

30th Street Corridor

Rail-with-Trail Revitalization Project

Milwaukee, Wisconsin



WisDOT
Reconnecting Communities
and Neighborhoods (RNC)

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Overview

The proposed 30th Street Corridor project includes the modernization of an active freight rail line and the development of a shared-use bicycle and pedestrian trail largely utilizing portions of the rail right-of-way. This application seeks investment in both rail and trail infrastructure to fund an economic and community equitable development project with generational quality of life impacts.

The 30th Street Corridor is defined by the areas of land adjacent to a roughly seven-mile, north-south rail line owned and operated by Wisconsin & Southern Railroad (WSOR). The rail line is a low-traffic, active freight line and includes seven elevated bridges, a 16-line rail yard, and a section below street grade. There are over 1,000 acres of land within the Corridor, with roughly half of those acres zoned for industrial use. On its southern end, the Corridor merges with a Class I east-west rail line owned and operated by Canadian Pacific in the Menomonee Valley area of Milwaukee. On the northern end, the Corridor ends at Havenwoods State Forest, Wisconsin's only urban state forest, which offers 237 acres of publicly accessible land, restored indigenous habitats, and environmental education programming.

The Corridor was once the backbone of Milwaukee's rich industrial history. Home to tens of thousands of quality jobs and some of Wisconsin's most iconic businesses, the neighborhoods that developed in and near the Corridor as a result of the postwar economic boom had one of the highest standards of living for Black Americans. The rail line hummed with the movement of goods to and from Milwaukee's industrial center. Today, much of the industry and associated opportunity is gone, and the adjacent neighborhoods suffer persistent poverty, high unemployment, racial segregation, high crime, poor public health outcomes, and declining property values.

As Reggie Jackson, the head docent of America's Black Holocaust Museum in Milwaukee, said: "Drive down 30th Street, you will see a trail—a trail of destruction¹." Despite these socioeconomic challenges, community stakeholders, including non-profit organizations, business associations, resident groups and local governments, have been actively working together to reach collective goals that will transform the Corridor.



Figure 1.
Southern Rail Mergers

One of these goals is modern, efficient freight rail that will catalyze economic development. Hundreds of acres of former industrial sites are owned by the Redevelopment Authority of the City of Milwaukee and many have existing or former rail line spurs that were once used to provide direct freight access. New rail access can provide manufacturers with a major logistical advantage and surrounding neighborhoods can supply a modern workforce, which will directly combat high unemployment and poverty rates. Rail infrastructure also plays an important role in the trail network in Milwaukee. Both rail-to-trail and rail-with-trail projects exist within Milwaukee County. Milwaukee's trail network, which hosts more than two million rides each year, fails to connect to the nearly 200,000 residents of the City's north side. Building a rail-with-trail active transportation network within the Corridor will improve equitable access to alternative modes of transportation and improve public health and safety. The proposed trail will connect to several schools, institutions of higher education, childcare centers, affordable housing, mass transit routes, essential services, parks, and Wisconsin's only urban state forest.

The parallel investments in freight rail and a recreational trail will catalyze a multi-decade community redevelopment effort led by residents and other stakeholders. By creating safe spaces for residents to be active outdoors, this initiative can save the city and residents more than \$22.4 million in direct health-care costs according to Rails-to-Trails Conservancy's 2017 BikeAble Study. The 30th Street Corridor trail will also serve as an important link to the Route of the Badger, a developing 700-miles-plus world-class trail system in Southeast Wisconsin that will stimulate economic opportunity, promote healthier lifestyles and bridge gaps in communities along the route, for a more socially equitable and vibrant region. Local non-profits, economic development organizations, business leaders, and all levels of government stand ready to follow the lead of Corridor residents, who have formed the broad-based Equitable Development Task Force, as they guide the future of these vibrant, resilient Milwaukee neighborhoods.



Figure 2. Low Traffic Freight Line



Figure 3. Elevated Bridge Crossing

Location & Map

The target area for the project is the 30th Street Industrial Corridor (Figure 4) which is made up of the following census tracts within the City of Milwaukee: 24, 25, 26, 39, 41, 42, 47, 48, 62, 63, 64, 65, 88, 89, 90, 96, 97, 98, 99, 122, 123, 136, 137, 1858, 1861.

