline

Table 3-1, Table 3-2, and Table 3-3 below show the existing crashes by severity, road condition, crash type and crash rate along the I-43/94 mainline between the Marquette Interchange and Becher Street during the five-year period 2010-2012 & 2015-2016. Existing volumes (AADT) are from counts on the WisDOT TOPS website[3] from most recent available year within the 2010-2012 & 2015-2016 period. Crash severities and rates were calculated for roadway segments relative to I-43/94 interchange cross streets.

Table 3-1 shows that a total of 654 crashes occurred from 2010-2012 & 2015-2016 along the I-43/94 mainline between the Marquette Interchange and Becher Street, including 150 injury crashes but no fatal crashes. Approximately half of the recorded crashes occur between National Avenue and the Marquette System Interchange.

[3] https://transportal.cee.wisc.edu/products/hourly-traffic-data/bysiteid/milwaukee.html, November 2017

Table 3-1: Existing Crashes by Severity – I-43/94 Mainline

Segment	Segment Length		Existing Volume	Crash Severity					
				K	Injury			PD	Total
	ft	mi	AADT		A	B	C		
I-43 NB - Becher to Lapham	4,100	0.78	63,500	0	1	2	11	38	52
I-43 NB - Lapham to National	3,700	0.70	69,700	0	1	4	14	58	77
I-43 NB - National to Marquette	4,600	0.87	71,300	0	2	8	31	115	156
I-43 SB - Marquette to National	4,600	0.87	73,600	0	2	4	27	136	169
I-43 SB - National to Lapham	3,700	0.70	71,000	0	1	4	22	107	134
I-43 SB - Lapham to Becher	4,100	0.78	69,800	0	0	3	13	50	66
Totals				0	7	25	118	504	654

Table 3-2 shows about 32% of crashes along the I-43/94 mainline between the Marquette Interchange and Becher Street occurred during wet or ice/snow conditions. In addition, about 35% of the crashes were single vehicle crashes and 36% were rear-end crashes from 2010-2012 & 2015-2016.

Table 3-2: Existing Crashes by Road Condition & Crash Type – I-43/94 Mainline

Segment	Road Condition			Crash Type			
	Dry	Wet	Ice/Snow	Single Vehicle	Rear-end	Sideswipe	Angle
I-43 NB - Becher to Lapham	36	7	9	23	17	12	0
I-43 NB - Lapham to National	53	18	6	36	18	20	3
I-43 NB - National to Marquette	99	38	19	70	42	36	8
I-43 SB - Marquette to National	110	35	24	45	64	51	9
I-43 SB - National to Lapham	89	29	16	42	53	31	8
I-43 SB - Lapham to Becher	57	5	4	14	42	9	1

Between National Avenue and the Marquette System Interchange, 115 crashes involved a single vehicle. Typically, single vehicle accidents with dry pavement conditions involve the median barrier. In this roadway section, the median barrier is approximately 4 feet from the travel lane.

Table 3-3: Existing Crash Rates – I-43/94 Mainline

Segment	Existing Volume (AADT)	Average Annual Crash Rate (Crashes/100M VMT)		Comparison with Statewide Crash Rate & Upper Control Limits			
		2010-2012 & 2015-2016		2012-2016			
		KAB	Total	KAB	KAB UCL	Total	Total UCL
I-43 NB - Becher to Lapham	63,500	3.3	57.5	43%	31%	56%	51%
I-43 NB - Lapham to National	69,700	5.6	86.5	72%	52%	85%	77%
I-43 NB - National to Marquette	71,300	8.8	137.8	113%	85%	135%	124%
I-43 SB - Marquette to National	73,600	5.1	144.6	66%	49%	142%	130%
I-43 SB - National to Lapham	71,000	5.5	147.7	71%	51%	145%	131%
I-43 SB - Lapham to Becher	69,800	3	66.4	39%	28%	65%	59%

The Wisconsin statewide average total crash rate from 2012-2016 is 102 crashes per 100 million vehicle-miles traveled (100M VMT) for a freeway segment. Table 3-3 compares the project crash rates to the statewide averages and the statewide Upper Control Limit (UCL). The UCL is defined as one standard deviation above the average crash rate. Approximately, 25% of roadway segments have a crash rate above the UCL. Half of the I-43/94 mainline segments between the Marquette Interchange and Becher Street are above the statewide average for total crashes. The Wisconsin statewide average fatal and injury (KAB) crash rate from 2012 to 2016 is 7.8 KAB crashes per 100M VMT.

Table 3-3 shows that the northbound segment between the Marquette Interchange and National Avenue is above the statewide average KAB crash rate. The highest total crash rates occur along the I-43/94 southbound mainline between the Marquette Interchange and Lapham Blvd. This section of roadway is the target improvement area for the short-term freeway alternatives.

3.2 Freeway Ramps

Table 3-4 and Table 3-5 below show the existing crashes by severity, road condition, and crash type along the I-43/94 ramps in the project study area during the five-year period from 2010-2012 & 2015-2016. Existing volumes (AADT) are from counts on the WisDOT TOPS website from most recent available year within the 2010-2012 & 2015-2016 period.

Table 3-4: Existing Crashes by Severity – I-43/94 Ramps

Ramps	Existing Volume (AADT)	Crash Severity					
			Injury				
		K	A	B	C	PD	Total
I-43 NB off ramp to Walker/9th Street	4,800	0	0	1	0	2	3
I-43 NB on ramp from Mineral/6th Street	4,700	0	0	0	0	1	1
I-43 NB on ramp from Walker/9th Street	2,200	0	0	0	0	0	0
I-43 SB off ramp to Mineral/6th Street	5,200	1	0	0	1	1	3
I-43 SB off ramp to Mineral/9th Street	4,100	0	0	0	0	0	0
I-43 SB on ramp from Mineral/9th Street	3,200	0	0	0	0	0	0
Totals		1	0	1	1	4	7

Table 3-4 shows that a total of 7 crashes occurred from 2010-2012 & 2015-2016 along the IH 43/94 ramps in the project study area, including one fatality and 2 injury crashes. The fatality crash occurred on the I-43/94 southbound exit ramp to Mineral Street/6th Street, it was a single vehicle crash where the driver was negotiating the curve and driving too fast for conditions and was under the influence of alcohol.

Table 3-5: Existing Crashes by Road Condition & Crash Type – I-43/94 Ramps

Ramps	Road Condition			Crash Type			
	Dry	Wet	Ice/ Snow	Single Vehicle	Rear-end	Sideswipe	Angle
I-43 NB off ramp to Walker/9th Street	2	1	0	3	0	0	0
I-43 NB on ramp from Mineral/6th Street	0	1	0	0	1	0	0
I-43 NB on ramp from Walker/9th Street	0	0	0	0	0	0	0
I-43 SB off ramp to Mineral/6th Street	3	0	0	2	0	1	0
I-43 SB off ramp to Mineral/9th Street	0	0	0	0	0	0	0
I-43 SB on ramp from Mineral/9th Street	0	0	0	0	0	0	0

Table 3-5 shows that 2 of the 7 crashes (29%) along the I-43/94 ramps in the study area occurred during wet or ice/snow conditions. In addition, 5 of the 7 crashes (71%) were single vehicle crashes and 1 crash was a sideswipe crash.

3.3 Ramp Terminal Intersections

Table 3-6, Table 3-7, and Table 3-8 below show the existing crashes by severity, road condition, crash type, and crash rate at the I-43/94 ramp terminal intersections in the project study area during the five-year period from 2010-2012 & 2015-2016. Existing volumes (AADT) are from counts on the WisDOT TOPS website from most recent available year within the 2010-2012 & 2015-2016 period.

Table 3-6: Exiting Crashes by Severity – I-43/94 Ramp Terminal Intersections

Intersections	Existing Volume (AADT)	Crash Severity					
			Injury			PD	Total
		K	A	B	C		
Mineral & 6th Street	19,500	0	0	4	3	30	37
Walker & 9th Street	8,750	0	0	2	1	6	9
Mineral & 9th Street	8,650	0	0	0	0	2	2

Table 3-6 shows that a total of 48 crashes occurred between 2010-2012 & 2015-2016 at the I-43/94 ramp terminal intersections in the project study area, including zero fatalities and 10 injury crashes.

Table 3-7: Existing Crashes by Road Condition & Crash Type – I-43/94 Ramp Terminal Intersections

Intersections	Road Condition			Crash Type			
	Dry	Wet	Ice/Snow	Single Vehicle	Rear-end	Sideswipe	Angle
Mineral & 6th Street	30	7	0	2	5	5	25
Walker & 9th Street	9	0	0	4	3	1	1
Mineral & 9th Street	2	0	0	0	0	0	2

Table 3-7 shows that 7 of the 48 crashes (15%) at the ramp terminal intersections occurred during wet or ice/snow conditions. In addition, 28 of the 48 crashes (58%) were angle crashes and 8 crashes were rear-end crashes (17%).

Table 3-8: Existing Crash Rates – I-43/94 Ramp Terminal Intersections

Intersections	Existing Volume (AADT)	Average Annual Crash Rate (Crashes/1M EV)			
		Fatal	Injury	PD	Total
Mineral & 6th Street	19,500	0.0	0.2	0.8	1
Walker & 9th Street	8,750	0.0	0.2	0.4	0.6
Mineral & 9th Street	8,650	0.0	0	0.1	0.1

Table 3-8 shows that all the I-43/94 ramp terminal intersections in the project study area have average annual crash rates equal to or below one crash per one million entering vehicles (1M EV).

4. Existing and Future No-build Traffic Operations

This section presents the existing (2017), and future 2050 no build traffic operations for the National Avenue Interchange intersections and I-43/94 mainline; plus Interim (2027) analysis for the I-43/93 freeway mainline. The analysis uses Vissim microsimulaion software for both the freeway and intersection operations. Vissim freeway analysis results are compared to HCS analysis using the HCS 7 Facilities software. The HCS 7 analysis is in Attachment Q.

The base year traffic volumes are from traffic counts taken in 2017. The analysis covers multi-hour periods with the AM period covering 6 to 10 AM and the PM period covering 2 to 7 PM.

The ramp terminal and local road intersection traffic operations analysis presents level-of-service (LOS) conditions by intersection. The locations included in this report includes intersection along the box of National Avenue on the north, Washington Avenue on the south, 9th Street on the west, and 6th Street on the east. Additional details of the intersection analysis including more locations surrounding the corridor and operational details by turning movement are in Attachment P. The freeway operations analysis presents LOS conditions by segment type defined by Highway Capacity Manual.

For the freeway merge/diverge segments, vehicle density determines LOS, as shown in Table 4-1 with the LOS based upon the 2010 Highway Capacity Manual LOS criteria for basic freeway segments. Control delay per vehicle, as shown in Table 4-2, determines the LOS for signalized and stop controlled intersections. LOS D conditions are considered acceptable.

Level of Service A: represents free-flow operation and free-flow speeds prevail, vehicles are completely unimpeded and able to maneuver within the traffic stream.

Level of Service B: reasonably free-flow conditions with slight decline in the freedom to maneuver within the traffic stream

Level of Service C: provides for flow with speeds at or near free-flow speeds, but the driver becomes significantly affected by others in the traffic stream

Level of Service D: speeds begin to decline with increasing flows with restricted freedom to maneuver

Level of Service E: operating conditions at or near capacity

Level of Service F: describes breakdowns in vehicular flow

*Table 4-1**. Level of Service Criteria – Freeways***

Level of Service	Density (pc/mi/ln)	
	Basic Freeway Segments	Freeway Merge/Diverge Segments
A	≤ 11.0	≤ 10.0
B	11.1 - 18.0	10.1 - 20.0
C	18.1 - 26.0	20.1 - 28.0
D	26.1 - 35.0	28.1 - 35.0
E	35.1 - 45.0	35.1 - 43.0
F	≥ 45.1 or Demand Exceeds Capacity	≥ 43.1 or Demand Exceeds Capacity

Source: 2010 Highway Capacity Manual

*Table 4-2**. Level of Service Criteria – Intersections***

Level of Service	Control Delay Per Vehicle (seconds)	
	Signalized Intersection	Stop-Controlled Intersection
A	≤ 10	≤ 10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	> 80	> 50

Source: 2010 Highway Capacity Manual

4.1 Existing Traffic Operations

The existing traffic analysis uses current lane geometry. The freeway mainline, ramp terminals, and local road intersection operations analysis uses existing year 2017 peak period (6-10 AM, 2-7 PM) traffic volumes. The project study area is analyzed with Vissim for all locations and HCS 7 Facilities software for the Freeway Mainline. HCS 7 Facilities software is used to backcheck the results from Vissim. The HCS 7 results are very comparable to the results from Vissim. The HCS 7 analysis is summarized in Attachment P.

The Vissim microsimulation model is validated to reflect the freeway speeds, travel time, and traffic counts. The models underwent a WisDOT peer review. The peer review document is in Attachment R, data tables for the model validation and validation methodology report is in Attachment O.

4.1.1 Southbound I-43/94 Mainline

4.1.1.1 Existing Observations

A speed and travel time study for the I-43/94 mainline is in Attachment M. The study suggests reoccurring congestion for SB I-43/94 through the project corridor from about 3 to 6 PM. During the PM period the average corridor speed is about 20 mph. The speed data and operational analysis shows two bottleneck locations in the corridor. They include the Marquette to National Avenue Interchange weave and the Becher Street entrance ramp merge. These 2-bottleneck locations control the traffic throughput during the PM period.

4.1.1.2 Vissim Microsimulation

The existing Vissim models reflect observed freeway conditions, which are free flow travel in the AM peak and congested in the PM peak along the SB I-43/94 corridor. The hourly LOS for each segment are shown in Table 4-3.

Table 4-3: SB I-43/94 Existing Vissim Model Results

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	B	C	C	B	D	C
Upstream of 11th St Entr Ramp	2	Basic	D	D	D	C	D	D	D	*F*	D
11th St Entr Ramp	3	Merge	C	C	C	B	C	C	*E*	*F*	C
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	D	D	D	D	*E*	*E*	*F*	*F*	*E*
Marq Int W-S Sys Ramp	4	Merge	C	C	C	B	C	C	*F*	*F*	C
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	D	D	C	*E*	*E*	*F*	*F*	*E*
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Weave	C	C	C	C	*E*	*E*	*F*	*F*	*E*
Mineral St Exit Ramp to National Ave Entr Ramp	3	Basic	D	D	D	C	*E*	*F*	*F*	*F*	*E*
National Ave Entr Ramp to Lapham St Exit Ramp	4	Weave	C	C	C	B	D	*E*	*F*	*F*	*E*
Lapham St Exit Ramp to Becher St Exit Ramp	3	Basic	D	D	D	C	*E*	*F*	*F*	*F*	*E*
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	C	C	C	*E*	*F*	*F*	*F*	*E*
Becher St Entr Ramp	4	Merge	C	D	C	C	*F*	*F*	*F*	*F*	*F*
Downstream of Becher St Entr Ramp	3	Basic	C	D	D	C	*F*	*F*	*F*	*F*	*F*

The AM peak period Vissim model hourly speeds along the SB I-43/94 corridor average between 50 and 57 miles per hour (mph) as hourly demand is less than capacity. Speed profiles at various points along the corridor are flat from 6AM to 10AM, which coupled with the 50-57 mph average speed indicates free-flow conditions. As indicated in Table 4-3, AM peak period LOS based on Vissim model outputs range from LOS B to LOS D. Mainline segments between entrance and exit ramps tend to operate at LOS D. The SB I-43/94 weave between the Marquette and Mineral St/National Ave interchanges operates consistently at LOS C. The Becher St entrance ramp operates between LOS C and LOS D.

The PM peak period Vissim model reflects observed congestion between the Marquette Interchange and Becher Street along the SB I-43/94 corridor. Hourly mainline demand and weaving volumes are highest between about 3PM and 6PM. Vissim model speeds during the most congested portion of the PM peak period (4-6PM) range from 15 to 30 mph along SB I-43/94. Corridor speed profiles show free-

flow speeds at the beginning of the PM peak period (2 PM) which consistently degrade with increasing congestion until speeds bottom out from about 4 PM to about 6 PM. From 6-7 PM, model speeds recover quickly to free-flow conditions as congestion dissipates. PM peak period LOS based on Vissim range from LOS B to LOS F. The Becher St entrance ramp and mainline south of the ramp consistently operates at LOS F as the ramp demand consistently exceeds 800 vehicles per hour (vph) from 2 PM to 6PM. The weave south of the Marquette Interchange also operates between LOS E and LOS F due to the amount of weaving traffic between the Marquette and Mineral St/National Ave interchanges.

4.1.2 National Avenue Interchange Ramp Terminals and Local Road Intersections

Ramp terminal and the surrounding local road intersections along National Ave, 9th St, 6th St, and Washington St are analyzed using the AM and PM peak period Vissim models. Overall intersection hourly LOS are shown in Table 4-4.

Table 4-4: Existing Intersection Level of Service

Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	B	B	B	B	B	B	B	B	B
National & 6th	Signal	B	B	B	B	B	B	B	B	B
Walker & 9th	AWSC	A	B	A	A	A	A	A	A	A
Mineral & 9th	AWSC	A	A	A	A	A	A	A	A	A
Mineral & 6th	Signal	B	B	B	B	B	B	C	C	B
Washington & 9th	AWSC	A	C	B	A	A	B	B	A	A
Washington & 6th	Signal	A	B	A	A	B	B	B	B	A

As indicated in Table 4-4 the ramp terminal intersections (Walker St/9th St, Mineral St/9th St, and Mineral St/6th St) operate at LOS C or better overall during both the AM and PM peak periods. Intersection movements at the 9th St ramp terminals (all-way stop control) operate within minimal delay (LOS B or better) during both peak periods. At the Mineral St/6th St ramp terminal (signalized), the EB and WB approaches operate at LOS C during both periods. The EBL and WBL turn movements degrade to LOS D or LOS E during the peak hours when volumes on 6th St are highest. Adjacent local road intersections operate at LOS C or better overall as well. Minor street left and thru movements at Washington St/6th St operate at LOS C and LOS D during some portions of the peak periods.

4.2 Year 2027 No-build Traffic Operations

Year 2027 No Build operations use the existing geometry and the 2027 traffic forecasts. The traffic forecasts use the 2017 existing volume with an annual growth rate of 0.5. See Attachment L for the traffic forecasts (2017 and 2050 volumes are displayed in schematics).

4.2.1 Southbound I-43/94 Mainline

The existing Vissim models of the study area form the base of the future peak period models in terms of driver behavior, lane change distances, OD paths, and geometrics (for No Build scenarios). Driver

behaviors, which are calibrated specific to the I-43/94 study area during the development of the existing Vissim models, remain unchanged in the various interim year (2027) and future year (2050) Vissim models. These behaviors simulate actual driver behavior in the corridor and is assumed to remain unchanged in future conditions. Lane change distances (i.e. where a vehicle becomes aware of downstream exits or merging) also remain unchanged.

The hourly LOS for each segment are shown in Table 4-5.