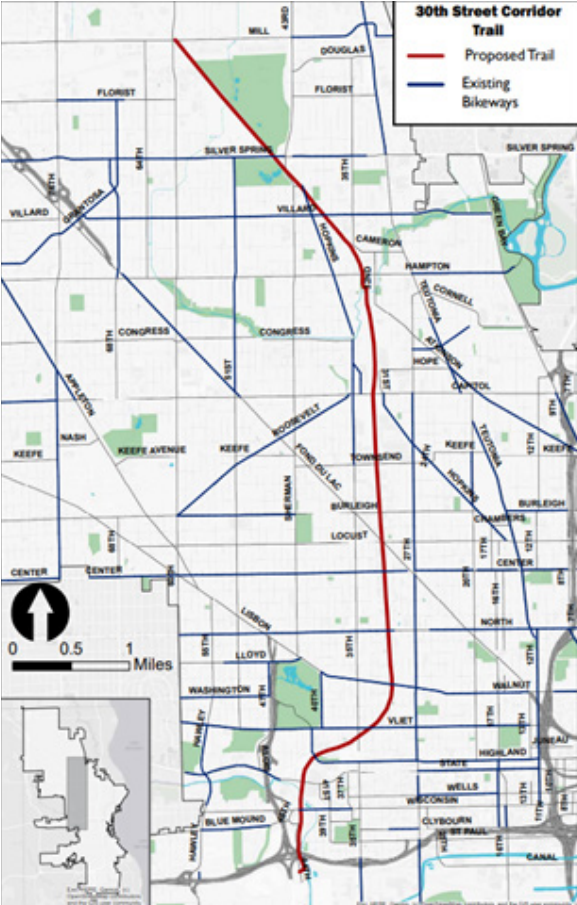


Figure 4. Proposed 30th Street Corridor Trail

These census tracts either overlap or adjoin the geographic area outlined by North 35th Street on the west, North 27th Street on the east, West Hampton Avenue on the north, and West Highland Avenue on the south. The area is approximately 5 miles from north to south, and on average 1.3 miles from west to east, with a total area of about 6.5 miles.

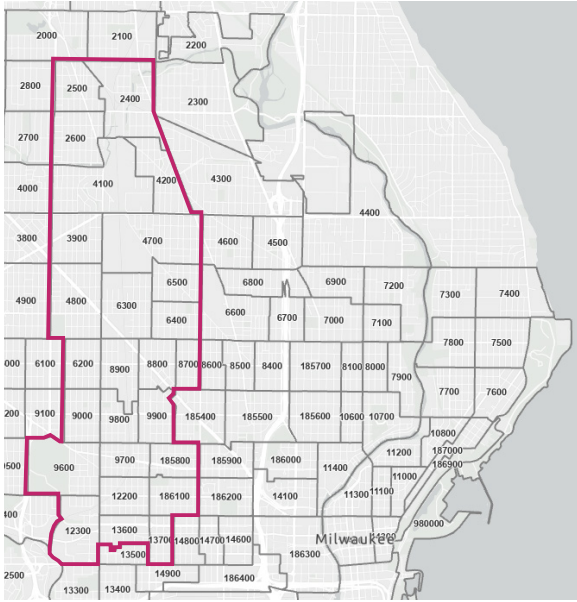


Figure 5. 30th St. Industrial Corridor Census Tracts

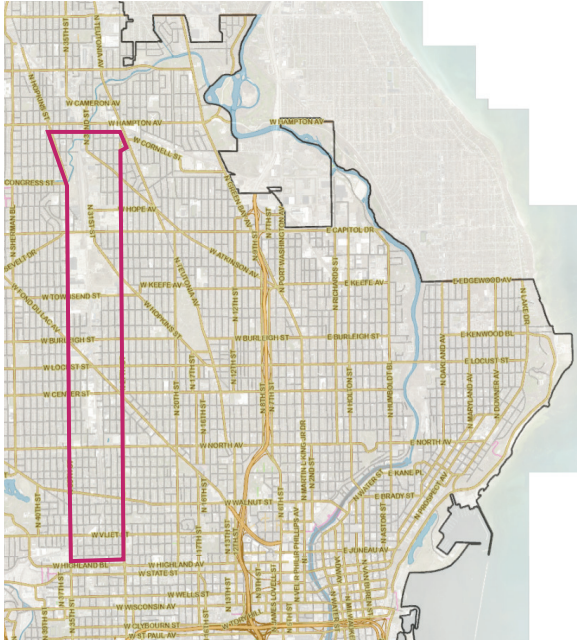


Figure 6. 30th St. Industrial Corridor Area 3

Response to Merit Criteria

CRITERIA 1

EQUITY and ENVIRONMENTAL JUSTICE

The 30th Street Corridor bears the scars of nearly a century of divestment and racial segregation. Some policies were developed for the specific purpose of racial and economic segregation, while others involved larger, more global or macroeconomic changes. Together, these forces have led to concentrated, generational poverty among residents, almost exclusively within Black neighborhoods.

Below is a portion of a map from 1938, created by federal mandate for use by realtors and mortgage lenders. Alongside the Corridor, highlighted in blue, only two colors are shown: yellow and red. The yellow on the map defined areas in “definite decline” while red identified “hazardous” areas. In describing two neighborhoods adjacent to the Corridor, the narrative reads -- “25 years ago this was a good, middle class section of Milwaukee occupied by the second generation of Germans, Jews began to move in 20 years ago” -- while another reference mentions “Negro slum residents and lower-type Jews.”