Table 4-5: SB I-43/94 2027 No Build Vissim Model Results

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	B	C	*F*	*F*	*F*	*F*
Upstream of 11th St Entr Ramp	2	Basic	D	D	D	C	D	*F*	*F*	*F*	*F*
11th St Entr Ramp	3	Merge	C	C	C	B	D	*F*	*F*	*F*	*F*
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	D	*E*	*E*	D	*F*	*F*	*F*	*F*	*F*
Marq Int W-S Sys Ramp	4	Merge	C	C	C	B	D	*F*	*F*	*F*	*E*
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	D	D	C	*E*	*F*	*F*	*F*	*F*
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Weave	C	D	C	C	*F*	*F*	*F*	*F*	*F*
Mineral St Exit Ramp to National Ave Entr Ramp	3	Basic	D	D	D	D	*F*	*F*	*F*	*F*	*F*
National Ave Entr Ramp to Lapham St Exit Ramp	4	Weave	C	C	C	C	D	*F*	*F*	*F*	*F*
Lapham St Exit Ramp to Becher St Exit Ramp	3	Basic	D	D	D	C	*F*	*F*	*F*	*F*	*F*
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	C	C	C	*E*	*F*	*F*	*F*	*F*
Becher St Entr Ramp	4	Merge	C	D	C	C	*F*	*F*	*F*	*F*	*F*
Downstream of Becher St Entr Ramp	3	Basic	D	D	D	C	*F*	*F*	*F*	*F*	*F*

Interim year (2027) AM peak period hourly speeds along the SB I-43/94 corridor are expected to stay relatively the same as existing conditions based on the Vissim model. Interim year No Build AM speeds average between 51 and 56 mph, as 2027 hourly demands do not exceed capacity. 2027 AM speed profiles along the corridor continue to remain flat from 6 AM to 10 AM. As indicated in Table 4-5, AM peak period LOS based on Vissim model outputs range from LOS B to LOS E. Most mainline segments between entrance and exit ramps remain at LOS D in comparison to existing conditions. The two lane mainline segment between the 11th St entrance ramp and Marquette Interchange W-S system ramp is expected to degrade to LOS E from 7-9 AM, although the calculated density is only 2-3% greater than the maximum density threshold for LOS D based on the Highway Capacity Manual. The SB I-43/94 weave between the Marquette and Mineral St/National Ave interchanges degrades to LOS D (from LOS C) during the AM peak hour (7-8 AM) and continues to operate at LOS C during the other AM hours. The Becher St entrance ramp continues to operate between LOS C and LOS D, and the mainline south of the entrance ramp degrades slightly and operates at LOS D during three of the four AM hours. Overall, there is no change in travel time between the Marquette Interchange and Becher St between the 2027 No Build AM and existing AM Vissim models.

The 2027 PM peak period Vissim model indicates that the duration of SB I-43/94 congestion increases from about 2 hours during existing conditions (4-6 PM) to more than 4 hours during the interim year (3-

7 PM). Interim year No Build PM speeds average between 37 and 52 mph from 2 PM to 3 PM and 20 mph or less from 3 PM to 6 PM along the entirety of the SB I-43/94 corridor. In comparison to existing conditions, congestion starts about 45 minutes earlier near Becher St due to the increase in interim year demand. Congestion originating near Becher St in the interim year reflects upstream and effects the rest of the SB I-43/94 corridor. Interim year PM congestion occurring between the Marquette and Mineral St/National Ave interchanges increases in comparison to existing conditions due to a combination of increased weaving volumes and the effect of downstream congestion due to the Becher St entrance ramp. Interim year PM peak period corridor speeds do not recover by the end of the model period (7 PM) which suggests that the duration of congestion extends into the 7PM hour. In terms of LOS, the SB I-43/94 corridor operates at LOS F from 3 PM to 6 PM and at LOS E/F from 6-7 PM. Interim year 2-3 PM LOS ranges from LOS C-F as congestion begins around 2:45PM. Overall, interim year hourly travel times increase during all PM hours between the Marquette Interchange and Becher St. Travel times increase by 1.5 minutes (33-41%) during the adjacent hours (3-4 PM and 6-7 PM) as the duration of congestion increases in comparison to existing PM peak period conditions.

4.2.2 National Avenue Interchange Ramp Terminals and Local Road Intersections

Interim year ramp terminal and the surrounding local road intersections are analyzed using the AM and PM peak period 2027 No Build Vissim models. Overall intersection hourly LOS are shown in Table 4-6.

Table 4-6: 2027 No Build Intersection Level of Service

Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	B	B	B	B	B	B	B	B	B
National & 6th	Signal	B	B	B	B	B	B	B	B	B
Walker & 9th	AWSC	A	C	A	A	A	A	A	A	A
Mineral & 9th	AWSC	A	A	A	A	A	A	A	A	A
Mineral & 6th	Signal	B	B	B	B	B	B	C	C	B
Washington & 9th	AWSC	A	C	B	A	A	B	B	A	A
Washington & 6th	Signal	A	B	A	A	B	B	B	B	A

In comparison to existing peak period conditions, ramp terminals and adjacent local intersections operate similarly during both 2027 peak periods (LOS A-C). At Walker St/9th St, the ramp terminal degrades to LOS C during the AM peak hour (7-8AM). At the Mineral St/9th St ramp terminal, the EB and WB approaches continue to operate at LOS C with left turns at LOS D during the peak hours. Minor street left and thru movements at Washington St/6th St also continue to operate between LOS C-D during some portions of the AM/PM peak periods.

4.3 Year 2050 No-build Traffic Operations

Year 2050 No Build operations use the existing geometry and the 2050 traffic forecasts. The 2050 forecasts use the base year 2017 volumes and an annual growth rate of 0.5%.

The hourly LOS for each segment are shown in Table 4-7.

Table 4-7: SB I-43/94 2050 No Build Vissim Model Results

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	C	*F*	*F*	*F*	*F*	*F*
Upstream of 11th St Entr Ramp	2	Basic	*E*	*E*	*E*	D	*F*	*F*	*F*	*F*	*F*
11th St Entr Ramp	3	Merge	C	C	C	C	*F*	*F*	*F*	*F*	*F*
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	*E*	*E*	*E*	D	*F*	*F*	*F*	*F*	*F*
Marq Int W-S Sys Ramp	4	Merge	C	C	C	C	*F*	*F*	*F*	*F*	*F*
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	*E*	D	D	*F*	*F*	*F*	*F*	*F*
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Weave	D	D	D	C	*F*	*F*	*F*	*F*	*F*
Mineral St Exit Ramp to National Ave Entr Ramp	3	Basic	D	*E*	D	D	*F*	*F*	*F*	*F*	*F*
National Ave Entr Ramp to Lapham St Exit Ramp	4	Weave	C	C	C	C	*F*	*F*	*F*	*F*	*F*
Lapham St Exit Ramp to Becher St Exit Ramp	3	Basic	D	D	D	D	*F*	*F*	*F*	*F*	*F*
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	D	D	C	*F*	*F*	*F*	*F*	*F*
Becher St Entr Ramp	4	Merge	D	D	D	C	*F*	*F*	*F*	*F*	*F*
Downstream of Becher St Entr Ramp	3	Basic	D	*E*	D	D	*F*	*F*	*F*	*F*	*F*

Future year (2050) AM peak period hourly speeds along the SB I-43/94 corridor are expected to be similar to interim year and existing conditions based on the Vissim model. Future year No Build AM speeds average between 49 and 56 mph, as 2050 hourly demands do not exceed capacity. 2050 AM speed profiles along the corridor remain flat from 6AM to 10AM. As indicated in Table 4-7, AM peak period LOS based on Vissim model outputs range from LOS C to LOS E. The two lane mainline segments within the Marquette Interchange degrade to LOS E from 6AM to 9AM (LOS D in existing conditions). Three other mainline basic segments degrade to LOS E during the AM peak hour (7-8AM) as well. The SB I-43/94 weave between the Marquette and Mineral St/National Ave interchanges degrades to LOS D (from LOS C) during the hours adjacent to the AM peak and continues to operate at LOS C during the last AM hour. There is no change in travel time between the Marquette Interchange and Becher St between the 2050 No Build AM and existing AM Vissim models.

The 2050 PM peak period Vissim model indicates that the duration of SB I-43/94 congestion will increase to encompass almost the entirety of the PM model analysis period (2-7PM). Future year No Build PM speeds average less than 20 mph from 3-7PM and less than 30 mph from 2-3PM along the SB I-43/94 corridor. In comparison to existing conditions, congestion starts at about 2:30PM near Becher St due to the increase in future year ramp and mainline demands. Similar to existing and interim year conditions, congestion originating near Becher St reflects upstream and effects the rest of the SB I-43/94 corridor. Future year PM congestion occurring between the Marquette and Mineral St/National Ave interchanges increases significantly as well, where speeds at 2PM average 35 mph due to increased weaving volumes. Similar to interim year conditions, future year PM peak period corridor speeds do not recover by the end of the model period (7PM), which indicates that congestion extends into the 7PM hour. In terms of LOS, the entirety of the SB I-43/94 corridor operates at LOS F from 2PM to 7PM. Future year No Build PM

travel times increase by 1.8-1.9 minutes (41-64%) during the adjacent hours (2-3PM, 3-4PM, and 6-7PM) as the duration of congestion continues to increase in comparison to interim year and existing PM peak period conditions.

4.3.1 National Avenue Interchange Ramp Terminals and Local Road Intersections

Future year ramp terminal and the surrounding local road intersections are analyzed using the AM and PM peak period 2050 No Build Vissim models. Overall intersection hourly LOS are shown in Table 4-8.

Table 4-8: 2050 No Build Intersection Level of Service

Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	B	B	B	B	B	B	B	B	B
National & 6th	Signal	B	B	B	B	B	B	B	C	B
Walker & 9th	AWSC	A	D	B	A	A	A	B	A	A
Mineral & 9th	AWSC	A	B	A	A	A	A	A	A	A
Mineral & 6th	Signal	B	C	B	B	B	C	C	C	B
Washington & 9th	AWSC	A	*E*	C	A	B	B	C	A	A
Washington & 6th	Signal	A	B	A	A	B	B	B	B	A

In comparison to interim year AM peak period conditions, two ramp terminals degrade one LOS overall where Walker St/9th St degrades to LOS D (from LOS C) and Mineral St/6th St degrades to LOS C (from LOS B) during the future year No Build AM peak period. At Walker St/9th St, the NB approach degrades to LOS D due to increased ramp volumes and increases overall delay. At Mineral St/6th St, the EB and WB approaches continue to operate at LOS C with left turns at LOS D during most of the AM peak period. Of the adjacent local intersections, Washington St/9th St (all way stop control) operations worsen to LOS E (from LOS C) from 7-8AM and LOS C (from LOS B) from 8-9AM. This intersection operates poorly during the 7-8AM hour when NB (LOS E) and EB (LOS F) approach volumes are highest.

During the future year No Build PM peak period, Mineral St/6th St degrades to LOS C during 3-4PM as the EB approach operates at LOS D. Adjacent local intersections at National Ave/6th St (5-6PM) and Washington St/9th St (4-5PM) also degrade to LOS C as minor street movements worsen to LOS D.

4.4 Existing and No-build Traffic Operations Summary

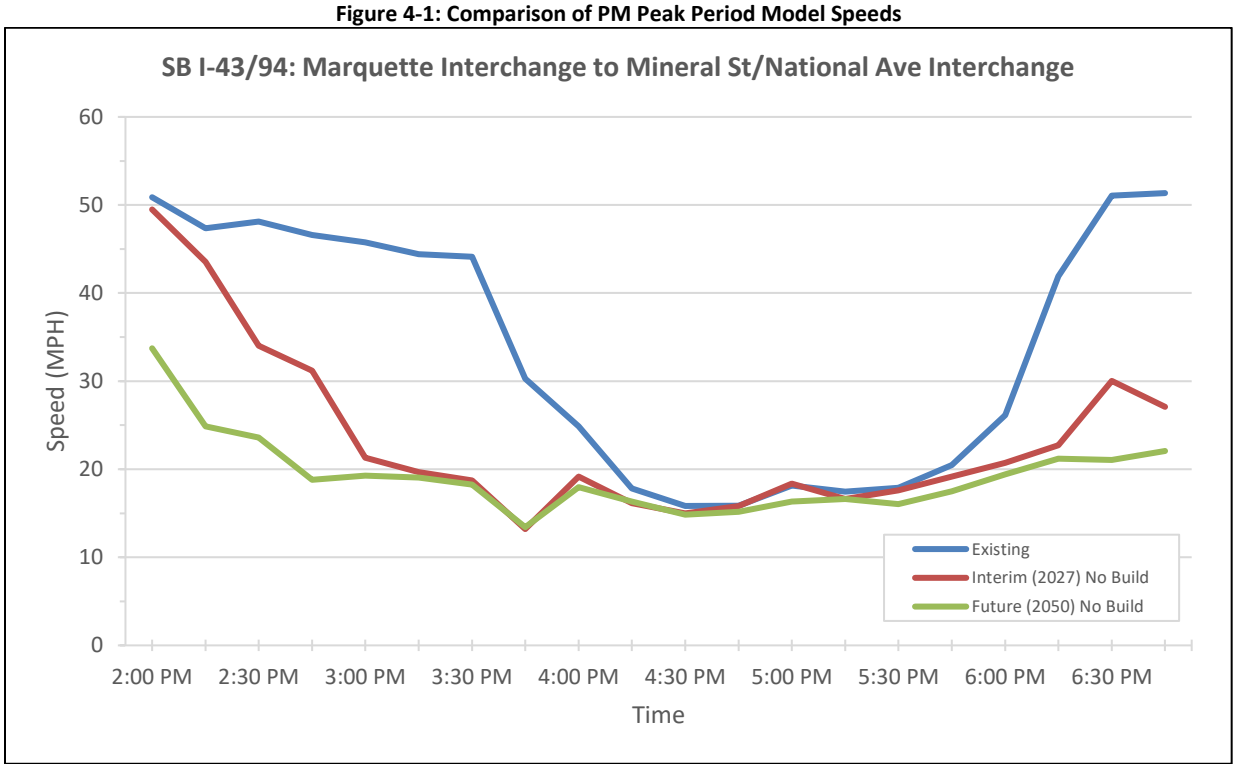
4.4.1 I-43/94 Southbound

AM peak period SB I-43/94 freeway operations have minimal change from existing conditions to the interim year (2027) or future year (2050). Existing average hourly speeds are greater than 50 mph and corridor speed profiles are flat as there is little to no congestion. Existing SB I-43/94 hourly demand is lower than the three-lane roadway capacity and this continues to be the case in the interim and future years even with the background growth rate. Interim and future year hourly speeds average greater

than 49 mph and speed profiles are flat which is indicative of free-flow conditions in each scenario. Existing LOS range from LOS B to LOS D. Interim and future year LOS range from LOS C to LOS E.

PM peak period SB I-43/94 freeway operations degrade significantly from existing conditions as the existing roadway cannot accommodate interim or future year demand. Existing average hourly speeds range from 15 to 30 mph during the most congested hours (4-6PM). Interim year hourly speeds degrade to less than 20 mph from 3-6PM as the duration of congestion increases along the SB I-43/94 corridor. Future year hourly speeds average less than 20 mph from 3-7PM and less than 30 mph from 2-3PM as the SB I-43/94 completely breaks down. A comparison of PM peak period speeds which highlights an example of the increasing level of SB I-43/94 congestion in the interim and future years and is shown in Figure 4-1. The existing and interim year PM peak period models indicate two chokepoints along the SB I-43/94 corridor: the SB Becher St entrance ramp and the weave between the Marquette and Mineral St/National Ave interchanges.

Figure 4-1: Comparison of PM Peak Period Model Speeds



4.4.2 National Avenue Interchange Ramp Terminals and Local Road Intersections

Existing ramp terminal and local road intersections operate at LOS C or better overall during both peak periods. Some approaches at specific ramp terminals (EB/WB at Mineral St/6th St in particular) operate at LOS C with left turn movements at LOS D or LOS E during the hours when volumes on 6th St are highest. Adjacent local road intersections on National Ave and Washington St operate at LOS C or better overall. Washington St EB/WB approaches operate at LOS C and LOS D during some hours.

Ramp terminal and adjacent local intersections operate similarly overall and by approach in the interim year peak periods in comparison to existing conditions. Mineral St/9th St degrades to LOS C overall during the AM peak hour (7-8AM). In the future year AM peak period, two ramp terminals degrade one LOS overall in comparison to interim year conditions. Walker St/9th St degrades from LOS C to LOS D and Mineral St/6th St degrades from LOS B to LOS C. At Walker St/9th St, the NB approach degrades to LOS D due to increased ramp volumes. which increases the overall delay. Washington St/9th operations degrade from LOS C to LOS E from 7-8AM and from LOS B to LOS C from 8-9AM in comparison to interim year operations. This intersection operates poorly during the 7-8AM hour due to increased NB (LOS E) and EB (LOS F) approach volumes. During the future year No Build PM peak period, Mineral St/6th St degrades to LOS C overall (3-4PM) due to the EB approach (LOS D) related to increased ramp demand. Adjacent local intersections at National Ave/6th St and Washington St/9th St also degrade to LOS C as minor street movements worsen to LOS D during some hours.

5. Short Term Improvements - Freeway Restriping Alternatives

5.1 I-43/94 Restriping Alternative

5.1.1 Design

The Restriping Alternative provides an additional fourth thru lane on SB I-43/94 between the Marquette Interchange and south of the exit ramp to Becher St to provide more distance for traffic from the Marquette Interchange to merge onto the SB I-43/94 mainline. To accommodate the additional lane, 3 of the 4-thru lanes are narrowed to 11 feet with reduced inside and outside shoulder widths (proposed cross sections are shown in Figure 5-2, Figure 5-3,and Figure 5-4). As a result, the right lane of the existing SB I-43/94 weave between the Marquette Interchange and the Mineral St/National Ave exit ramp (to 9th or 6th St) becomes an option lane. An auxiliary lane is maintained between the Mineral St/National Ave entrance ramp and the Lapham St exit ramp. The fourth lane merges to three lanes approximately 400 feet downstream of the Becher St exit ramp

To accommodate the extra lane and maintain the auxiliary lane between National and Lapham interchanges, the SB I-43/94 entrance ramp requires outside edge bridge deck widening to a maximum of 8 feet for the units (B-40-286-24A/26) carrying SB I-43/94 over the intersection of 6th and Washington Streets. This requires adding a new outside steel girder and unique details to support the girder at existing piers 1 and 2. See Attachment F, Structural Memorandum, for more information on these bridge modifications. Restriping I-43/94 without bridge widening was evaluated (see conceptual design in Attachment B). However, this configuration is eliminated from further consideration due to the unsafe merge condition for the SB entrance ramp at the National interchange.

Figure 5-1: I-43/94 Restriping Alternative Overview

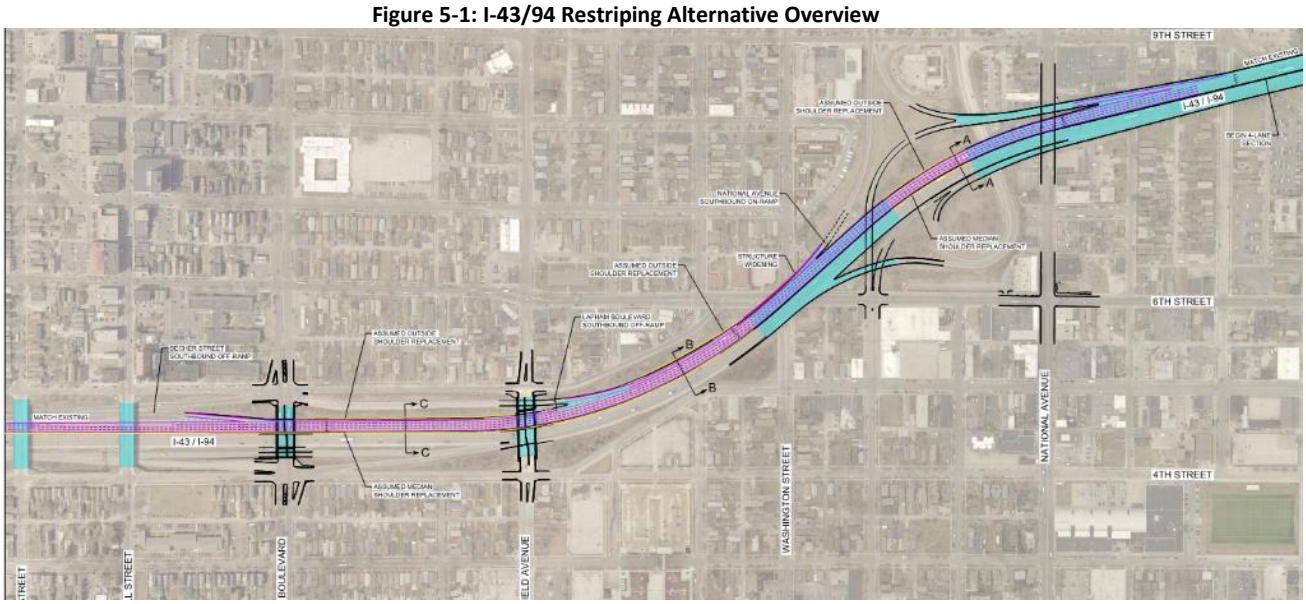


Figure 5-2: Proposed I-43/94 Cross Section A (at National Avenue)

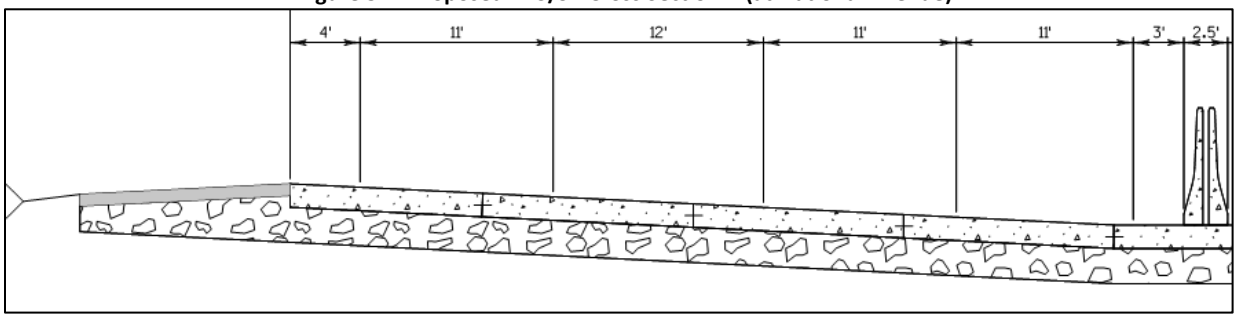


Figure 5-3: Proposed I-43/94 Cross Section B (National to Lapham Weave)

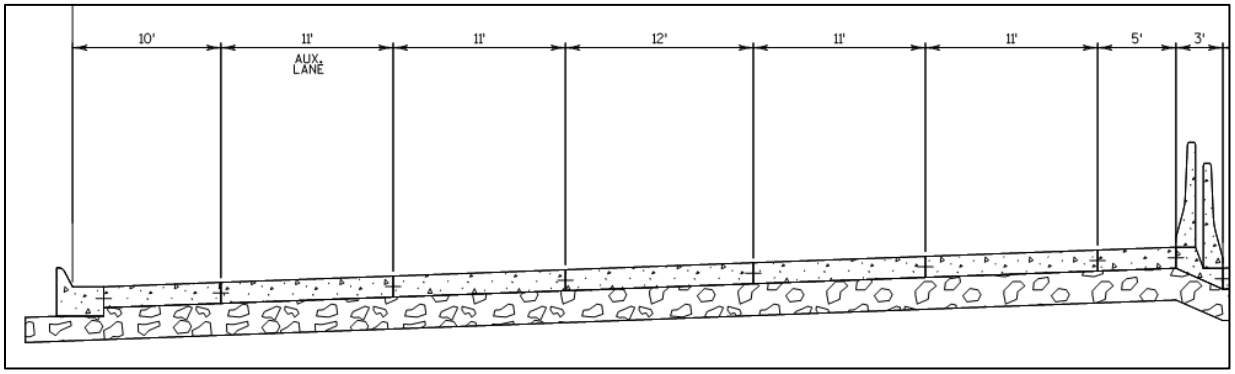
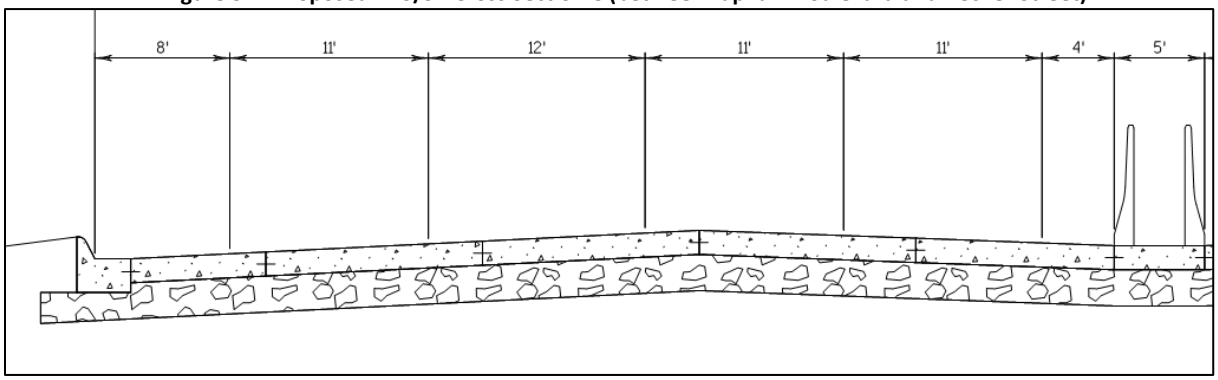


Figure 5-4: Proposed I-43/94 Cross Section C (between Lapham Boulevard and Becher Street)



The estimate construction let amount is $5.6M with a total project cost estimate of $7.4M. The structural costs included in the let amount is $2M.

5.1.2 Operations

The Restriping Alternative is analyzed for operations during the interim (2027) and future (2050) years. The interim year hourly LOS for each segment are shown in Table 5-1. The future year hourly LOS for each segment are shown in Table 5-2. The restriping section is highlighted in blue in both tables.

Table 5-1: 2027 Build Restriping Level of Service

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	B	C	*E*	***F***	***F***	***F***
Upstream of 11th St Entr Ramp	2	Basic	D	D	D	C	D	***F***	***F***	***F***	***F***
11th St Entr Ramp	3	Merge	C	C	C	B	D	***F***	***F***	***F***	***F***
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	D	*E*	*E*	D	***F***	***F***	***F***	***F***	***F***
Marq Int W-S Sys Ramp	4	Merge	C	C	C	B	D	***F***	***F***	***F***	***F***
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	D	D	C	*E*	***F***	***F***	***F***	***F***
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Diverge	C	C	C	C	*E*	***F***	***F***	***F***	***F***
Mineral St Exit Ramp to Mineral St Entr Ramp	4	Basic	C	C	C	C	D	***F***	***F***	***F***	***F***
Mineral St Entr Ramp to Lapham St Exit Ramp	5	Weave	B	B	B	B	C	***F***	***F***	***F***	***F***
Lapham St Exit Ramp to Becher St Exit Ramp	4	Basic	C	C	C	C	D	***F***	***F***	***F***	***F***
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	C	C	C	*E*	***F***	***F***	***F***	***F***
Becher St Entr Ramp	4	Merge	C	D	C	C	***F***	***F***	***F***	***F***	***F***
Downstream of Becher St Entr Ramp	3	Basic	D	D	D	C	***F***	***F***	***F***	***F***	***F***

In comparison to 2027 No Build operations (Table 4-7), the Restriping Alternative operates similarly during the AM peak period from north of 11th St to the Marquette Interchange E-S system ramp (LOS B-E) and south of the Becher St entrance ramp (LOS C-D), as the Restriping Alternative has no impact on these sections. South of the Marquette E-S system ramp to the Becher St exit ramp, operations improve where the Restriping Alternative operates between LOS B and LOS C, whereas the No Build scenario operates between LOS C and LOS D. AM peak period hourly speeds average between 50 and 56 mph for the Restriping Alternative and speed profiles are flat throughout the SB I-43/94 corridor.

The Restriping Alternative operates similarly to operations reported for the 2027 No Build PM peak period scenario where much of the corridor operates at LOS F between 3-7PM. Interim year Restriping speeds average less than 20 mph from 4PM to 7PM and between 24 and 46 mph from 2-4PM. Operational issues with the Alternative are largely attributed to the slow speeds and congestion that occurs at the Becher St entrance ramp. Slow speeds in this area start around 3PM, which results in queuing and congestion that continues to build throughout the remainder of the PM period and eventually impacts the rest of the upstream SB I-43/94 corridor. Therefore the 2027 Restriping Vissim model suggests that even with the additional capacity between the Marquette Interchange and the Becher St exit ramp, the southern chokepoint (Becher St entrance ramp) needs to be addressed in order for the Restriping Alternative to provide a meaningful operational improvement for the SB I-43/94 corridor during the interim year PM peak period.

Table 5-2: 2050 Build Restriping Alternative Level of Service

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	C	*E*	*F*	*F*	*F*	*F*
Upstream of 11th St Entr Ramp	2	Basic	*E*	*E*	*E*	D	*F*	*F*	*F*	*F*	*F*
11th St Entr Ramp	3	Merge	C	C	C	C	*F*	*F*	*F*	*F*	*F*
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	*E*	*E*	*E*	D	*F*	*F*	*F*	*F*	*F*
Marq Int W-S Sys Ramp	4	Merge	C	C	C	C	*E*	*F*	*F*	*F*	*F*
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	*E*	D	D	*F*	*F*	*F*	*F*	*F*
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Diverge	D	D	D	C	*F*	*F*	*F*	*F*	*F*
Mineral St Exit Ramp to Mineral St Entr Ramp	4	Basic	C	C	C	C	*F*	*F*	*F*	*F*	*F*
Mineral St Entr Ramp to Lapham St Exit Ramp	5	Weave	C	C	C	B	*F*	*F*	*F*	*F*	*F*
Lapham St Exit Ramp to Becher St Exit Ramp	4	Basic	C	C	C	C	*F*	*F*	*F*	*F*	*F*
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	D	D	C	*F*	*F*	*F*	*F*	*F*
Becher St Entr Ramp	4	Merge	D	D	D	C	*F*	*F*	*F*	*F*	*F*
Downstream of Becher St Entr Ramp	3	Basic	D	*E*	D	D	*F*	*F*	*F*	*F*	*F*

In the future year (2050), the 5 Lane Restriping Alternative would operate similarly to 2050 AM No Build conditions for the segments outside of the 5 Lane Restriping section. Segments north of the Marquette Interchange E-S system ramp would operate between LOS C and LOS E, with the mainline two lane segments predominately operating at LOS E. Segments south of the Becher St exit ramp operate between LOS C and LOS D, with the mainline segment downstream of the Becher St entrance ramp operating at LOS E during the AM peak hour (7-8AM). Operations within the restriping section improves to LOS B to LOS D from LOS C to LOS E under the No Build scenario. AM peak period hourly speeds average between 49 and 56 mph for the Restriping Alternative and speed profiles are flat throughout the SB I-43/94 corridor.

There is very little difference between the 2050 PM Restriping Alternative and 2050 No Build PM operations as the majority of the corridor operates at LOS F between 2-7PM. Future year Restriping speeds average less than 20 mph between 3-7PM and less than 29 mph from 2-3PM. As noted with the Restriping Alternative in the interim year, operational issues with the Restriping Alternative in the future year are attributed to congestion that occurs at the Becher St entrance ramp. Queues that develop in this area create congestion that continues to build throughout the PM period which impacts the rest of the SB I-43/94 corridor.

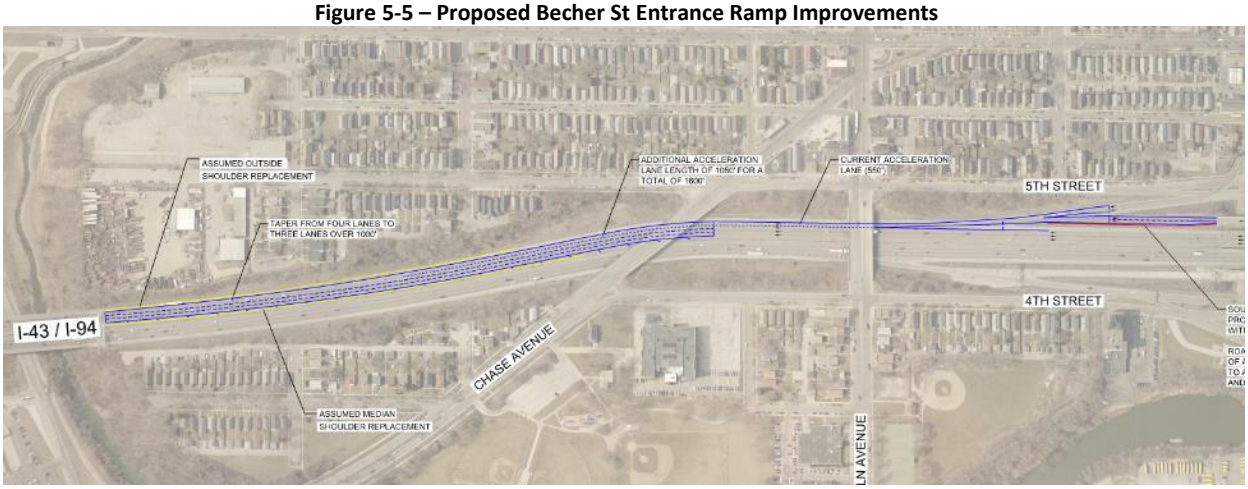
5.2 Restriping Alternative + Improvements at Becher Street Entrance Ramp

5.2.1 Design

This alternative adds improvements to the Becher Street Entrance ramp in conjunction with the Restriping Alternative. The additional improvements at the Becher St entrance ramp create a two lane ramp meter from the collector-distributor (CD) roadway (350 ft), shift the CD roadway ramp meter further south to line up with the Becher St entrance ramp meter, modify the ramp metering rates, and extend the entrance ramp acceleration lane by more than 1000 feet to be 1600 feet total. The combination of the proposed improvements at the Becher St entrance ramp are developed to address operational deficiencies identified in the interim year Restriping Alternative as described **in Section 5.2.2**.

The estimate construction let amount for the Becher Street improvement is $0.8M with a total project cost estimate of $1M

Figure 5-5 – Proposed Becher St Entrance Ramp Improvements



5.2.2 Operations

The 5 Lane Restriping Alternative with Improvements at the Becher St entrance ramp is analyzed for operations during the interim (2027) and future (2050) years. The interim year hourly LOS for each segment are shown in Table 5-3. The future year hourly LOS for each segment are shown in Table 5-4. The Restriping section is highlighted in blue in both tables.

Table 5-3: 2027 Build Restriping + Becher Street Improvements Level of Service

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	B	C	C	C	C	C
Upstream of 11th St Entr Ramp	2	Basic	D	D	D	C	D	D	D	D	D
11th St Entr Ramp	3	Merge	C	C	C	B	D	*E*	C	D	C
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	D	*E*	*E*	D	***F***	***F***	*E*	***F***	*E*
Marq Int W-S Sys Ramp	4	Merge	C	C	C	B	D	D	D	C	C
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	D	D	C	*E*	*E*	*E*	*E*	*E*
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Diverge	C	C	C	C	*E*	*E*	*E*	D	D
Mineral St Exit Ramp to Mineral St Entr Ramp	4	Basic	C	C	C	C	D	D	D	D	D
Mineral St Entr Ramp to Lapham St Exit Ramp	5	Weave	B	B	B	B	C	C	C	C	C
Lapham St Exit Ramp to Becher St Exit Ramp	4	Basic	C	C	C	C	D	D	D	D	D
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	C	C	C	*E*	*E*	*E*	*E*	*E*
Becher St Entr Ramp	4	Merge	C	D	C	C	***F***	*E*	*E*	*E*	*E*
Downstream of Becher St Entr Ramp	3	Basic	D	D	D	C	*E*	*E*	*E*	*E*	*E*

In comparison to the Restriping Alternative, the Restriping Alternative with Improvements to the Becher St entrance ramp operates the same during the AM peak period throughout the SB I-43/94 corridor. The proposed improvements at Becher St have no negative impact on 2027 AM peak period mainline operations and ramp traffic has minimal delay entering the freeway due to the ramp meter modifications. AM peak period hourly speeds continue to average greater than 50 and speed profiles remain flat throughout the SB I-43/94 corridor with the 5 Lane Restriping Alternative with Improvements at Becher St.

The proposed Becher St improvements significantly improve 2027 PM peak period operations on SB I-43/94. Providing two lanes with storage at the CD ramp meter allows for the meter release rate to be reduced (i.e. less throughput) and for the associated queue to be contained within the proposed 350 foot storage. In addition, the Becher St entrance ramp meter rate can also be reduced. The modified Becher St and CD ramp meter rates provides longer gaps between entering ramp traffic, which along with the extended acceleration distance lessens the impact of entering traffic on the SB I-43/94 mainline.

The 5 Lane Restriping Alternative with Improvements to the Becher St entrance ramp operates at LOS E south of the Becher St entrance ramp to south of the Becher St entrance ramp for the entirety of the PM peak period, except for the entrance ramp which operates at LOS F only from 2-3PM (0.5% greater than the maximum density threshold for a ramp merge segment). In comparison, the 2027 Restriping Alternative operates at LOS F from the Becher St entrance ramp south. The restriping section operates between LOS C and LOS E. Interim year Restriping with Becher St improvement hourly speeds average between 49 and 52 mph for the SB I-43/94 corridor. Average speeds are slowest (40-49 mph) within the Marquette Interchange between the 11th St entrance ramp and the Marquette Interchange W-S system ramp, which is a two lane segment with reported between LOS E and LOS F. Figure 5-6 shows a

comparison of 2027 PM peak period speed profiles on SB I-43/94 between Lapham and Becher Streets to show the improvement in operations with the proposed improvements at Becher St with the Restriping Alternative.

Figure 5-6: Comparison of Year 2027 PM Peak Period Speeds

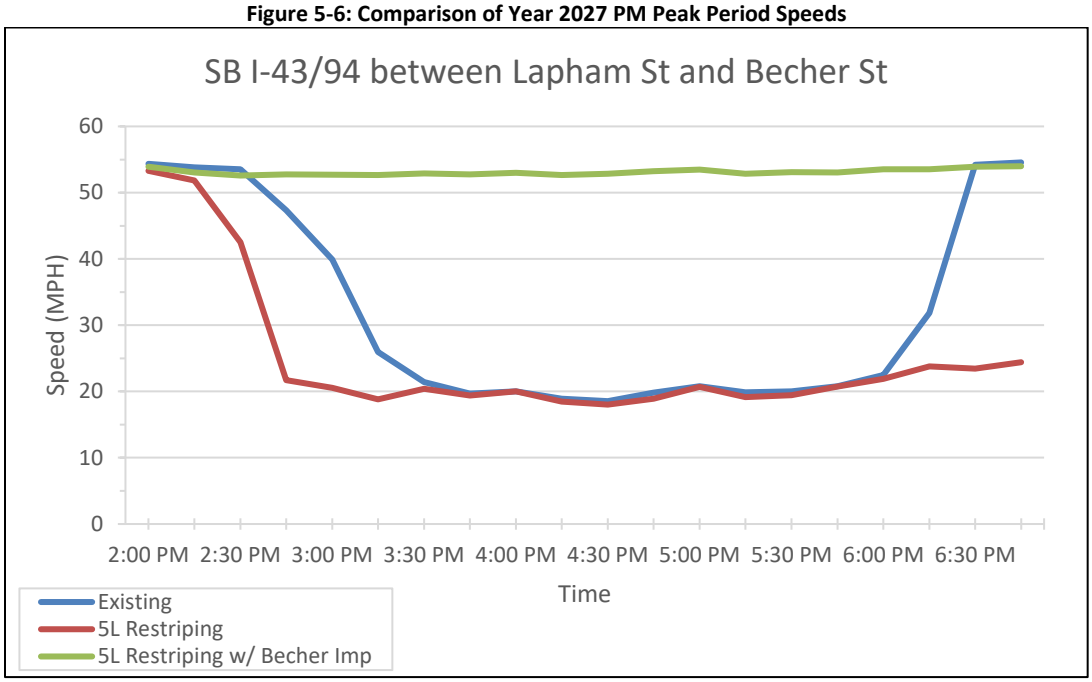


Table 5-4: 2050 Build Restriping + Becher Street Improvements Level of Service

Segment	# Lanes	HCM Type	Level of Service								
			6 AM	7 AM	8 AM	9 AM	2 PM	3 PM	4 PM	5 PM	6 PM
Upstream of 11th St Entr Ramp	3	Basic	C	C	C	C	C	C	C	C	C
Upstream of 11th St Entr Ramp	2	Basic	*E*	*E*	*E*	D	D	*E*	D	D	D
11th St Entr Ramp	3	Merge	C	C	C	C	D	D	D	D	D
11th St Entr Ramp to Marq Int W-S System Ramp	2	Basic	*E*	*E*	*E*	D	***F***	***F***	***F***	***F***	*E*
Marq Int W-S Sys Ramp	4	Merge	C	C	C	C	*E*	*E*	D	D	D
Marq Int W-S Sys Ramp to Marq Int E-S Sys Ramp	3	Basic	D	*E*	D	D	***F***	***F***	*E*	*E*	*E*
Marq Int E-S Sys Ramp to Mineral St Exit Ramp	4	Diverge	D	D	D	C	*E*	*E*	***F***	*E*	*E*
Mineral St Exit Ramp to Mineral St Entr Ramp	4	Basic	C	C	C	C	*E*	D	***F***	*E*	D
Mineral St Entr Ramp to Lapham St Exit Ramp	5	Weave	C	C	C	B	D	D	***F***	D	D
Lapham St Exit Ramp to Becher St Exit Ramp	4	Basic	C	C	C	C	D	*E*	***F***	***F***	D
Becher St Exit Ramp to Becher St Entr Ramp	3	Basic	C	D	D	C	*E*	***F***	***F***	***F***	*E*
Becher St Entr Ramp	4	Merge	D	D	D	C	***F***	***F***	***F***	***F***	***F***
Downstream of Becher St Entr Ramp	3	Basic	D	*E*	D	D	***F***	***F***	***F***	***F***	***F***

In the future year, the Restriping Alternative with Improvements at the Becher St entrance ramp operates the same as the Restriping Alternative during the AM peak period (LOS C-E) throughout the SB I-43/94 corridor. The proposed improvements at Becher St has no negative impact on 2050 AM peak

period mainline operations and ramp traffic experiences minimal delay due to the ramp meter modifications. AM peak period hourly speeds average greater than 50 mph and speed profiles remain flat throughout the SB I-43/94 corridor.