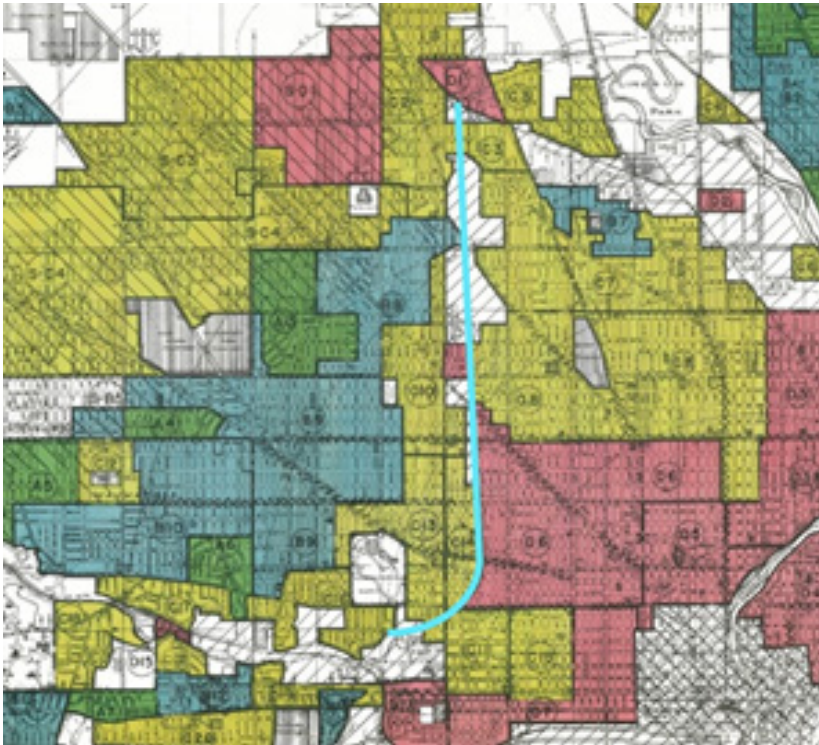


Figure 7.
Redlining map
of Milwaukee

The impact of historic redlining remains today. The population within the Corridor is 89% Black, compared to a citywide percentage of 33% and a statewide percentage of 6.8%. The median household income in the Corridor is far below the City of Milwaukee's, and the separation continues to widen. The median household income for Corridor residents was \$26,927 in 2000 and \$29,352 in 2019, a 9% increase, compared to the citywide household income of \$32,216 in 2000 and \$39,934 in 2019, a 20% increase. The racial and economic disparities within the City of Milwaukee continue to worsen, and the people bearing the brunt of the inequity are Black residents within the 30th Street Corridor. In addition to racial and economic inequality, the industrial history of the Corridor has led to pervasive environmental inequity and negative health outcomes, as demonstrated by the Climate and Economic Justice Screening Tool. A majority of the census tracts in the Corridor are above the 90th percentile for numerous health indicators, such as asthma and diabetes, proximity to hazardous waste facilities, and low life expectancy. Compounding the issues, census tracts within the Corridor are above the 90th percentile for many workforce development metrics, such as poverty, unemployment, and high school education. Census tracts within the Corridor meet nearly all of the burden thresholds (6 of 8) outlined by the Climate and Economic Justice Screening Tool. The cycle of poverty is a dominant force in these communities, and without significant, comprehensive investments, future generations will continue to face the same fate.

CRITERIA 2

ACCESS

Milwaukee County’s network of parks has won national recognition for its connectivity, creating the “necklace of green” or “emerald necklace,” referring to the series of parks and parkways that create a crescent-shaped ring around the City of Milwaukee. Notably, this network of parks, parkways, and trails does not include access for residents within core city neighborhoods. The map to the left, included in the study *Reconnecting Milwaukee—A BikeAble Study of Opportunity, Equity and Connectivity*, shows the “emerald necklace.” Communities with recreational trail access are in green, while those without access are shown in red. The majority of Milwaukee’s residents of color live within the red areas with limited or no access to recreational trails, including the neighborhoods within the Corridor.

The Rails-to-Trails Conservancy’s study determined that completing a trail along the 30th Street Corridor is the most important trail investment in the Milwaukee region to create more equitable trail access for users of all races, ethnic groups, and incomes. According to this study, while 24% of overall Milwaukee residents are within two miles of an existing trail access point, only 8% of people living in neighborhoods experiencing inequality are within two miles of an existing trail access point. Building the 30th Street Corridor Trail would monumentally change these access statistics — 66% of people living in neighborhoods experiencing inequality and 59% of Milwaukee residents overall would be within two miles of an access point. Milwaukee residents in neighborhoods experiencing inequity that could safely access a trail would rise from 25,000 to 200,000.

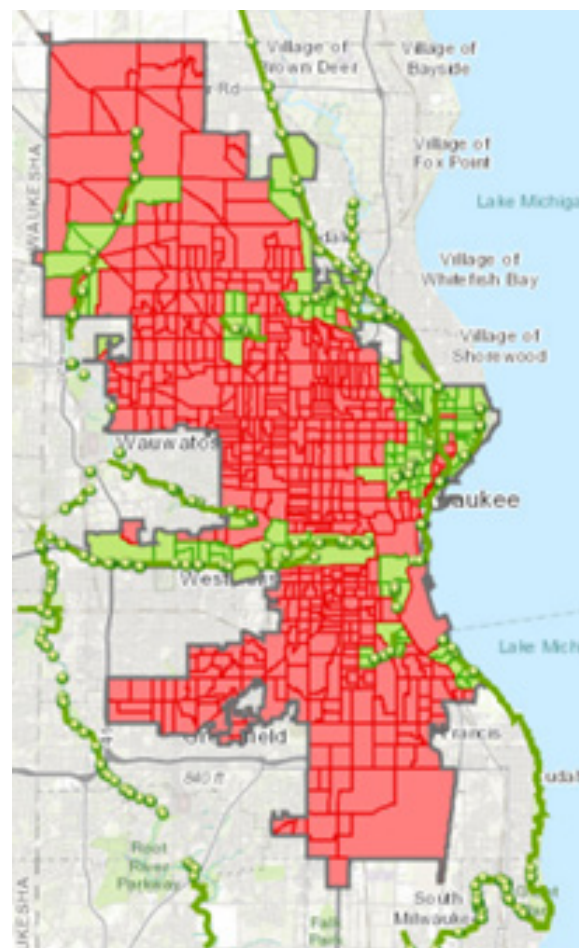


Figure 8. Map showing trail access in green and lack of access in red

The proposed trail will not only serve a recreational purpose, but it will also connect to more than a dozen major bus routes, providing a safe and efficient way for residents to walk or bike to their bus stops. Many residents in the Corridor rely heavily on public transportation. In some census tracts within the Corridor, over 40% of residents do not have access to a car. Milwaukee does not currently have regional commuter rail service, but investments in the Corridor will accommodate possible future transit uses for the rail line and intermodal connectivity.