In comparison to 2027 PM Restriping Alternative operations, the 2050 PM Restriping Alternative degrades to LOS F near the Becher St entrance ramp for the duration of the PM peak period. Future year SB I-43/94 demand exceeds the capacity of the existing cross section (three lanes) at the southern end of the corridor. Congestion near Becher St cannot be adequately mitigated with proposed ramp metering improvements as the metering rate (particularly of the CD ramp meter) cannot be as slow as it is in 2027 because the ramp volumes are greater and the resulting queue cannot exceed the available storage. Becher St congestion influences upstream speeds and LOS F extends from Becher St to the Marquette Interchange from 4-5PM.

6. Long Term Improvements - National Avenue Interchange Alternatives

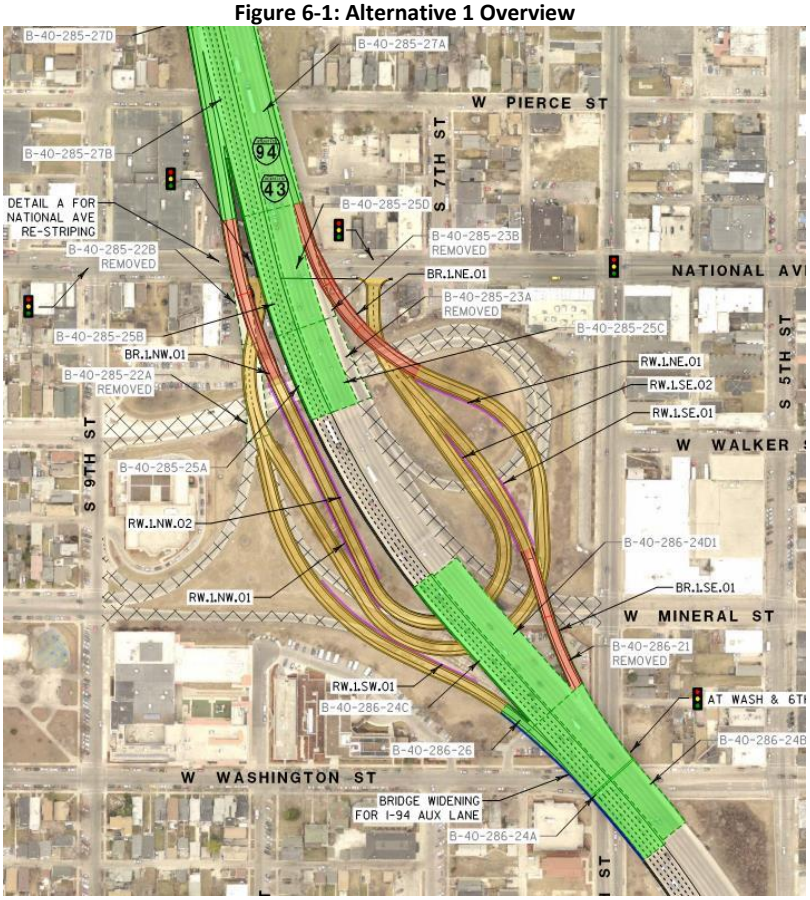
Four long term interchange improvements are evaluated for the National Avenue Interchange. The design details and operational results are discussed in this section. See attachment D Alternatives Matrix for additional comparison of these alternatives.

6.1 Alt 1: U-Ramp Interchange at National Avenue

6.1.1 Design

Alternative 1 consolidates I-43/94 access to/from National Ave via U-ramps and two ramp terminals located between 9th and 6th St as indicated in Figure 6-1. The west ramp terminal provides access to both the NB and SB I-43/94 entrance ramps. The east ramp terminal provides access to National Ave from the NB and SB I-43/94 exit ramps. The NB and SB exit ramps combine into a two-lane ramp approximately 230 feet south of National Ave. Similarly, the entrance ramps split into separate ramps approximately 200' south of National Avenue. The NB I-43/94 entrance ramp and SB I-43/94 exit ramp would utilize u-ramps south of National Ave.

Figure 6-1: Alternative 1 Overview



Both ramp terminals are signalized based on MUTCD signal warrant analysis of forecasted hourly volumes in the future year (Attachment Q). Vissim analysis of the ramp terminals and adjacent local intersections indicated that geometric and signal improvements are required to provide acceptable operations in the future year. Proposed improvements include:

- National Ave/West Ramp Terminal
  - Add dual WBL turn lanes (protected-only)
  - Provide single WBT lane
  - Modify EB approach to have one EBT lane and one EBR turn lane
- National Ave/East Ramp Terminal
  - Provide WB advanced left turn storage lanes
- National Ave/6th St
  - Add NBL turn lane (200 feet)
  - Add EB and WB left turn lanes (125 feet)
  - Add protected EBL, WBL, and NBL turn phases (actuated)
  - Change coordinated phases to EB/WB National Ave
  - Retime signal phases and offsets
- Mineral St/6th St
  - Add NBR (100 feet) and SBL (100 feet) turn lanes
  - Removal existing traffic signal
- Washington St/6th St
  - Add protected SBL turn phase (AM only; pre-timed)
  - Modify EB/WB phase passage time parameters

The proposed improvements along National Ave require on-street parking removal between the west ramp terminal and 6th Street with no modifications to existing roadway footprint. The removal of the service ramps at Mineral St/6th St reduces future minor street traffic volumes through this intersection and does not meet signal warrant criteria.

6.1.2 Operations

In general, Alternative 1 concentrates service ramp volumes along National Ave and 6th St. National Ave becomes congested in the future peak hours (7-9AM and 4-6PM) due to the combined exit and entrance ramp volumes and short signal spacing between the ramp terminals. Signalized intersections in the study area are owned and operated by the City of Milwaukee, which utilizes a consistent cycle length of 80 seconds. Alternative 1 assumes that the ramp terminal signals and proposed adjustments to existing signals adhere to the 80 second cycle length. This limitation does result in some operational difficulties due to phase requirements and adequate service for some heavy demand movements, such as the NB approach at the east ramp terminal and all approaches at National Ave/6th St. In addition, analysis of Alternative 1 indicated that the WBL turn protected-only phase at the west ramp terminal should be shown twice per cycle (leading and lagging) to adequately clear internal queues.

Future year ramp terminal and the surrounding local road intersections are analyzed for Alternative 1 using the AM and PM peak period 2050 Vissim models. Overall intersection hourly LOS are shown in Table 6-1.

Table 6-1: 2050 Intersection Traffic Operations – U-Ramp Interchange

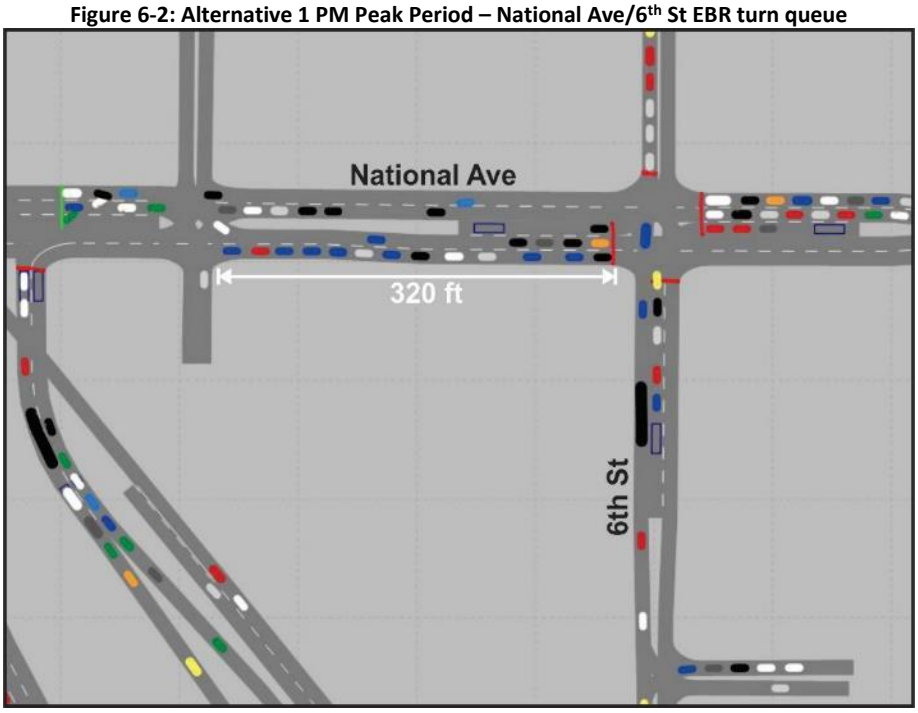
Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	A	B	A	A	A	B	A	A	A
National & Entr	Signal	A	B	A	A	A	A	A	A	A
National & Exit	Signal	A	B	A	A	B	B	B	B	B
National & 6th	Signal	A	B	A	A	C	C	C	C	C
Walker & 9th	AWSC	A	B	A	A	A	A	A	A	A
Mineral & 9th	AWSC	A	B	A	A	A	A	A	A	A
Mineral & 6th	TWSC*	A	*E*	D	A	D	*E*	***F***	D	B
Washington & 9th	AWSC	A	B	A	A	A	A	B	A	A
Washington & 6th	Signal	A	B	A	A	A	A	A	A	A

*LOS shown represents minor street approach

Overall operations for Alternative 1 are acceptable (LOS D or better) for all ramp terminal and adjacent local intersections except for Mineral St/6th St which operates at LOS E and F during three future hours. As noted previously, this intersection does not meet signal warrant criteria and the existing signal is replaced with stop control for the minor street approach. During the future hours when demand on 6th St is highest, traffic on Mineral St finds it difficult to find gaps in traffic. Keeping the existing signal is a potential solution to reduce the side street delay, however there would be a disproportional increase in delay for traffic on 6th St which has significantly greater demand in comparison to Mineral St.

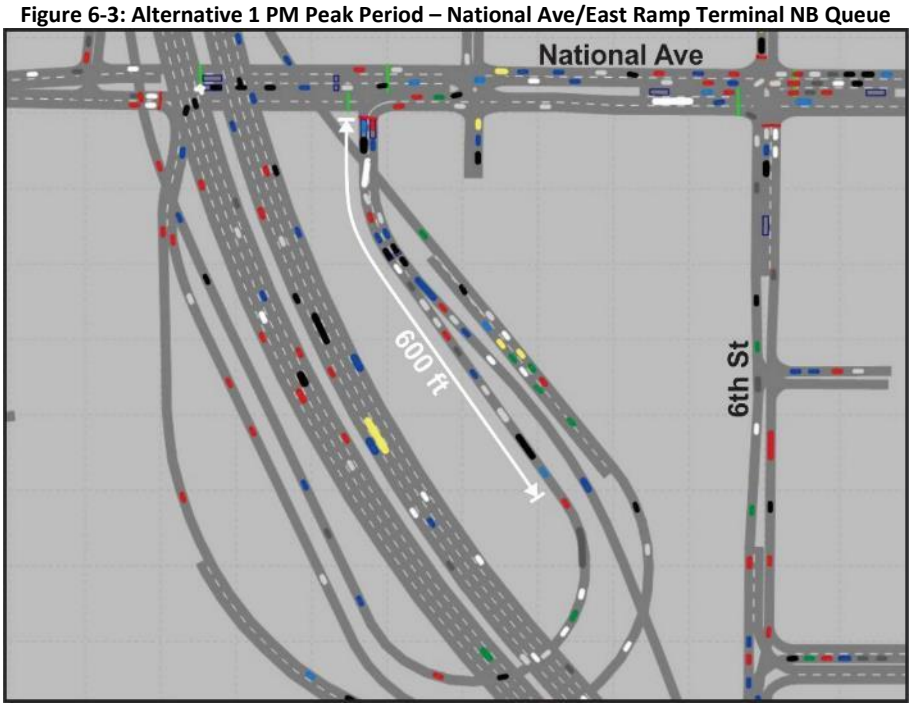
At National Ave/6th St, the intersection operates at LOS A-B during the AM peak period and LOS C during the PM peak period, however even with the proposed geometric and signal improvements there are several turning movements (EBL, WBL, and NBL) that operate at LOS E or F for multiple hours. The proposed left turn lanes help reduce the potential blocking of the thru lanes. The proposed left turn lanes are assumed to utilize queue-based detection where the left turn phase only shows if the queue is more than several cars deep, which helps reduce the delay of the opposing thru movements but also doesn't completely address instances of cycle failure when not all left turning traffic can progress through the signal during one cycle. Future EB volumes (in particular the EBR turn movement) at the intersection increase due to the combined exit ramps, which leads to long EBR turn queues, primarily during the PM peak period when acceptable SB gaps in traffic on 6th St are minimal. Figure 6-2 shows an example of the EBR turn queue at about 4PM.

Figure 6-2: Alternative 1 PM Peak Period – National Ave/6th St EBR turn queue



The east ramp terminal requires the majority of the 80 second cycle to be reserved for the NB approach (combined exit ramps), which limits EB/WB National Ave signal progression. Additional detection is required on the NB exit ramp to make sure the NB phase does not gap out early. Even with maximizing the NB phase duration, there are instances where NB queues extend back onto the NB and SB exit ramps. This issue is compounded by occurrences where traffic from the north wants to head west on National Ave, but cannot get into the left lane due to the queue. An example of the long NB queue is shown in Figure 6-3 which shows future PM peak period operations at about 4:15PM. The NB approach average queue during the PM peak period ranges between 60 and 247 feet with the maximum queue ranging between 259 and 1,040 feet. Queues on the exit ramp have possible safety implications with back of queue crashes and sideswipe crashes due to the combined left and right turning traffic.

Figure 6-3: Alternative 1 PM Peak Period – National Ave/East Ramp Terminal NB Queue

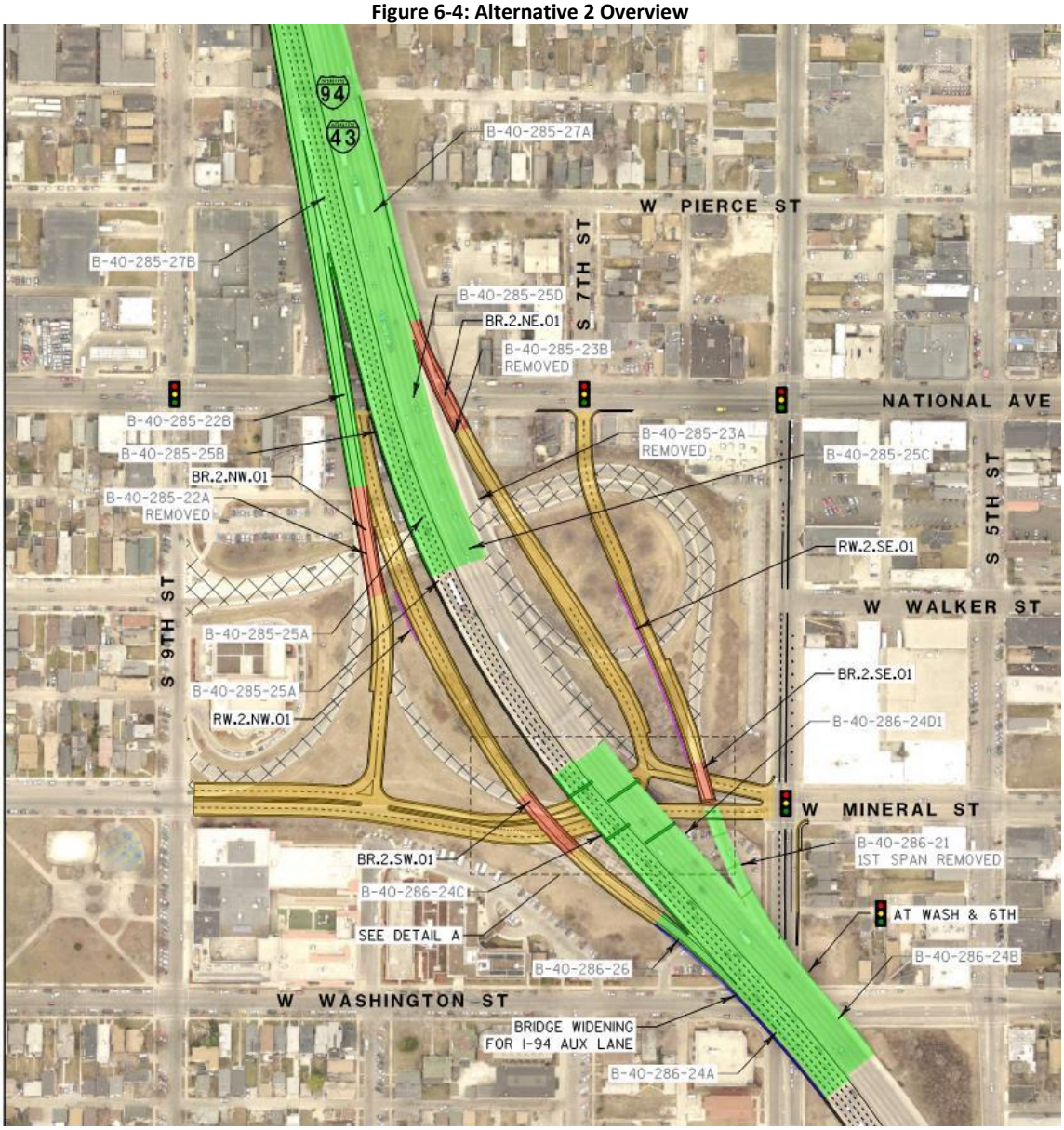


6.2 Alt 2: Split Diamond Interchange at National Avenue/Mineral Street

6.2.1 Design

Alternative 2 is a split diamond interchange with service ramps to/from the south at National Ave and service ramps to/from the north at Mineral St, which are extended beneath I-43/94 between 6th and 9th St as indicated in Figure 6-4. The horizontal alignment of the Mineral St extension was developed to avoid existing bridge piers under I-43/94. Only the National Ave/NB Exit ramp terminal is signalized based on MUTCD signal warrant analysis of forecasted hourly volumes (Attachment Q). The Mineral St/SB exit ramp terminal is stop controlled for the ramp approach. The entrance ramp terminals on National Ave (to SB I-43/94) and Mineral St (to NB I-43/94) operate like a typical uncontrolled intersection (left turn yields to opposing thru and right turn).

Figure 6-4: Alternative 2 Overview



Vissim analysis of the ramp terminals and adjacent local intersections indicate that geometric and signal improvements are required to provide acceptable operations in the future year. Proposed improvements include:

- Walker St/6th St
  - Add SBL turn lane (100 feet)
- Mineral St/6th St
  - Add SBL and SBR turn lanes (150 feet)
  - Add protected NBL turn phase (actuated)
  - Retime signal phases and offsets
- Washington St/6th St

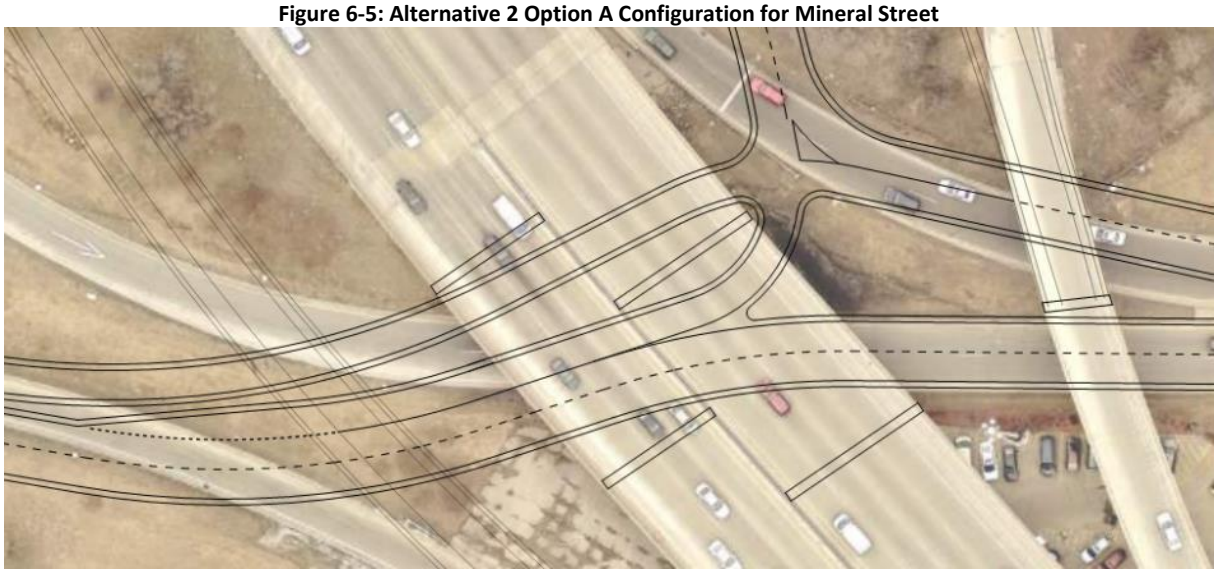
- Add protected SBL turn phase (AM only; pre-timed)
- Modify EB/WB phase passage time parameters

The proposed improvements along 6th St may require on-street parking removal at the intersection approaches. The existing traffic signal at Mineral St/6th St remains.

6.2.1.1 Option A

There are two design options for Alternative 2. The only variance between these options is the horizontal alignment of Mineral Street between 6th and 9th Street. Option A seeks to minimize structural impacts and reduce costs. To do this the WB Mineral Street horizontal alignment avoids the existing pier for the northbound I-43/94 exit ramp. This design is depicted below in Figure 6-5. By avoiding impacting the pier the construction costs can be reduced by ~$665K by not replacing the existing span between this pier and the next pier to the south. Indirect benefits related to maintenance of traffic will likely be seen with Option A during construction which have not been quantified.

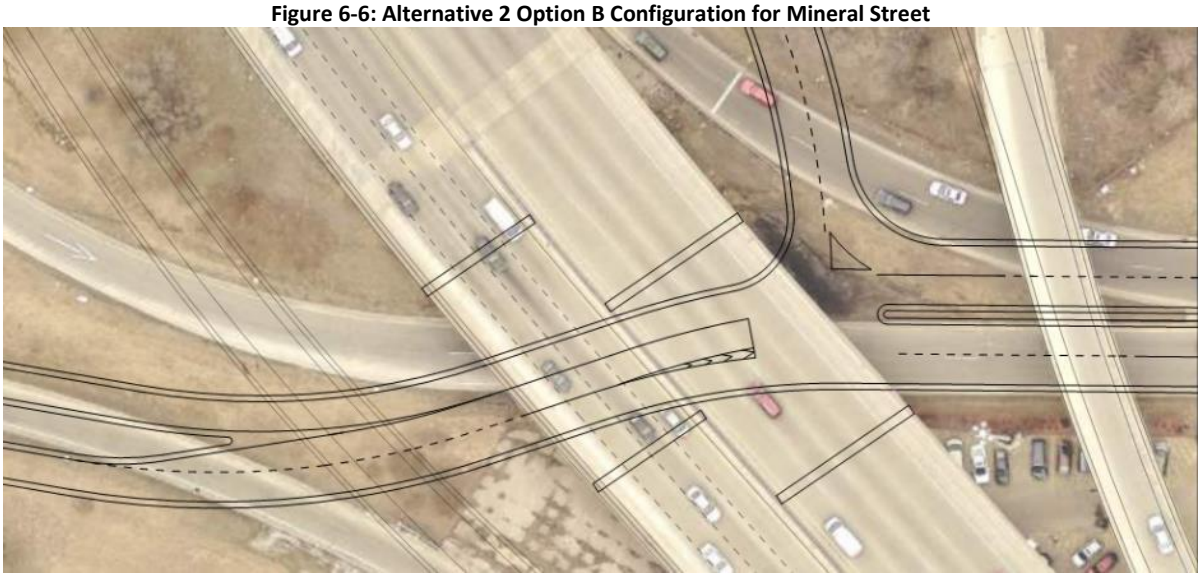
Figure 6-5: Alternative 2 Option A Configuration for Mineral Street



6.2.1.2 Option B

The Option B design smooths the horizontal alignment along Mineral Street, but requires additional bridge replacement for the northbound I-43/94 exit ramp. The geometrics of this option are more typical and prevent potential wrong-way driving that are a possibility with Option A. Option B design is depicted in Figure 6-6 below and increases construction costs by ~665K.

Figure 6-6: Alternative 2 Option B Configuration for Mineral Street



6.2.2 Operations

Future year ramp terminal and the surrounding local road intersections are analyzed for Alternative 2 using the AM and PM peak period 2050 Vissim models. Overall intersection hourly LOS are shown in Table 6-2.

Table 6-2: 2050 Intersection Traffic Operation – Split Diamond Interchange

Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	B	B	B	B	B	B	A	A	A
National & SB Entr	TWSC*	A	A	A	A	A	A	A	A	A
National & NB Exit	Signal	B	B	B	A	B	B	B	B	B
National & 6th	Signal	B	B	B	B	B	B	C	C	B
Walker & 9th	AWSC	A	B	A	A	A	A	A	A	A
Mineral & 9th	AWSC	A	C	A	A	A	A	A	A	A
Mineral & SB Exit	TWSC**	A	A	A	A	A	A	A	A	A
Mineral & NB Entr	TWSC*	A	B	A	A	A	A	B	A	A
Mineral & 6th	Signal	B	B	B	B	B	B	C	C	B
Washington & 9th	AWSC	A	A	A	A	A	A	A	A	A
Washington & 6th	Signal	A	B	A	A	A	A	A	A	A

*LOS shown represents major street left turn movement

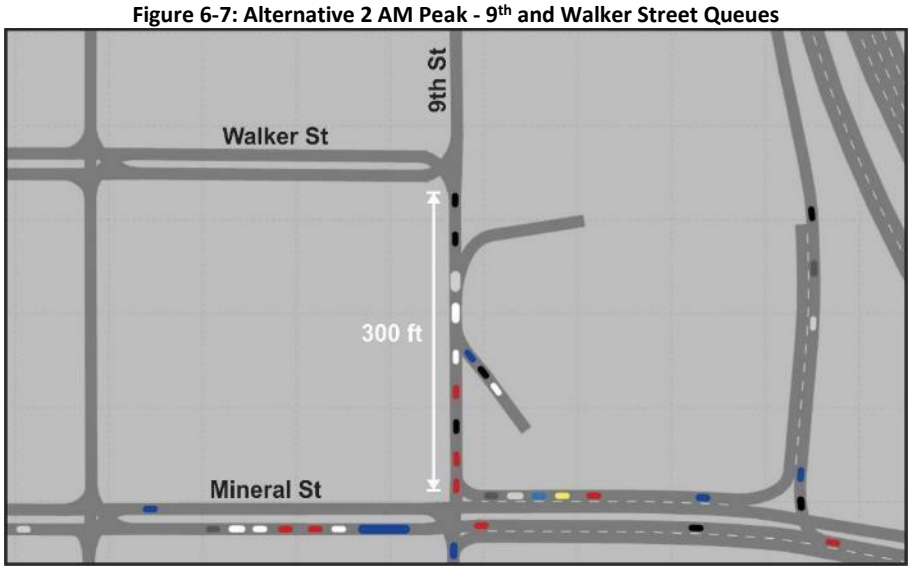
**LOS shown represents minor street approach

All ramp terminals and adjacent local intersections operate at LOS C or better overall under Alternative 2. Traffic is more evenly spread out based on the overlapping, split diamond interchange design and the connection of Mineral St between 6th St and 9th St. One of the heaviest movements in the future peak periods is the SB I-43/94 exit to WB National Ave. By providing the SB exit ramp movement to the

Mineral St extension, this traffic does not need to use 6th St to access National Ave, but rather can travel west on Mineral St and access National Ave via 9th St. This reduces the overall demand on 6th St which improves operations in comparison to Alternative 1 and does not require extensive improvements at National Ave/6th St.

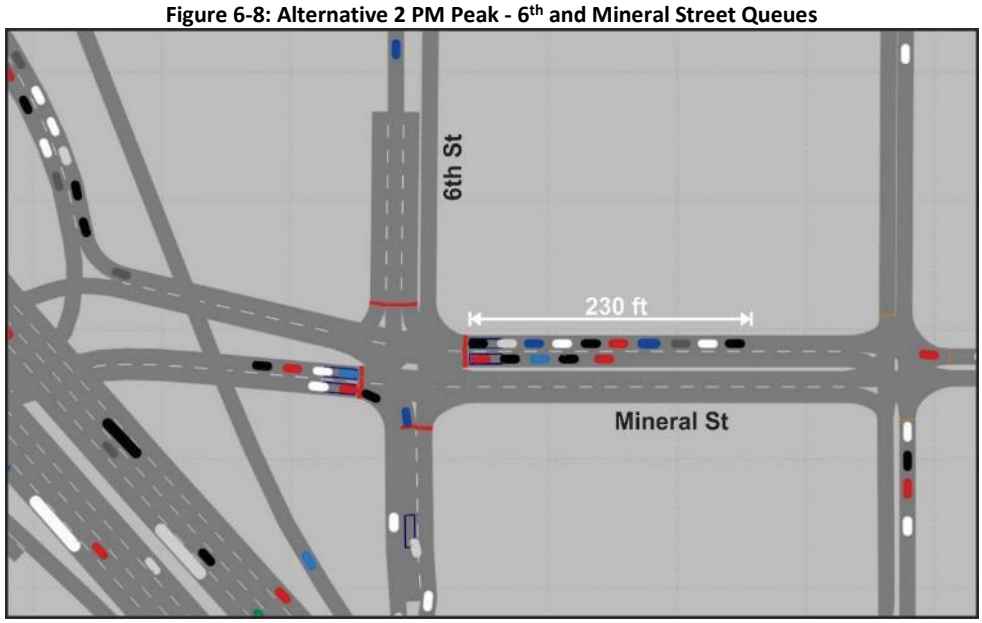
During the AM peak period, the intersection of Mineral St/9th St operates at LOS C (7-8AM) primarily due to the EB approach which operates at LOS D during this hour. The intersection remains all-way stop controlled and increased EBT traffic heading to the NB I-43/94 entrance ramp from Mineral St leads to slightly more delay in the future. Queuing generally isn't an issue during the AM peak period. Maximum queues of about 300 feet towards the end of the 7-8AM hour occur NB at Walker St/9th St due to the increase in NB traffic to National Ave from the SB exit ramp (Figure 6-7).

Figure 6-7: Alternative 2 AM Peak - 9th and Walker Street Queues



During the PM peak period, both National Ave/6th St and Mineral St/6th St operate at LOS C from 4-6PM. At National Ave/6th St, the WBL turn operates at LOS E from 4-6PM which increase the overall intersection delay. The WBL turn forecasted volume is less than 70 vehicles per hour (vph) throughout the PM peak period and does not meet consideration for a protected left turn phase. At Mineral St/6th St, the WB approach operates at LOS D from 3-6PM due to the future timing plan for the intersection. To adequately service 6th St demand as well as EB traffic from the I-43/94 service ramps, the majority of the 80 second cycle is dedicated to the 6th St and the EB phases. The signal timings reduce the WB phase minimum split requirement. A pedestrian call crossing the north leg pushes the signal out of coordination, however existing traffic count data indicates that only three pedestrians cross using the north crosswalk throughout the 12 hour count. Therefore, it is likely that the signal will be out of coordination only on rare occasions. Another potential solution is to eliminate the north crosswalk entirely and consolidate EB/WB pedestrian crossing on the south crosswalk. The WB approach queue during the 4-5PM hour averages more than 200 feet (Figure 6-8).

Figure 6-8: Alternative 2 PM Peak - 6th and Mineral Street Queues

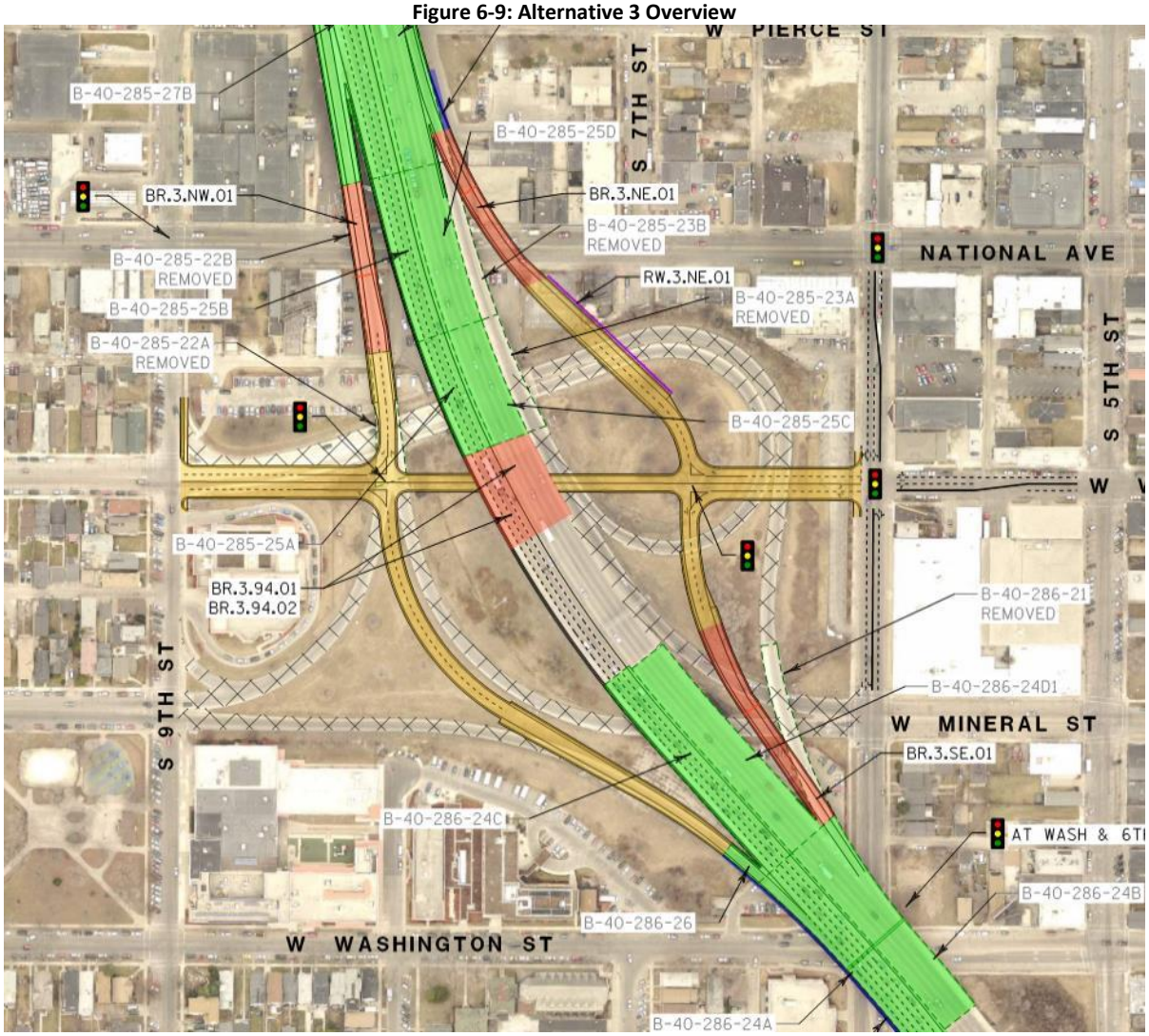


6.3 Alt 3: Traditional Diamond Interchange at Walker Street

6.3.1 Design

Alternative 3 is a typical tight diamond interchange with I-43/94 service ramps at Walker St, which extends beneath I-43/94 between 6th and 9th St as shown in Figure 6-9. The NB and SB I-43/94 exit ramps are designed with vertical profiles greater than 8.0% resulting in design exceptions. Both ramp terminals are signalized based on MUTCD signal warrant analysis of forecasted hourly volumes (Attachment Q). No left turns are shown at the ramp terminal intersections, but they could be accommodated. Connectivity is provided between 6th St and 9th St with this alternative.

Figure 6-9: Alternative 3 Overview



Signal warrant analysis of forecasted hourly volumes for Alternative 3 indicated that Walker St/6th St meets signal warrant criteria, but Mineral St/9th St does not. In addition, Mineral St/6th St does not meet signal warrant thresholds for the future year and as such the signal is removed with Alternative 3. Vissim analysis of the ramp terminals and adjacent local intersections indicate that geometric and signal improvements are required to provide acceptable operations in the future year. Proposed improvements include:

- Walker St/10th St
  - Add WBL turn lane (125 ft)
- Walker St/9th St
  - Add WBR turn lane storage (200 ft)
- Walker St/6th St
  - Signalize
    - Protected phases for EBL, SBL, and NBL turn movements
  - Add SBR and SBL turn lanes (150 ft)

  - Add EBL (150 ft) and WBL (100 ft) turn lanes
  - Add NBL turn lane (225 ft)
- National Ave/6th St
  - Add NBL turn lane (150 ft)
  - Add NBL protected turn phase (actuated, leading)
- Mineral St/6th St
  - Add SBL (50 ft) and NBR (100 ft) turn lanes
- Washington St/6th St
  - Add SBL protected left turn phase (leading, pretimed – AM only)

The proposed improvements along 6th St will likely require on-street parking removal at the intersection approaches.

6.3.2 Operations

Future year ramp terminal and the surrounding local road intersections are analyzed for Alternative 3 using the AM and PM peak period 2050 Vissim models. Overall intersection hourly LOS are shown in Table 6-3.