Safe active transportation infrastructure is a key component of improving Corridor residents' wellbeing. The Milwaukee Crash Analysis report from earlier this year demonstrated that neighborhoods within the Corridor experience elevated levels of traffic accidents, reckless driving, and pedestrian fatalities. As seen in the table below, 6 of the 10 worst high injury network (HIN) corridors in the City are located within the 30th Street Corridor.

Street Name	Overlapping HIN Mileage	% Overlapping HIN Mileage	Ped Mileage	Ped Score	Bike Mileage	Bike Score	Driver Mileage	Driver Score
Capitol Drive	3.26	9%	3.11	102	2.56	84	3.26	107
27th Street	3.09	8%	2.47	84	1.27	44	2.48	85
Silver Spring Drive	2.68	7%	0.67	22			2.04	67
Sherman Boulevard	2.66	7%	0.85	28			2.66	88
Fond Du Lac Avenue	2.35	6%	1.97	67	0.48	18	2.35	80
60th Street	2.32	6%	1.13	37			2.16	71
Hampton Avenue	2.17	6%	0.82	28	1.31	43	2.17	72
Locust Street	1.92	5%	0.61	20	0.57	19	1.35	45
Appleton Avenue	1.80	5%	1.04	34			1.31	43
35th Street	1.47	4%	1.21	40	0.67	22	1.29	43

Table 1. Overview of High Injury Networks (HINs). A higher score indicates a more dangerous street.

The HINs also meet within the Corridor to create some of Milwaukee's most dangerous intersections. As seen below, 3 of the 5 highest crash intersections are within the Corridor. Together, the crashes at these three intersections had a total societal cost of over \$115 million and over \$40 million in costs associated with pedestrian crashes alone.

Intersection Name	Societal Cost of Crashes ²			
	Pedestrian crash costs	Bicycle crash costs	Driver crash costs	Total crash costs
W Fond Du Lac Ave & W Locust St	\$12,379,790		\$31,495,211	\$43,875,001
N 43rd St & W Good Hope Rd		\$1,053,751	\$37,896,626	\$38,950,377
N 35th St & W Capitol Dr	\$14,084,846		\$24,241,268	\$38,326,114
N 91st St & W Appleton Ave	\$22,853,301	\$11,527,262		\$34,380,563
N 27th St & W Burleigh St	\$13,835,987		\$20,418,031	\$34,254,018

Table 2. Societal cost of crashes



Figure 9. Fond du Lac Avenue and Locust Street, the intersection with the highest societal cost crash rate of any intersection in Milwaukee. Off-street pedestrian crossing proposed in this project will substantially increase safety and reduce the societal cost of accidents at the intersection.

West Capitol Drive, which also serves as State Highway 190, is the busiest street within the Corridor with over 40,000 vehicles each day. The Milwaukee Crash Analysis identified Capitol Drive as the worst street in Milwaukee for bicycles, scoring nearly twice as badly as any other street analyzed. In this section of Capitol Drive there are no street-separate bike facilities and no street-separated pedestrian crossings. Four miles east, in the affluent suburb of Shorewood, a pedestrian bridge crosses Capitol Drive as part of the Oak Leaf Trail. Pictured below, the Corridor trail will provide a safe, grade-separated crossing of Capitol Drive along dormant rail lines. Also pictured is the adjacent intersection of Capitol Drive and North 35th Street, identified as the third worst crash intersection and responsible for over \$14 million in costs due to pedestrian accidents.

Milwaukee frequently ranks as Wisconsin's highest crime city, and neighborhoods within the Corridor frequently rank among Milwaukee's high crime areas. With an overall crime rate of

58.3 for every 1,000 residents, the City of Milwaukee's crime rate is roughly twice the national average of 23 per 1,000 residents and three times higher than Wisconsin's statewide average of 18.6 per 1,000 residents. Five of the ten highest crime neighborhoods in 2021 in Milwaukee were within the Corridor. In these neighborhoods, the crime rate is 150-200% higher than Milwaukee's overall crime rate. The high rate of abandonment, both residential and commercial or industrial, has left an area extremely difficult to protect and particularly vulnerable to criminal activity.

The Corridor project will reduce crime through place-making and activating currently abandoned spaces. Enhanced activity, lighting, public art, and the new walking & biking infrastructure will bring local investment and economic opportunity. The Corridor trail will also connect to four existing off-street trails, more than a dozen city or county parks, more than two dozen schools, two libraries, multiple grocery stores, affordable housing opportunities, and thousands and thousands of jobs.