Table 6-3: 2050 Intersection Traffic Operations – Walker Diamond Interchange

Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	B	B	B	B	B	B	B	B	B
National & 6th	Signal	B	B	B	B	B	C	C	C	C
Walker & 9th	AWSC	A	A	A	A	A	A	A	A	A
Walker & SB Ramps	Signal	B	B	B	B	B	B	B	B	B
Walker & NB Ramps	Signal	B	B	B	A	A	A	A	A	B
Walker & 6th	Signal	B	C	C	C	B	C	C	C	C
Mineral & 9th	AWSC	A	A	A	A	A	A	A	A	A
Mineral & 6th	TWSC*	A	C	D	A	B	B	***F***	C	A
Washington & 9th	AWSC	A	B	A	A	A	A	A	A	A
Washington & 6th	Signal	A	B	B	A	A	A	B	A	A

*LOS shown represents minor street approach

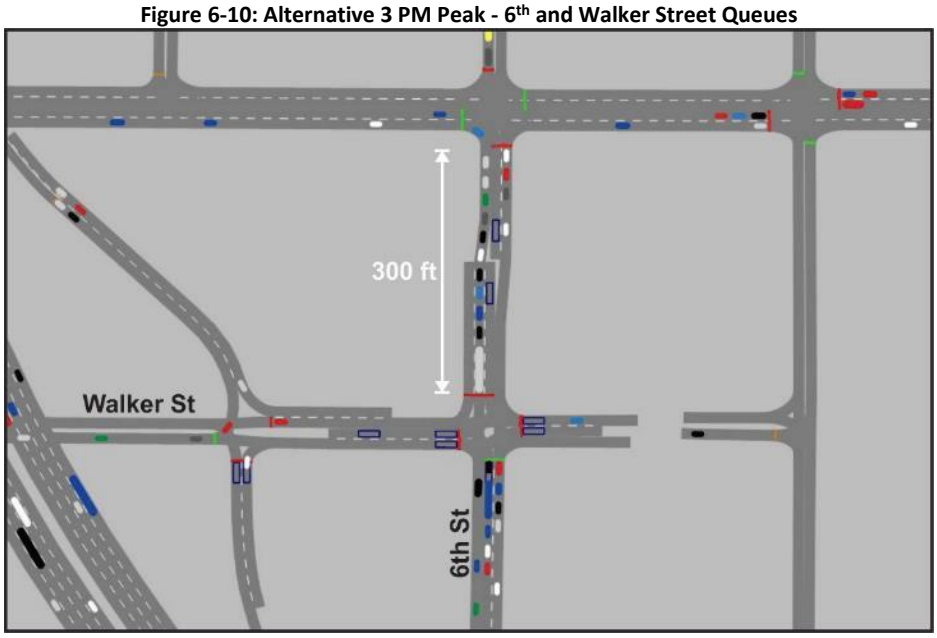
Overall operations for Alternative 3 are acceptable at all ramp terminal and adjacent local intersections, except for Mineral St/6th St which operates at LOS F from 4-5PM. Like Alternative 1, this intersection does not meet signal warrant criteria and the existing signal is replaced with stop control for the Mineral St approach. During the future peak hours when volumes on 6th St are highest, WB traffic finds it difficult to find gaps in traffic. Keeping the existing signal is a potential solution to reduce delay for Mineral St, however there is a disproportional increase to traffic on 6th St.

The most important intersection for Alternative 3 is Walker St/6th St as the majority of entering or exiting traffic travels through this intersection. It's location relative to National Ave/6th St makes NB/SB

signal coordination difficult as EB volumes are heavy during both peak periods. During the AM peak hour, Walker St/6th St would operate at LOS C overall from 7-10AM, as the NBL, SBL, and WBL turn movements operate between LOS D-E for the majority of the AM peak period even with the proposed protected left turn signal phasing. Queuing is generally not an issue during the AM peak period.

Similarly, during the PM peak period each left turn at Walker St/6th St operate between LOS E-F for at least two hours. This is primarily due to the amount of thru traffic on 6th St and adhering to the 80 second cycle length. The SB queue at Walker St/6th St averages 200 feet or greater from 3PM to 5PM. Figure 6-10 shows the maximum queue of about 300 feet at approximately 3:45PM. At National Ave/6th St, the WBL turn operates at LOS E from 4-6PM.

Figure 6-10: Alternative 3 PM Peak - 6th and Walker Street Queues

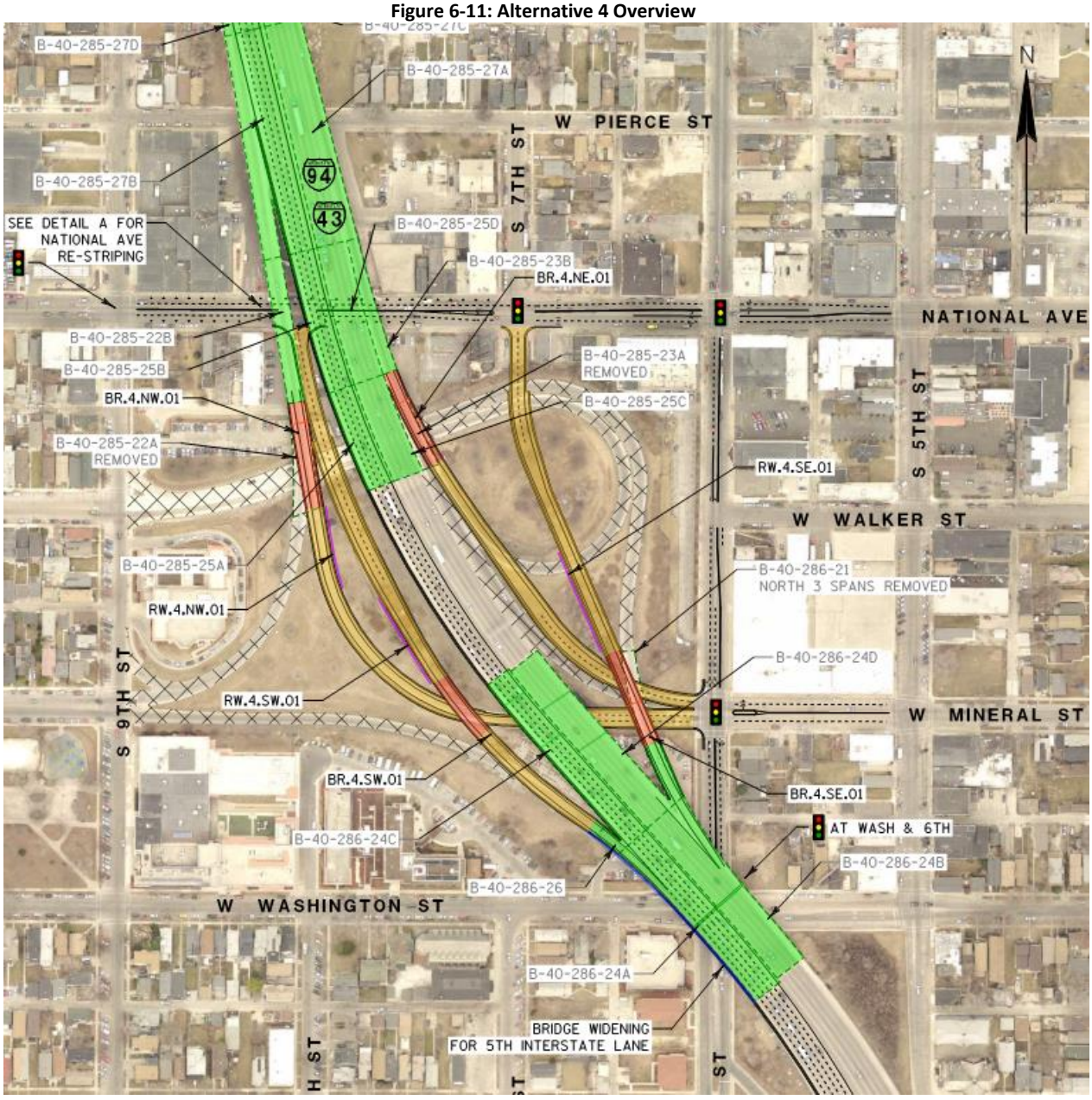


6.4 Alt 4: Hybrid Diamond Interchange at National Avenue/6th Street

6.4.1 Design

Alternative 4 is a hybrid diamond interchange with service ramps to/from the north forming the west leg of the Mineral St/6th St intersection and service ramps to/from the south at new ramp terminals on National Ave as indicated in Figure 6-11. The service ramps to/from the north essentially follow the same alignment as the existing ramps they replace. Like Alternative 2, the National Ave/NB exit ramp terminals are signalized based on MUTCD signal warrant analysis using the forecasted hourly turning movement volumes (Attachment Q). The entrance ramp terminal on National Ave to SB I-43/94 operates like a typical uncontrolled intersection where left turns yield to opposing thru and right turn traffic.

Figure 6-11: Alternative 4 Overview



Vissim analysis of the ramp terminals and adjacent local intersections indicate that geometric and signal improvements are required to provide acceptable operations in the future year. Proposed improvements include:

- National Ave/6th St
  - Add NBL leading protected left turn phase
  - Add NBL turn lane (200 ft)
  - Add EBL and WBL turn lanes (150 ft)
  - Retime signal
- Walker St/6th St
  - Add SBL turn lane (100 ft)

- Mineral St/6th St
  - Extend EBL turn lane (450 ft total)
  - Add EBR turn lane (250 ft)
  - Add SBL and SBR turn lanes (200 ft)
  - Add EBL and NBL leading protected left turn phases (actuated)
  - Add EBR overlap
  - Retime signal
- Washington St/6th St
  - Add EBL protected left turn phase (actuated – AM only)
  - Add SBL protected left turn phase (pretimed – AM only)
  - Retime signal

The proposed improvements along 6th St may require on-street parking removal at the intersection approaches. The existing traffic signal at Mineral St/6th St would remain as well.

6.4.2 Operations

Alternative 4 splits service ramp demand between Mineral St/6th St and National Ave. The configuration of the ramps results in a significant amount of ramp traffic along 6th St, especially at Mineral St/6th St which connects to the SB exit and NB entrance ramps.

Future year ramp terminal and the surrounding local road intersections were analyzed for Alternative 4 using the AM and PM peak period 2050 Vissim models. Overall intersection hourly LOS are shown in Table 6-4.

Table 6-4: 2050 Intersection Traffic Operations – Modified Split Diamond Interchange

Intersection	Control	Level of Service								
		6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM	2 - 3 PM	3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
National & 9th	Signal	A	A	A	A	A	A	A	A	A
National & SB Entr	TWSC*	A	A	A	A	A	A	A	A	A
National & NB Exit	Signal	A	B	A	A	B	B	B	B	B
National & 6th	Signal	B	C	C	B	C	C	C	C	C
Walker & 9th	AWSC	A	A	A	A	A	A	A	A	A
Mineral & 9th	AWSC	A	A	A	A	A	A	A	A	A
Mineral & 6th	Signal	B	C	B	B	C	D	D	D	C
Washington & 9th	AWSC	A	C	A	A	A	A	B	A	A
Washington & 6th	Signal	B	C	C	A	B	B	B	B	A

*LOS shown represents major street left turn movement

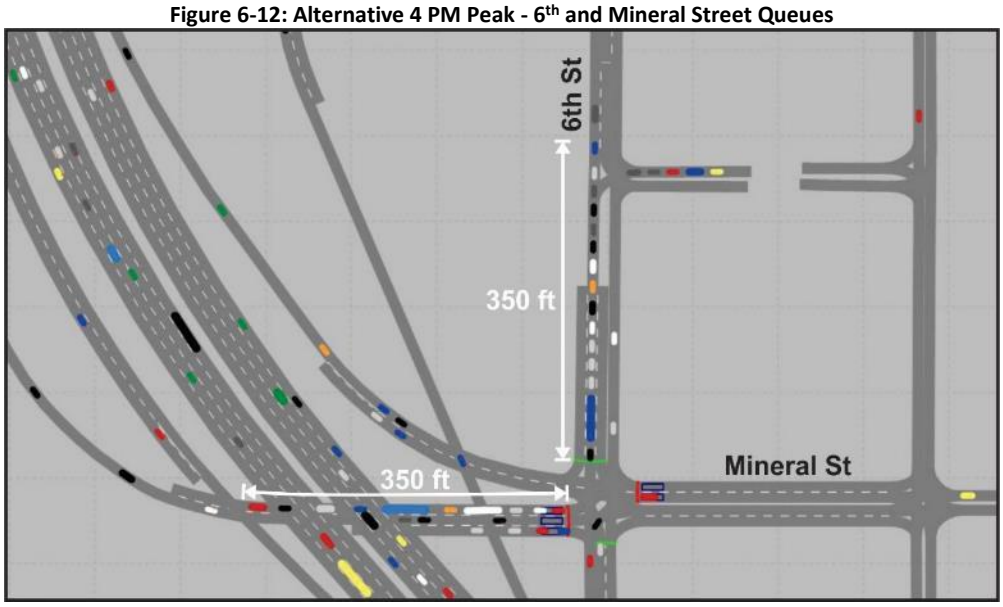
All ramp terminals and adjacent local intersections operate at LOS D or better overall with Alternative 4. Providing access to/from SB I-43/94 via National Ave spreads out some of the future ramp demand between 6th St and National Ave. However, as noted previously, one of the heaviest trip pairs in the future peak periods is the SB I-43/94 exit to WB National Ave. By eliminating the existing SB exit movement to Mineral St/9th St, that traffic must now utilize 6th St and head north to National Ave. This

additional demand on both 6th St and National Ave necessitates the proposed improvements (NBL turn lane and protected left turn phase).

During both peak periods, the intersection of National Ave/6th St operates mostly at LOS C overall mainly due to the EB and WB left turns operating at LOS D and LOS E-F, respectively. Degradation of these movements can be linked to the increase in demand on 6th St where most of the 80 second cycle length must be given to the NB/SB phases in order to keep the approach delay and queues to a minimum.

At Mineral St/6th St during the PM peak period, the intersection operates at LOS D from 3-6PM. This is primarily due to the EB and WB approaches operating between LOS D and LOS F. During the PM peak period, SB demand on 6th St averages greater than 600 vph which necessitates that the majority of the 80 second cycle be provided to the NB/SB phases. As such, the EB/WB approach delay and queues increase. Figure 6-12 shows an example of the average SB and EB queues at Mineral St/6th St during the PM peak period. Like Alternative 2, the future signal timings reduce the WB phase minimum split requirement.

Figure 6-12: Alternative 4 PM Peak - 6th and Mineral Street Queues



6.5 National Ave Alternatives Comparison

6.5.1 Design

The four design alternatives are compared based on their horizontal and vertical geometry, cross sectional elements, structural elements required and costs associated with distinct items such as earthwork.

6.5.1.1 Alternative 1

The NB I43/94 exit ramp (SE ramp) requires a 35mph advisory speed reduction sign on the interstate due to a less than desirable crest vertical curve north of the ramp gore. The SE ramp utilizes cut and fill retaining walls adjacent to the NE and NW ramps. After the SE ramp connects with the NW ramp there

is a short 200-foot weaving area prior to the ramp terminal intersection at National Ave. The ramp has desirable lane and shoulder widths and utilizes much of the existing interchange topography.

The NB I43/94 entrance ramp (NE ramp) is one of two movements with this alternative that features a full 'U' turn beginning in a southbound direction before looping under I43/94and climbing over the SE and NW ramps. The 'U' turn features a less than desirable horizontal curve which requires traffic to keep a low speed of 30-mph. The unique vertical profile requires significant earthwork cut west of the interstate and fill east of the interstate. The connection to the existing Interstate bridge results in substandard superelevation transition to match the existing deck cross slope.

The SB I43/94 exit ramp (NW ramp) is the second movement which loops under the interstate before bearing north and connecting to the NB exit ramps prior to terminating at National Ave. The 'U' turn features a less than desirable horizontal curve which requires traffic to keep a low speed of 30-mph. The NW ramp includes cut and fill retaining walls in various locations due to the close proximity of the ramps to each other and the interstate.

The SB I43/94 entrance ramp (SW ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The SW ramp requires a significant amount of earthwork cut to remove the existing SB exit ramp. The SW ramp requires less than desirable shoulder widths at the ramp gore tie-in to SB I43/94

National Avenue is restriped by removing existing parking to accommodate the additional traffic movements to/from the ramp terminals.

The unique configuration of the ramps and the close proximity to each other results in higher costs due to the large amount of retaining walls needed. Impervious pavement area with Alternative 1 is higher than the other alternatives resulting in a more complex drainage solution and higher overall costs.

6.5.1.2 Alternative 2

Alternative 2 is analyzed independent of the sub alternatives discussed in section 6.2.1.

The NB I 43/94 exit ramp (SE ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The ramp requires a retaining wall adjacent to the NE ramp and potentially along the east shoulder depending on final right-of-way constraints for future land use.

The NB I43/94 entrance ramp (NE ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The earthwork values are larger to remove the existing ramp movement and realign the ramp with the Mineral Street extension.

The SB I43/94 exit ramp (NW ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The close proximity of the SW ramp will require a longer bridge south of National Avenue increasing costs with this alternative.

The SB I43/94 entrance ramp (SW ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The terminal intersection at National Avenue will be tightly

located between the Interstate bridge and NW ramp bridge piers. A retaining wall is needed where the NW ramp bridge ends south of National Avenue. The SW ramp requires less than desirable shoulder widths at the ramp gore tie-in to SB I43/94

6th Avenue is restriped by removing existing SB parking to accommodate the additional traffic movements at the intersection with Mineral Street.

Alternative 2 has the potential to connect 8th Street to the SB exit ramp intersection with Mineral Street if desired.

The area between the NW and SW ramps could create needed space for drainage detention/retention.

6.5.1.3 Alternative 3

The NB I 43/94 exit ramp (SE ramp) requires a 30mph advisory speed reduction sign on the interstate due to a less than desirable crest vertical curve north of the ramp gore, an 8% vertical profile grade, and short deceleration distance to the ramp terminal intersection.

The NB I43/94 entrance ramp (NE ramp) has an 8% maximum profile grade to achieve proper vertical clearance over National Avenue. The bridge connection to existing NB I-43/94 requires a substandard superelevation transition as well as widening to the existing bridge.

The SB I43/94 exit ramp (NW ramp) requires a 30mph advisory speed reduction sign on the interstate due to sharp crest vertical curve and a 11% maximum profile grade. The vertical profile for the NW ramp is highly unsafe and will likely result in a large amount of rear end crashes at the ramp terminal intersection with Walker Street.

The SB I43/94 entrance ramp (SW ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions.

6th Avenue is restriped by removing existing SB parking to accommodate the additional traffic movements at the intersection with Walker Street.

6.5.1.4 Alternative 4

The NB I 43/94 exit ramp (SE ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The SE ramp requires a retaining wall adjacent to the NE ramp and potentially along the east shoulder depending on final right-of-way constraints for future land use.

The NB I43/94 entrance ramp (NE ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions.

The SB I43/94 exit ramp (NW ramp) does not include any vertical geometrics which result in less than desirable conditions. The portion of the ramp which extends under I 43/94 has a low speed horizontal curve resulting in advanced signing and flashing warning arrows.

The SB I43/94 entrance ramp (SW ramp) does not include any horizontal or vertical geometrics which result in less than desirable conditions. The terminal intersection at National Avenue will be tightly

located between the Interstate bridge and NW ramp bridge piers. Retaining walls are needed between the SW and NW ramps.

National Avenue is restriped by removing existing parking to accommodate the additional traffic movements to/from the ramp terminals.

6.5.2 Operations

Operational differences between the four interchange alternatives can be traced to increased future year demand as well as freeway access point modifications. Alternatives 1, 2, and 4 all include some degree of direct freeway access to/from National Ave. Freeway access for Alternative 3 is concentrated to Walker St, but the majority of traffic utilizes National Ave or 6th St to get to the Walker St interchange. Each alternative also requires local intersection improvements to provide acceptable operations during the future year peak periods. The ramp terminal intersections for each alternative generally operate at LOS D or better during the future year peak periods. The intersection of Mineral St/6th St degrades to LOS E and LOS F for Alternatives 1 and 3 when the intersection does not meet signal warrant criteria and the existing signal is removed. Overall, Alternative 2 operates the best as the future ramp demand is spread between Mineral St and National Ave.

Local road travel time data was collected from each Vissim model to compare the alternatives against each other in addition to 2050 No Build operations. Routes are established in the models to report travel times between the freeway and major local roadways (National Ave and 6th St). The start and end points on the ramps to establish travel times are located near the freeway gores. The local road start and end points for travel times are located west of 10th St and east of 5th St (for National Ave) as well as north of National Ave and south of Scott St (for 6th St). Table 6-5 below reports AM average peak period model travel times.