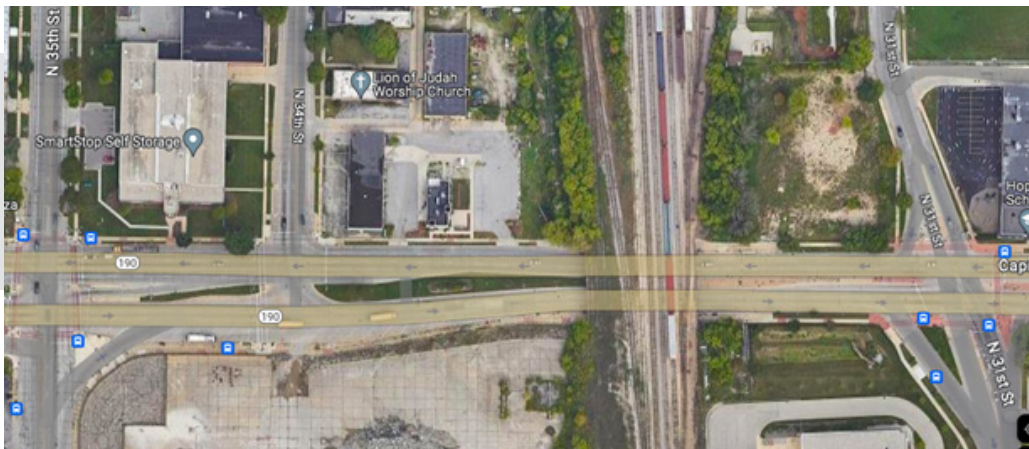


Figure 10. Seen from above, Capitol Drive passes under the elevated rail line where abandoned rail lines offer a safe crossing of the area's busiest and most dangerous street.

CRITERIA 3

FACILITY SUITABILITY

The rail line offers unique opportunities and challenges. Building grade separated infrastructure through well-established neighborhoods is often cost prohibitive, if not technically impossible. The rail infrastructure within the Corridor is in disrepair. Following decades of deferred maintenance, the rail line, bridges, and rail exchanges all need improvements to ensure efficient and safe freight service.

Beyond the rail infrastructure, the current physical landscape in the corridor is wholly unsuitable for community members. In many ways, the right-of-way has been abandoned for decades. High levels of illegal dumping have gone unabated, and vegetation is overgrown. These conditions only worsen the contaminated soil, water, and air left behind by decades of industry.

In northern sections of the Corridor, flooding is common. In the summers of 2008 and 2010, severe rainstorms resulted in over \$32 million in flood damage to homes and businesses. Problems in the Corridor's built environment contributed to the flooding — the rail infrastructure and adjacent industrial areas disrupted the natural water pathways, and rivers and streams were overwhelmed by fast runoff from the pavement and hard surfaces such as parking lots and roads.



Figure 11.
Illegal dumping is common in many areas of the Corridor

In response to the severe flooding, the Milwaukee Metropolitan Sewerage District (MMSD) built stormwater basins, helping alleviate the risk of severe flooding. However, as dangerous rainfall events continue to be a more present threat, a holistic green infrastructure plan is much-needed in the Corridor. From rainwater capturing strategies to restoration of indigenous plants and habitats, the proposed project will prioritize green infrastructure to complement the new rail and trail facilities and provide significant sustainable quality of life benefits for all residents.



Figure 12.
Extent of the
July 2010
flood

CRITERIA 4

COMMUNITY ENGAGEMENT

Community-based Stewardship, Management, and Partnerships

Community engagement is a top priority for this project and strongly reflected in how the initiative has been developed. The diversity of partners that support this project have been highly involved in engagement activities for over a decade and will continue to lead project implementation upon receipt of the grant. With the support of community groups, local stakeholders, and local governments, the following planning efforts have been published over the past 20 years:

- Land Use Concepts for the Tower Automotive Site (2003)
- Redevelopment Plan for the W. Capitol Drive and N. 35th Street “Century City” Project Area (2005)
- Action Plan for the Revitalization of the 30th Street Industrial Corridor (2008)
- 30th Street Industrial Corridor Economic Asset and Opportunity Analysis (2008)
- TID Economic Feasibility Study: Proposed N. 35th St. and W. Capitol Drive Tax Increment District (2009)
- Project Plan for N. 35th St. and W. Capitol Drive TID (2009)
- 30th Street Corridor Economic Development Master Plan for the Milwaukee Department of City Development (2011)
- Rails to Trails 30th Street Corridor Shared-Use Trail Preliminary Feasibility Study (2020)
- City of Milwaukee Connecting the Corridor Plan (2020)
- City of Milwaukee Industrial Land Usage Study (2020)

In addition, there is a new planning project underway called the 30th Street Corridor Linear Park Equitable Development Plan. Funded privately by The Catena Foundation, this project is a multi-year grant to the 30th Street Industrial Corridor Business Improvement District (BID) and Rails-to-Trails Conservancy (RTC) to fund the creation of an equitable development plan. This equitable development plan is highly focused on residents, and the initial development phase of the plan has centered entirely on community engagement, education of the public, and relationship building. For nearly two years, this partnership of local leaders has organized innovative and meaningful community outreach. Beyond community meetings, the effort has included bike rides, walks, and involvement with numerous community events within the area. Key engagement partners for the equitable development plan initiative are the Northwest Side Community Development Corporation, the Havenwoods Business Improvement District and the Near West Side Partners. Each of the 20 unique neighborhoods are engaged, as well as dozens of business, non-profit, faith, and community leaders. This work will continue through 2024.