Table 6-5: AM Travel Time Comparsion for the Local Roads

Route		AM Peak Period (min)					
From	**To**	**Existing**	**No Build**	**Alt 1**	**Alt 2**	**Alt 3**	**Alt 4**
6th St	NB Entr Ramp	1.4	1.5	3.0	1.7	2.1	1.9
National Ave		1.7	1.7	2.6	1.7	1.5	2.2
NB Exit Ramp	6th St	1.9	2.0	1.8	1.5	1.8	1.7
	National Ave	1.8	1.9	1.4	1.3	1.7	1.4
SB Exit Ramp	6th St	1.3	1.4	1.9	1.6	1.4	1.2
	National Ave	2.4	2.5	2.0	2.0	1.8	2.1
6th St	SB Entr Ramp	2.1	2.3	2.3	1.2	1.5	1.6
National Ave		2.0	2.1	1.7	1.1	1.9	1.2
Average Difference Compared to No Build (%)				**14%**	**-18%**	**-8%**	**-11%**

In comparison to No Build travel times, Alternative 1 AM travel times to the NB entrance ramp increase by 53-100% (about 1-1.5 minutes) mainly due to the increased demand and congestion along National Ave due to the combined ramp terminals. AM peak period travel times for Alternative 2 decrease (or

stay the same) for each route relative to No Build as ramp demand is split between Mineral St and National Ave. Alternative 3 shows the greatest average reduction in travel times from the north (via the SB exit ramp) to 6th St or National Ave. Alternative 4 shows consistent travel time reduction for routes associated with the NB exit ramp, SB exit ramp, and SB entrance ramp. There is a 27-29% (0.4-0.5 minute) increase in Alternative 4 travel times associated with the NB entrance ramp.

Overall, average AM peak period travel times increase only under Alternative 1 in comparison to No Build operations. Alternatives 2 (18%) and 4 (14%) show the greatest reduction in average AM peak period travel times. Table 6-6 below reports PM average peak period model travel times.

Table 6-6: PM Travel Time Comparsion for the Local Roads

Route		PM Peak Period (min)					
From	**To**	**Existing**	**No Build**	**Alt 1**	**Alt 2**	**Alt 3**	**Alt 4**
6th St	NB Entr Ramp	1.5	1.8	3.5	1.8	2.0	2.1
National Ave		1.9	2.0	2.4	2.3	1.9	3.3
NB Exit Ramp	6th St	2.1	2.7	1.9	1.6	1.6	1.9
	National Ave	2.0	2.0	1.5	1.3	2.3	1.4
SB Exit Ramp	6th St	1.7	1.6	2.6	2.5	2.0	1.7
	National Ave	2.4	2.6	2.0	2.0	1.9	2.9
6th St	SB Entr Ramp	2.1	2.3	2.1	1.2	1.6	1.2
National Ave		2.1	2.3	1.9	1.2	1.8	1.1
Average Difference Compared to No Build (%)				**9%**	**-15%**	**-9%**	**-8%**

Like the AM peak period, Alternative 1 average PM travel times to the NB entrance ramp increase by 20-94% (about 0.4-1.7 minutes) due to increased demand and congestion along National Ave between the ramp terminals and 6th St. PM peak period travel times for Alternative 2 decrease for every route in comparison to No Build, except for the SB exit ramp to National Ave which stays the same (2 minutes). Alternative 3 shows travel time increases for the NB exit ramp to National Ave (15%) and SB exit ramp to 6th St (25%). Alternative 4 indicates an increase in travel time from National Ave to get to the NB entrance ramp (about 1.3 minutes) due to increased delay at the intersection of National Ave/6th St. Average PM peak period travel times increase for Alternative 1 only in comparison to the No Build scenario. Alternatives 2 (15%) and 3 (9%) show the greatest reduction in average PM peak period travel times.

6.5.3 Neighborhood Considerations

In addition to design, safety, and operational considerations there are other benefits for each alternative such developable land, local connectivity, and pedestrian accommodations. Comparison of these factors are summarized in this section.

Local Connectivity:

- Alternative 1 U-Ramp – Consolidates all I-43/94 access to National Avenue. No local through streets are created.
- Alternative 2: Split Diamond Interchange – Create new connection on Mineral Street between 6th and 9th Streets. Consolidates I-43/94 ramp access to National Avenue and Mineral Street.
- Alternative 3 Traditional Diamond: Creates new connection on Walker Street between 6th and 9th Street and consolidates all I-43/94 ramp traffic to Walker Street.
- Alternative 4 Hybrid Diamond: I-43/94 ramp access is split between National Avenue and Mineral Street/6th Street Intersection. No local through street are created.

Developable land

The National Avenue Interchange designs reduce the foot print of the existing Interchange. The designs are in the planning phases and the exact right-of-way surplus is not yet determined. The general opportunities for developable lands are listed below.

- Alternative 1 U- Ramp
    - Removal of Walker Street ramps vacate land between UCC owned properties (Bruce Guadalupe Middle School and parking lot)
    - Removal of Mineral Street ramp to 9th Street vacates land between Bruce Guadalupe Middle School and Elementary School. Additional land is also vacated east of the Middle School.
    - Land is vacated in the Northeast quadrant of the interchange behind businesses on National Avenue between 7th Street and 6th Street.
- Alternative 2 Split Diamond Interchange
    - Removal of Walker Street ramps vacate land between UCC owned properties (Bruce Guadalupe Middle School and parking lot)
    - Removing the loop ramps vacate land in the northeast quadrant behind businesses on National Avenue between 7th Street and 6th Street; and along 6th Street between National and Mineral Street
- Alternative 3 Traditional Diamond Interchange
    - Removal of Mineral Street ramp to 9th Street vacates land between Bruce Guadalupe Middle School and Elementary School. Additional land is also vacated east of the Middle School.
    - Land is vacated in the Northeast quadrant of the interchange behind businesses on National Avenue between 7th Street and 6th Street; and along 6th Street from National to Walker Street, and Walker Street to Mineral Street.
- Alternative 4 Hybrid Diamond Interchange
    - Removal of Walker Street ramps vacate land between UCC owned properties (Bruce Guadalupe Middle School and parking lot)

- Removal of Mineral Street ramp to 9th Street vacates land between Bruce Guadalupe Middle School and Elementary School. Additional land is also vacated east of the Middle School.
- Removing the loop ramps vacate land in the northeast quadrant behind businesses on National Avenue between 7th Street and 6th Street; and along 6th Street between National and Mineral Street

Pedestrian Safety

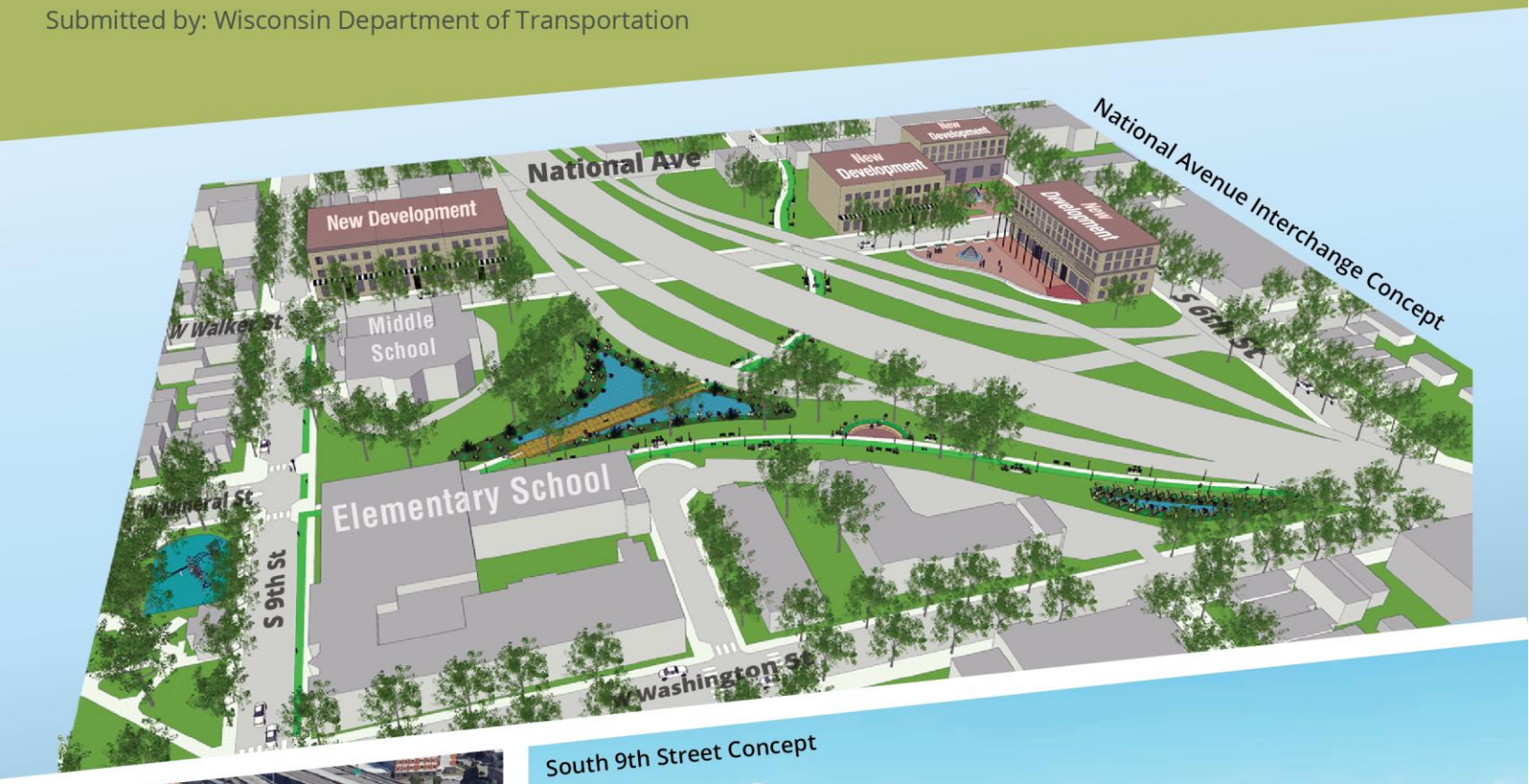
The highest pedestrian activity in the project corridor is along 9th Street, especially near the elementary school, middle school, and park at Mineral Street.

- Alternative 1 U Ramp – Improves pedestrian safety along 9th street with removal of all ramp access to 9th Street.
- Alternative 2 Split Diamond Interchange – Improves pedestrian safety along 9th Street with consolidation of ramps on Mineral Street.
- Alternative 3 Traditional Diamond – Improves pedestrian safety along 9th Street with consolidation of ramps to Walker Street and ramp removals at 9th Street & Mineral Street intersection.
- Alternative 4 Hybrid Diamond – Improves pedestrian safety along 9th Street with removal of all ramp access at 9th Street.

REIMAGINING THE NATIONAL AVENUE INTERCHANGE

U.S. DOT FY 2023 Reconnecting Communities and Neighborhoods Planning Grant

Submitted by: Wisconsin Department of Transportation



LETTERS OF SUPPORT

SEPTEMBER 28, 2023

Letters of Support

- **Wisconsin Secretary of Transportation,** Craig Thompson
- **Office of the Governor of Wisconsin,** Tony Evers
- **U.S. Senator,** Tammy Baldwin, Wisconsin (Mailed directly to U.S. DOT)
- **State Senator,** Tim Carpenter, District 3
- **State Senator,** Lena C. Taylor, District 4
- **State Assembly Representatives – Joint Letter,** Sylvia Ortiz-Velez**,** District 08 and Jessie Rodriguez, District 21
- **State Assembly Representative,** Dora Drake, District 11
- **State Assembly Representative,** Evan Goyke**,** District 18
- **City of Milwaukee Mayor,** Cavalier Johnson
- **City of Milwaukee Alderman and Council President,** José G. Pérez**,** District 12
- **City of Milwaukee Commissioner of Public Works,** Jerrel Kruschke, P.E.
- **Milwaukee County Executive,** David C. Crowley
- **Milwaukee County Supervisor,** Caroline Gómez-Tom, District 14
- **Milwaukee County Supervisor,** Sheldon Wasserman, District 3
- **Milwaukee County Parks,** Guy D. Smith, Executive Director
- **Milwaukee Metropolitan Sewerage District (MMSD),** Kevin L. Shafer, P.E., Executive Director
- **Transportation Development Association of Wisconsin (TDA),** Debby Jackson, Executive Director
- **Wisconsin Transportation Builders Association (WTBA),** Steve Baas, Executive Director
- **United Community Center,** Laura Gutierrez, CEO
- **Hispanic Collaborative,** Nancy Hernandez, President
- **Forward Latino,** Darryl D. Morin, National President
- **Menomonee Valley Partners,** Corey Zetts, Executive Director
- **Sixteenth Street Community Health Center,** Julie B. Schuller, President & CEO
- **Milwaukee Christian Center,** Karen Higgins, Executive Director
- **St. Peter Evangelical/Lutheran Church**, James W. Carter, III, Treasurer
- **Walker Square Neighborhood Association**, James W. Carter, III, Representative
- **Latino Chamber of Commerce of Southeastern Wisconsin**, Samantha Jimenez, Director of Engagement
- **MobiliSE**, Dave Steele, Executive Director

Wisconsin Department of Transportation
Office of the Secretary
4822 Madison Yards Way, S903
Madison, WI 53705

Governor Tony Evers
Secretary Craig Thompson
wisconsindot.gov
Telephone: (608) 266-1114
FAX: (608) 266-9912
Email: sec.exec@dot.wi.gov

August 21, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses, and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Craig Thompson
Secretary

Tony Evers
Office of the Governor | State of Wisconsin

September 7, 2023

The Honorable Pete Buttigieg
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Buttigieg:

On behalf of the state of Wisconsin, I write to express my support for the Wisconsin Department of Transportation's (WisDOT) application to the 2023 Reconnecting Communities and Neighborhoods (RCN) Program titled "Reimaging the National Avenue Interchange Planning Study." This project will be essential in determining and evaluating design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin. Constructed in the 1960s, the National Avenue Interchange continues to obstruct bike and pedestrian connections and contains safety concerns for the residents near the interchange, primarily Walker's Point and Walker Square, both predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40 percent of residents currently experiencing poverty.

This high-priority study will focus on a robust public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. The study will investigate and consider various options to reconnect these communities, such as decreasing the interchange footprint, matching land use with community needs, reconnecting the neighborhood through improved pedestrian, bicycle, transit, and vehicular mobility, and reduced intermodal conflicts. Traffic patterns will also be analyzed to determine potential alternatives that will improve the public realm, reduce both vehicle miles traveled and greenhouse gas emissions, and reclaim valuable land for community use and future investment. WisDOT will also develop a complete streets vision for the four acres of land in partnership with the local community for their benefit and use, highlighting the importance of state and local partnership in community reconnection, and all future infrastructure projects.

As my administration continues to prioritize safety and community benefits in our state infrastructure plans, and as we continue to successfully implement President Biden's generational investments through his Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), I ask for your support of this important project. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the study, and WisDOT will develop an implementable strategic plan to reconnect this historically underserved southside Milwaukee community, vastly enhancing mobility and quality of life. Thank you for your consideration, and please do not hesitate to reach out to my office about this critical proposal.

Sincerely,

Tony Evers
Governor

WISCONSIN STATE SENATOR
TIM CARPENTER
SENATOR – 3RD DISTRICT
State Capitol • PO Box 7882 • Madison, WI 53707-7882 • Phone: (608) 266-8535

August, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimagining the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of this study are to determine and evaluate design alternatives to reconnect neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void at the core of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses, and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. *Ramps completely surround Bruce-Guadalupe Middle School on S. 9th Street*, separating it from its neighboring elementary school, creating dangerous traffic for families, and impairing the learning environment for both schools.

This much-needed planning study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public space, reduce vehicle miles traveled and greenhouse gas emissions, and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience to conduct robust public outreach and complete the study well before statutory deadlines. Through public engagement and technical analysis, the study will develop an implementable strategic plan to reconnect this historically underserved South Side community, vastly enhancing mobility and quality of life.

Sincerely,

Tim Carpenter

Tim Carpenter
Wisconsin State Senator, 3rd District

Toll Free: (800) 249-8173 E-mail: sen.carpenter@legis.state.wi.us Fax: (608) 282-3543
Website: www.legis.state.wi.us/senate/sen03/news

LENA C. TAYLOR
Wisconsin State Senator • 4th District
HERE TO SERVE YOU!

September 11, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Secretary Buttigieg,

I am writing to offer my enthusiastic support for Wisconsin Department of Transportation's (WisDOT) grant application for the Reimaging the National Avenue Interchange Planning Study for the Reconnecting Communities and Neighborhoods (RCN) Program. This Study is an opportunity to address past systemic and discriminatory practices that harmed Black and Brown communities, in the name of progress.

Historically, disadvantaged neighborhoods saw highways used as an extension of racial segregation, which placed physical barriers between them and their white neighbors. Residents, families and impacted communities have suffered generational harm. As we grapple with the environmental, public health and social justice consequences of these choices, we realize the detriment to quality of life, public safety, and neighborhood continuity.

I applaud the Biden/Harris Administration's commitment of resources, in their recent infrastructure plan, which takes these concerns into account. While the WisDOT proposal does not cover my senate district, I am, nonetheless, excited that the Study focuses on an urban, predominantly Hispanic and Latino neighborhood on Milwaukee's south side.

This Study will concentrate on Walker's Point and Walker Square, which was severely impacted by the National Avenue Interchange that was constructed in the mid 1960's. In the height of Wisconsin's open housing marches, neighborhoods were disconnected and segmented. Green space, bike paths, and pedestrian-friendly walkways were reduced, by as much as 20 acres.

The goals of the Study, as explained to me, are to review and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange. Whether ensuring that traffic flows into surrounding communities, in a way that is equitable, or correcting ramps that separate middle and elementary schools, the study will speak to best practices to bring much needed relief.

For years, we've talked about food deserts, pollution, and other issues related to our proximity to the highway. However, the Buffalo Mass shooting, in May 2022, at Tops Friendly Market, forced a national conversation about a community being reduced to one small grocery store. A highway was built through their community and effectively cut them off from readily accessible resources. These grants are an opportunity to provide redress and restore neighborhoods.

Therefore, I am hopeful that you will give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT is well positioned to achieve the goals of the grant. They have the support of many state, municipal, and local stakeholders. As a legislator, I've worked with the department on issues impacting my district. I have known them to be exceptional with public engagement, project management, and coming in under budget and on time regarding state projects. I am confident they will bring those skill sets to the proposed Study. Most importantly, I am thrilled at an ability to improve the quality of life for our neighbors on Milwaukee, Wisconsin's south side.

Sincerely,

Lena C. Taylor
Wisconsin State Senator – 4th District

August 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Representative Jessie Rodriguez
Assembly District 21

Representative Sylvia Ortiz-Velez
Assembly District 08

STATE REPRESENTATIVE

Dora DRAKE

August 29, 2023

Secretary Pete Buttigieg
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Mr. Buttigieg,

I write in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

The Study focuses on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian, bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange cuts through diverse urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an interactive public engagement process to identify the needs and desires of the community. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based place making and complete street vision will be developed for the land that WisDOT would potentially give back to the community due to ramp configurations in this area.

In closing, I ask that you give important consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved Southside community, vastly enhancing mobility and quality of life.

Sincerely,

Dora Drake
WI State Representative
11th Assembly District

ELEVENTH ASSEMBLY DISTRICT

STATE CAPITOL P.O. Box 8952, Madison, WI 53708 || **TELEPHONE** (608) 266-3756 || **TOLL FREE** (888) 534-0011
EMAIL rep.drake@legis.wisconsin.gov || **WEBSITE** legis.wisconsin.gov/assembly/11/drake
FACEBOOK @RepDrake || **TWITTER** @RepDrake

EVAN GOYKE
STATE REPRESENTATIVE
18th ASSEMBLY DISTRICT

September 12, 2023

Secretary Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you consider WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

State Representative Evan Goyke
18th Assembly District

State Capitol: P.O. Box 8952, Madison, WI 53708 (608) 266-0645 Toll-free: (888) 534-0018
E-mail: rep.goyke@legis.wi.gov Web: http://goyke.assembly.wi.gov

Cavalier Johnson
Mayor, City of Milwaukee

September 11, 2023

Secretary Pete Buttigieg
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Secretary Buttigieg,

The City of Milwaukee (City) strongly supports the *Reimagining the National Avenue Interchange Planning Study* Community Planning application for the Reconnecting Communities and Neighborhoods (RCN) Program submitted by the Wisconsin Department of Transportation (WisDOT). WisDOT is also in support of the City's concurrent efforts to receive capital construction funding through the Neighborhood Access & Equity (NAE) Program for the transformative *Connecting North to South: A Complete 6th Street* Project. These distinct projects – one construction, one planning – both seek to reconnect communities disrupted by the legacy of automobile-oriented infrastructure through community-informed design. While operationally independent, WisDOT and the City hope to maximize health and safety outcomes for area residents through these projects. Both parties are committed to work cooperatively to realize a shared vision for the study areas.