Figure 15. Community members engaging in the design of the equitable development plan at the Sherman Phoenix business incubator, located within the Corridor

The 30th Street Industrial Corridor Business Improvement District (BID) is positioned as the lead organization to guide land-use, planning, and community engagement during and after the grant is awarded. The organization is made up of area business and community leaders and has already led the equitable development planning effort. The BID's board of directors has approved a strategic plan that includes development of the trail, as well as affordable housing investments and partnering with a Historically Black College or University to offer a transformative post-secondary education option for Milwaukee's Black community. The BID is community-facing, with resident input and participation, making it a perfect steward of community engagement as the Corridor project is developed.

In addition to local community stakeholders, the City of Milwaukee and Milwaukee County governments have been key partners in the planning process. During 2022 and 2023, the Milwaukee County Parks Department updated its trail plan for the area. The County held multiple open house events and sought input from residents and local leaders. Overwhelmingly, the Corridor project ranked the highest priority future County trail expansion in the area. As mentioned in the list above, the City of Milwaukee has initiated a number of planning studies and has invested millions in the environmental remediation and economic development efforts within the Corridor. The Redevelopment Authority of the City of Milwaukee is one of the largest landowners of parcels adjacent to the rail line and has been an engaged and supportive partner in developing



Figure 14. Leaders of the equitable development plan discussing their efforts with Congresswoman Gwen Moore

this grant application. Community members have guided these planning efforts in the past and with such strong local government leadership, will continue to do so in the future.

Finally, the region's MPO, the Southeast Wisconsin Regional Planning Commission (SEWRPC) is a partner in the planning and development of the Corridor. SEWRPC has led previous infrastructure projects in the area and is the lead entity carrying out the engineering study described in the Project Readiness section.

CRITERIA 5

EQUITABLE DEVELOPMENT



Figure 15.
The Community
Within the Corridor

Conscious of the possible displacing impacts of infrastructure projects, the City of Milwaukee has enacted an anti-displacement plan and provides resources for neighborhoods that may experience displacement. The City's anti-displacement policies, coupled with community engagement, will guide the development of the Corridor project. Several stakeholders have advanced equitable development projects within the Corridor in recent years, with many more potential projects catalyzed by the Corridor trail. The Northwest Side Community Development Corporation (NWSCDC) has been a powerful force in the Corridor for over 20 years. As a certified Community Development Financial Institution (CDFI), NWSCDC operates a business loan fund to provide low-interest financing to help local small businesses and community development projects. Since 2000, the NWSCDC loan fund has distributed over \$10 million in loans and created over 1,000 new jobs in the service area.

The NWSCDC partnered with the Milwaukee Public Library to redevelop the Villard Square Branch Library, while adding affordable housing units and improving a community asset. This groundbreaking partnership included modernizing the 12,700 sq. library branch, adding community spaces, and building 47 affordable housing units. These housing units are designed for families with grandparents caring for their grandchildren. The library offers culturally relevant programming, book clubs, and frequently hosts community events and gatherings.

Wisconsin's largest affordable housing development, the "Community within the Corridor", reimagined former industrial space along the rail corridor. A patchwork of industrial buildings making up a 6.2 acre campus, most built in the early 1900's and occupied by Briggs & Stratton Company, the development includes 197 affordable housing units and 60,000 square feet of commercial and community space.

Taking on a long-vacant and highly contaminated site, the Redevelopment Authority of Milwaukee led the development of the Washington Park Townhomes project. Built on the former site of the Esser Paint factory, which ceased operations in 1982 and largely sat vacant until its redevelopment, today the site is home to 40 attached, single family townhomes. All of the units are affordable, ranging from 30 to 60 percent of the area median income.

Beyond multi-unit developments, several homeownership initiatives are underway within the Corridor. Habitat for Humanity Milwaukee launched Midtown 100 in 2018, a project to rehabilitate, repair, and construct 100 homes in the Midtown neighborhood within the Corridor. Habitat for Humanity empowered numerous individuals who grew up in the Corridor to return to the neighborhood they love as homeowners. Gorman Company, a housing developer and project lead on the Washington Park Townhomes project featured above, has also built or renovated 282 homes in neighborhoods adjacent to the Corridor for purchase or rent-to-own using low-income tax credits, ensuring the properties remain affordable. Additional ownership and affordable housing strategies are underway led by organizations within the Corridor.

A new hub of economic development has grown from tragedy. In August of 2016, civil unrest in the Sherman Park neighborhood, adjacent to the Corridor, followed an officer involved shooting death of a young man. Several properties, including a branch bank, were burned. From that unrest grew the Sherman Phoenix, a reuse of the former bank property. The development was led by a diverse coalition aimed to provide minority-owned entrepreneurs a space to thrive, as well as a community centered space to support art, food, and culture. Today, Sherman Phoenix is home to 27 tenants, with several having outgrown their initial space, and is the heartbeat of the area.

While these success stories show the potential for equitable development in the Corridor, hundreds of acres remain vacant or abandoned and thousands of properties are in disrepair. The scale of abandonment is difficult to convey, and no one plan can accommodate the diverse needs of the 20 unique neighborhoods within the Corridor. However, as outlined in the previous section, a resident-led equitable development plan is underway, which will include community priorities beyond the rail and trail infrastructure. This work will conclude in 2024, and early input from residents highlights the continued need for affordable housing, public safety, and economic opportunities.

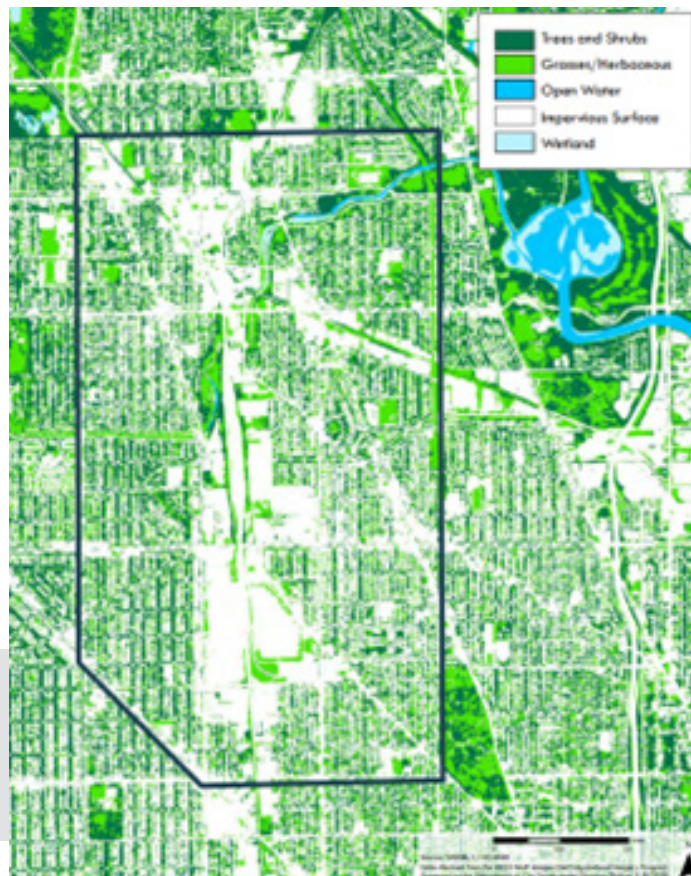
CRITERIA 6

CLIMATE and ENVIRONMENT

The City of Milwaukee's Climate and Equity Plan specifically names the Corridor project as a recommendation to help the City reach its goals to 1) reduce community greenhouse gas emissions by 45% by 2030 and achieve net zero emissions by 2050; and 2) improve racial and economic equity by creating green jobs that pay at least \$40,000 and are focused on recruiting local people of color. To achieve these goals, the City has identified a benchmark to reduce vehicle miles traveled (VMT) by 20% by 2030. More specifically, one of Milwaukee's strategies is to prioritize active modes of transportation, such as walking and biking, and the City names the proposed Corridor trail as a specific, short-term recommendation to achieve its goals.

Currently, properties adjacent to the rail corridor contain very little green space, and even fewer trees. The tree canopy map of Milwaukee clearly reveals the Corridor's lack of tree cover and high concentration of impervious surfaces. The lack of greenspace, in turn, leads to areas of excessive heat; the second map demonstrates the urban heat island effect within the Corridor. The development of the Corridor trail and the corresponding green infrastructure and habitat restoration will help to mitigate the impact of both of these existing conditions.

Figure 16. Areas with little tree cover appear white and follow the rail corridor and adjacent former industrial properties.



The Corridor's long industrial history is well documented, as are the legacy contaminants that are often found with heavy industry from the turn of the last century. Most recently, TCE (trichloroethylene) was discovered in the Community Within the Corridor, a 197-unit apartment building located in the former Briggs & Stratton industrial complex, prompting an evacuation of