This *National Avenue Interchange Planning Study* will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods, that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections and created safety deficiencies. The interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee. The City of Milwaukee's Department of City Development led a neighborhood planning effort with the Walker Square neighborhood in 2015. The resulting Walker Square Strategic Action Plan recommends a future reconstruction of the I-43/94 National Avenue Interchange that is informed by community engagement and reconnects the surrounding neighborhoods by prioritizing a smaller footprint, reestablishing the street grid, improving the public realm, and freeing valuable land for community uses and investment.

Built in the mid-1960s, this elevated section of I-94 travels though this historically diverse neighborhood, and the interchange ramps distribute traffic onto residential streets, leaving residents, businesses, and students to navigate local roads where Interstate-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated Interstate, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will advance recommendations from the City of Milwaukee's Comprehensive Plan to examine decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp re-configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's *Reimagining the National Avenue Interchange Study* planning grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop a strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Mayor Cavalier Johnson

Common Council President

12th District Alderman

José G. Pérez

City of Milwaukee Common Council

August 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

City Hall, 200 E. Wells St., Room 205, Milwaukee, WI 53202 • Ph: (414) 286-2221 • Fax: (414) 286-3456
E-mail: jperez@milwaukee.gov • Website: www.milwaukee.gov/district12

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Respectfully,

José G. Pérez,
Alderman, 12th District

City Hall, 200 E. Wells St., Room 205, Milwaukee, WI 53202 • Ph: (414) 286-2221 • Fax: (414) 286-3456
E-mail: jperez@milwaukee.gov • Website: www.milwaukee.gov/district12

City of Milwaukee

Department of Public Works

Jerrel Kruschke, P.E.
Commissioner of Public Works

August 23, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will

examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Jerrel Kruschke, P.E
Commissioner of Public Works

August 28, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This study is critical as Milwaukee County seeks to achieve its vision of achieving community health and racial equity. Reconnecting the neighborhoods that were cleaved by historic inequitable practices will move the needle toward achieving equity, and I know all involved will have robust, multilingual outreach to determine the wants and needs of the community. Improving multimodal transportation options – like pedestrian, bicycle, and transit – will similarly impact community health and equity. It will also seek to reduce greenhouse gas emissions and vehicle miles traveled – critical goals as we grapple with increasing temperatures and extreme weather events, the effects of which are felt most acutely by low-income and minority communities.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

David C. Crowley
Milwaukee County Executive

MILWAUKEE COUNTY BOARD OF SUPERVISORS

Supervisor Caroline Gómez-Tom • District 14

September 20, 2023

Joshua LeVeque, P.E.
Project Development Supervisor – SE Region
Wisconsin Department of Transportation
Email: Joshua.LeVeque@dot.wi.gov

Dear Mr. LeVeque,

I am writing to extend my wholehearted support for the grant application submitted by WisDOT to the U.S. Department of Transportation's Reconnecting Communities and Neighborhoods (RCN) Program. Studying the potential reimagining of the National Avenue Interchange holds immense promise for our community, particularly in enhancing safety, connectivity, and fostering economic development within the Walker's Point and Walker Square neighborhoods.

From the briefing I've received, it is evident that this initiative aligns seamlessly with the work Milwaukee County is already doing. I believe that with an RCN planning grant award, we can embark on a comprehensive public engagement program, one that will not only identify our community's needs but will also explore a spectrum of improvement alternatives. This will pave the way for a more inclusive, safer, and economically vibrant community in District 14 and in Milwaukee County.

I am confident that the proposed robust public engagement, development of improvement alternatives, and the feasibility study will serve as a beacon, guiding WisDOT and Milwaukee County towards achieving a shared vision for our community.

Please consider this letter as an assertion of my commitment and support of WisDOT's grant application. I believe that our joint efforts can yield a transformative change for the Walker's Point and Walker Square neighborhoods, and I'd like to commend WisDOT for spearheading such a timely and vital initiative.

Warm regards,

Caroline Gómez-Tom (she/her)
Supervisor District 14
Milwaukee County Board
901 N 9th Street, Milwaukee, WI 53233
Office: 414-278-4252
Email: Caroline.Gomez-Tom@milwaukeecountywi.gov

SHELDON A. WASSERMAN

MILWAUKEE COUNTY SUPERVISOR - 3RD DISTRICT

BOARD OF SUPERVISORS

September 18, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin. As the elected Milwaukee County Supervisor for the project area, I am committed to listening to the community and studying options to enhance mobility and quality of life for my constituents.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses, and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Sheldon Wasserman

Sheldon Wasserman
Milwaukee County Supervisor, District 3

MILWAUKEE COUNTY COURTHOUSE
901 North 9th Street, RM 201 • Milwaukee, WI 53233 • Phone: (414) 278-4237 • Fax: (414) 223-1380
sheldon.wasserman@milwaukeecountywi.gov • county.milwaukee.gov/wasserman

9480 W. Watertown Plank Road, Wauwatosa, WI 53226

August 23, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses, and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

9480 W. Watertown Plank Road, Wauwatosa, WI 53226

August 23, 2023

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Guy Smith

Guy D. Smith,
Executive Director, Milwaukee County Parks

MMSD
PARTNERS FOR A CLEANER ENVIRONMENT

Kevin L. Shafer, P.E.
Executive Director

August 28, 2023

The Honorable Pete Buttigieg
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Buttigieg:

The Milwaukee Metropolitan Sewerage District is a regional government agency that provides water reclamation and flood management services for 1.1 million customers in 28 communities in the Greater Milwaukee, Wisconsin Area. The District serves 411 square miles that cover all, or segments of, six watersheds.

The District is governed by 11 commissioners with taxing authority. Besides its core responsibilities, the District also handles water quality research, household hazardous waste collection, pharmaceutical collection, industrial waste monitoring, laboratory services, planning and engineering services, and Milorganite®, a fertilizer trusted by professionals for more than 97 years.

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on the Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. The interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

Built in the mid-1960s, this elevated section of I-94 travels through this historically diverse, traditional urban neighborhood, and the interchange ramps distribute traffic onto residential streets, leaving residents, businesses, and students to navigate local roads where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the

initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on South 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions, and reclaim valuable land for community use and future investment. A community-based placemaking vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Study grant application.

Sincerely,

Kevin L. Shafer, P.E.
Executive Director
Milwaukee Metropolitan Sewerage District

Transportation Development Association

It's how we get there

August 29, 2023

The Honorable Pete Buttigieg
Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Subject: Letter of Support – Reimaging the National Avenue Interchange Planning Study
Reconnecting Communities and Neighborhoods (RCN) Program Grant Application

Dear Secretary Buttigieg:

I am writing to support the Wisconsin Department of Transportation's (WisDOT) Reimaging the National Avenue Interchange Planning Study grant application for the Reconnecting Communities and Neighborhoods (RCN) Program. Working closely with the community and coordinating with other stakeholders during the study, WisDOT aims to determine and evaluate design alternatives to reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This study will focus on Walker's Point and Walker Square, historically disadvantaged, predominantly Hispanic and Latino neighborhoods with over 40% of residents currently experiencing poverty. The National Avenue Interchange, constructed in the heart of these neighborhoods, disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. The interchange removed more than 20 acres of traditional neighborhood fabric, resulting in a nine-block void in the heart of the Near South Side of Milwaukee.

Built in the mid-1960s, this elevated section of I-94 travels through this historically diverse, traditional urban neighborhood, and the interchange ramps distribute traffic onto residential streets, leaving residents, businesses, and students to navigate local roads where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the study will examine will be decreasing the interchange footprint, matching land use with community

needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, and vehicular mobility and reduced intermodal conflicts. The study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions, and reclaim valuable land for community use and future investment. A community-based placemaking vision will be developed for the four acres of land WisDOT would potentially give back to the community due to ramp configurations at the interchange.

In closing, I urge you to consider WisDOT's Reimagining the National Avenue Interchange Study grant application. WisDOT has available match funding and the technical experience to conduct robust public outreach and complete the study well before statutory deadlines. Through public engagement and technical analysis, the study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Debby Jackson

Debby Jackson
Executive Director

Aug. 31, 2023

Secretary Pete Buttigieg
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Secretary Buttigieg,

The Wisconsin Transportation Builders Association (WTBA) supports the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and other stakeholders, the goals of the study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wis.

This study will focus on the Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with more than 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections and created safety deficiencies. The interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

Built in the mid-1960s, this elevated section of I-94 travels through this historically diverse, traditional urban neighborhood and the interchange ramps distribute traffic onto residential streets, leaving residents, businesses, and students to navigate local roads where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

The planning study will use language translation services and best practices to conduct a public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. A community-based placemaking vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, WTBA asks that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Study grant application.

Sincerely,

Steve Baas
Executive Director

1 E. Main St., Suite 300 _Madison, WI 53703 office 608.256.6891_ www.wtba.org info@wtba.org

UNITED COMMUNITY CENTER
CENTRO DE LA COMUNIDAD UNIDA

August 31, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts.

The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

1028 S. 9th Street Milwaukee, WI 53204
Phone: (414) 384-3100 **Fax:** (414) 649-4411
Website: *www.unitedcc.org*

UNITED COMMUNITY CENTER
CENTRO DE LA COMUNIDAD UNIDA

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Laura E. Gutiérrez

Laura Gutierrez
CEO, United Community Center

1028 S. 9th Street Milwaukee, WI 53204
Phone: (414) 384-3100 **Fax:** (414) 649-4411
Website: *www.unitedcc.org*

hispanicollaborative in conjunction with the MMAC Metropolitan Milwaukee Association of Commerce

September 19, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. These neighborhoods are also the most densely populated areas of our state, full of young families and multigenerational households. The existing National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use in-language outreach materials and best practices to conduct an intensive public engagement process to identify the needs and desires of the predominantly Latino community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange spurring greater economic development and equitable growth into a vibrant community.

In closing, I ask that you support WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through strong public engagement and innovative and community-oriented technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility, quality of life and equitable prosperity.

Sincerely,

Sincerely,

Nancy Hernandez
President, Hispanic Collaborative

FORWARD LATINO

Arizona
California
Colorado
Florida
Hawaii
Illinois
Indiana
Iowa
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Montana
Nevada
New Mexico
New Jersey
New York
North Carolina
Ohio
Oklahoma
Oregon
Pennsylvania
Texas
Virginia
Washington
West Virginia
Wisconsin

September 10, 2023

August 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Secretary:

I am writing on behalf of our membership in strong support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm,

reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Darryl D. Morin
National President

MENOMONEE VALLEY PARTNERS

August 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

On behalf of Menomonee Valley Partners (MVP), I am writing to express my strong support of the Reimagining the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). The proposed study is critical to improving safety, connectivity, operations, housing supply, and economic development within the Walker's Point and Walker Square neighborhoods.

When originally constructed, National Avenue Interchange drastically changed the surrounding Walker's Point and Walker Square neighborhoods. Though the area sustains a communal feel with nearby commercial corridors and schools, it has faced decades of disinvestment and the Interchange has made community assets dangerous for pedestrians and bicyclists to navigate. Today, 38.6% of residents live below the poverty line.

A robust study is critical to reconfigure the National Avenue Interchange to undo the community-altering scars created by the elevated highway. WisDOT plans to create a public and stakeholder engagement program to identify community needs, develop a range of improvement alternatives, and conduct a feasibility study that will investigate traffic, ramp geometries, placemaking, and complete street opportunities and other improvements. The study will examine design alternatives to potentially return four acres of land back to the community, development opportunities for local businesses, and design changes to create safe streets adjacent to schools and Walker Square Park.

The RCN Program investment in this study is vital to healing the damage created to the neighborhoods well over 50-years ago. I am confident that WisDOT's strong study plan is a necessary first step in this process.

Sincerely,

Corey Zetts
Executive Director

Sixteenth Street
AT THE HEART OF OUR HEALTHY COMMUNITY

Chavez: 1032 S. 16th St., Milwaukee 53204, 414-672-1353
Parkway: 2906 S. 20th St., Milwaukee 53215, 414-672-1353
Layton: 4570 S. 27th St., Milwaukee 53221, 414-672-1353
National Ave: 1635 W. National Ave., Milwaukee 53204, 414-672-1353
Waukesha: 309 E. North St., Waukesha 53188, 262-408-2530

August 28, 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections, and created safety deficiencies. Built in the mid-1960s, this elevated interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

The National Avenue Interchange runs through historically diverse and traditional urban neighborhoods and its ramps distribute traffic onto residential streets, requiring residents, businesses and students to navigate local streets where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking and complete street vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Julie B Schuller, MD, MPH, MBA, FACP
President & CEO

Milwaukee Christian Center
Building Strong Neighborhoods Full of Opportunity
807 South 14th Street
Milwaukee, Wisconsin 53204
414|645|5350
mccwi.org

August 2023

Mr. Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Mr. Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

I am Executive Director of the Milwaukee Christian Center, a youth and family service agency located on 14th and National. We see chronic speeding and accidents happening outside our window with the way National Avenue is a misused thoroughfare. Pedestrians and bicyclists are at high risk as car traffic cruises through the area as if it's a speedway. We also can see how the freeway interchange has affected residents' connections to each other and the broader community.

It's exciting how these dollars could facilitate greater community engagement on how to redesign National Avenue in ways that decrease the interchange footprint and reconnect the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Planning Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life. And that aligns with our mission of building strong neighborhoods of opportunity.

Respectfully,

Karen Higgins
Executive Director

ST. PETER EVANGELICAL
LUTHERAN CHURCH/
Iglesia Luterana San Pedro

Pastor William Dunn
1214 South 8th Street
Milwaukee, WI 53204

September 22, 2023

Secretary Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). As a representative of St. Peter Evangelical Lutheran Church, (a church that has celebrated 163 years of service to neighbors on Milwaukee's southside – first in German, now in Spanish, Karen and English), I am in favor of the planning study goals of improving connections within our neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

St. Peter, (like our neighbors), both benefits and experiences hardship from our proximity to the interchange. Many of our members use the interchange to come to church, and parents and teachers access it to come to our school; many other people also use the interchange to flee quickly after committing a crime, and many other people simply enter and exit our neighborhood driving way too fast for a residential neighborhood. Our church is hopeful that this infrastructure project will encourage a safer environment in our neighborhood, while also facilitating traffic flow into and through our community.

Improving connections in our neighborhood is also an objective of St. Peter's; we encourage infrastructure projects that foster a sense of safety, assurance and ease of mobility for all people through our neighborhood.

In closing, please consider funding WisDOT's 'Reimagining the National Avenue Interchange' Study; we look forward to the next 163 years of God's grace that enables us to serve our community through this revitalized infrastructure.

Sincerely,

James W. Carter, III
Treasurer, St. Peter Evangelical Lutheran Church
School Board Member, Christ-St. Peter Lutheran School

WALKER SQUARE NEIGHBORHOOD ASSOCIATION

September 22, 2023

Secretary Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). As a representative of Walker Square Neighborhood Association (WSNA), and a resident of Walker Square, I concur with the planning study goals of improving connections within our neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

A variety of traffic flows into Walker Square, and specifically around Walker Square Park (which is adjacent to the interchange); residential, school, interstate and commerce. Additionally, our neighborhood struggles with issues of reckless driving and car theft/jacking. Consistently for many hours throughout the week, traffic around our neighborhood can fairly be described as 'chaotic'. Many residents have resorted to avoiding passing through our neighborhood at certain times during the day. A study for how to facilitate the different kinds of traffic, (car/truck, transit, bike, pedestrian), through our community would be a real benefit to our community.

Please be mindful that our community is majority Hispanic/Latino and that most residents are low-income; therefore, many are more conversant in the Spanish language and do not have the means nor connections to the greater populace that other communities do. An investment of infrastructure dollars through this study in our community could result in greater return on investment as compared to investing in other communities.

In closing, please consider funding WisDOT's 'Reimagining the National Avenue Interchange' Study. Our Walker Square Neighborhood will be very grateful if you do.

Sincerely,

James W. Carter, III
Representative - Walker's Square Neighborhood Association

Latino Chamber of Commerce
of
Southeastern Wisconsin Inc.

530 S 11th Street, Suite 300 A

Milwaukee, WI 53204

www.latinochambersew.org

(414) 509 - 6179

September 2023

Secretary Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Buttigieg,

I am writing in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on the Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections and created safety deficiencies. The interchange removed more than 20 acres of traditional neighborhood fabric and created a nine-block void in the heart of the Near South Side of Milwaukee.

Built in the mid-1960s, this elevated section of I-94 travels though this historically diverse, traditional urban neighborhood and the interchange ramps distribute traffic onto residential streets, leaving residents, businesses, and students to navigate local roads where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will

Latino Chamber of Commerce
of
Southeastern Wisconsin Inc.

530 S 11th Street, Suite 300 A

Milwaukee, WI 53204

www.latinochambersew.org

(414) 509 - 6179

streets, leaving residents, businesses, and students to navigate local roads where freeway-bound or exiting traffic is present. The configuration of the entrance and exit ramps is original to the initial construction of the elevated freeway, interacting with local neighborhood streets in a manner that impairs the quality of life in the neighborhood and undermines public safety. Ramps flank a middle school on S. 9th Street and separate it from a neighboring elementary school adjacent to Walker Square Park.

This much-needed planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. The Study will also include a detailed analysis of traffic patterns at the interchange to arrive at an alternative that will improve the public realm, reduce vehicle miles traveled and greenhouse gas emissions and reclaim valuable land for community use and future investment. A community-based placemaking vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

In closing, I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines. Through public engagement and technical analysis, the Study will develop an implementable strategic plan to reconnect this historically underserved southside community, vastly enhancing mobility and quality of life.

Sincerely,

Samantha Jimenez
Director of Engagement

MOBILISE
Moving Transportation Forward
in Southeast Wisconsin

September 25 2023

Secretary Pete Buttigieg
Secretary of Transportation
US Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Buttigieg,

As Southeastern Wisconsin's regional convener and advocate for transit and multimodal transportation, MobiliSE understands the importance of reconnecting communities that have been harmed by past infrastructure decisions. Accordingly, we are in support of the Reimaging the National Avenue Interchange Planning Study application for the Reconnecting Communities and Neighborhoods (RCN) Program grant submitted by the Wisconsin Department of Transportation (WisDOT). Working closely with the community and coordinating with other stakeholders, the goals of the Study are to determine and evaluate design alternatives that will reconnect the neighborhoods surrounding the I-43/94 National Avenue Interchange in Milwaukee, Wisconsin.

This Study will focus on the Walker's Point and Walker Square, predominantly Hispanic and Latino neighborhoods that are historically disadvantaged with over 40% of residents currently experiencing poverty, and a high number of families who rely on transit to access jobs and other neccessities. The National Avenue Interchange was constructed in the heart of these neighborhoods and disconnected the neighborhood street grid, decreased pedestrian and bike connections and created safety deficiencies.

This planning Study will use language translation services and best practices to conduct an intensive public engagement process to identify the needs and desires of the community adjacent to the National Avenue Interchange. Among the topics the Study will examine will be decreasing the interchange footprint, matching land use with community needs, and reconnecting the neighborhood through improved pedestrian, bicycle, transit, vehicular mobility and reduced intermodal conflicts. A community-based placemaking vision will be developed for the four acres of land that WisDOT would potentially give back to the community due to ramp configurations at the Interchange.

I ask that you give every consideration to WisDOT's Reimagining the National Avenue Interchange Study grant application. WisDOT has available match funding and the technical experience needed to conduct robust public outreach and complete the Study well before statutory deadlines.

Sincerely,

Dave Steele
Executive Director
MobiliSE