CRITERIA 7

WORKFORCE DEVELOPMENT and ECONOMIC OPPORTUNITY

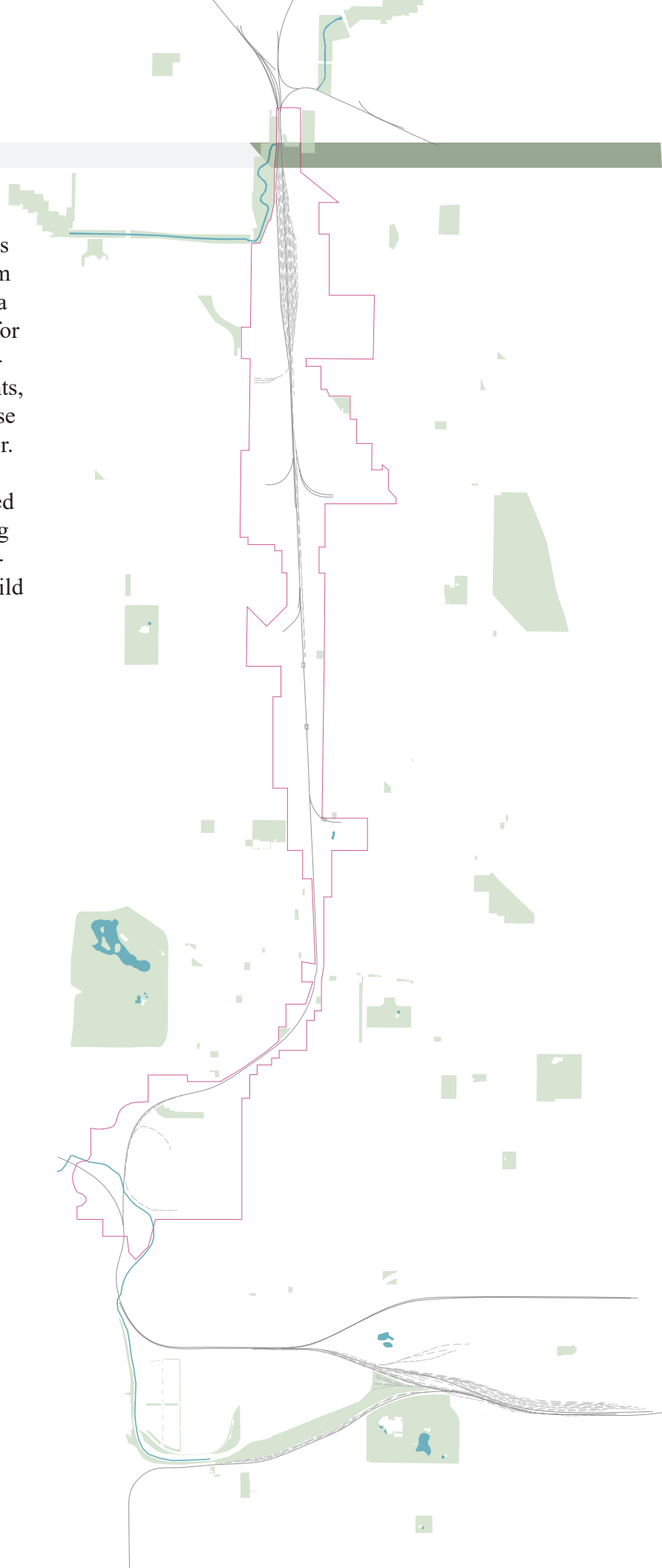
The City of Milwaukee has a long-standing and successful Residential Preference Program (RPP) for any public works project receiving over \$1 million in financial assistance from the City. Typically, projects must utilize 40% of total project hours from qualifying residents. The RPP targets residents of Milwaukee who meet the following criteria: 1) the individual has not worked in the preceding 15 days; 2) the individual has worked less than 1,200 hours in the preceding 12 months; or 3) the individual meets certain federal poverty guidelines. In addition, the RPP also targets specific zip codes, called Special Impact Area Zip Codes, where unemployment and poverty rates are high. The Corridor project is located in four of the eight Special Impact Area Zip Codes.

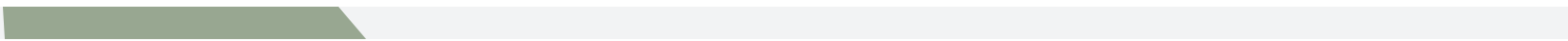
Despite Wisconsin's status as a right-to-work state and statutorily prohibiting certain project-labor agreements, local projects in partnership with the City of Milwaukee and Milwaukee County remain committed to ensuring fair labor practices, including a unionized workforce. Recent examples include the construction of the Fiserv Forum, the home of the Milwaukee Bucks, which exceeded the City's RPP requirements and contained strong labor agreements with the City of Milwaukee. Similarly, the construction of the new corporate headquarters of Northwestern Mutual exceeded the RPP and was built with a union labor force. That project included utilizing empty industrial space in the Corridor to assemble hundreds of window panels and move them to the downtown highrise.

The proposed project intends to draw on as many resident and local work hours and diverse businesses as possible. The Corridor is home to several job centers, placement efforts, as well as the Wisconsin Regional Training Partnership - Building Industry Group Skilled Trade Employment Program (WRTP-Big Step). WRTP-Big Step offers career opportunities in the skilled trades. WRTP-Big Step offers apprentice and pre-apprentice training, as well as immersive experiences for youth ages 15-24 through a summer trades academy. Located just steps from the Corridor, WRTP-Big Step can play an important role in ensuring the Corridor project is a career pathway for many.

In partnership with the City of Milwaukee, 30th Street Corridor is currently part of a Business Improvement District (#37). The stated objective of the BID is to "create an area that will attract and retain profitable and innovative manufacturing and commercial businesses, thus creating quality jobs with family supporting wages for central city residents." Additional BIDs, as well as community development organizations, are key partners in this project. Every effort will be made to ensure the Corridor project is built by a diverse, local workforce that provides a gateway to career opportunities.

Rail access is a critical piece of the Corridor's industrial history and a key to its future success. Talgo America, the U.S. arm of the Spanish train manufacturer, utilizes a rail spur and former manufacturing space for their passenger and commuter rail modernization work. Employing dozens of residents, Talgo's operations are only possible because of the rail infrastructure within the Corridor. In addition to Talgo, the Midwest Energy Research Consortium (M-WERC) is located within the Corridor. M-WERC, recognizing the local history in energy, power, and control manufacturers, seeks to partner and build modern business opportunities in the energy sector within the Corridor. These future opportunities will benefit, like Talgo, from direct access to modern, safe rail service.





Project Readiness

ENVIRONMENTAL RISK

The 30th Street Industrial Corridor cuts through the core of a dense urban fabric, aligned with a significant rail corridor that has been utilized by industry for over a century. The corridor is significantly disturbed, and there are no known significant historical or archaeological sites within the corridor. There is also limited habitat for threatened or endangered species within the corridor, other than areas that have recently been renaturalized along the Menomonee River. The trail project will be constructed in a manner that will capitalize on existing fallow land adjacent to the rail corridor and will include minimal disturbance to environmentally sensitive areas. Therefore, due to the nature of the project and the urban setting following an industrial rail corridor, we anticipate that the project will qualify for a NEPA Categorical Exclusion, and an Environmental Impact Statement (EIS) will not be required.

Archaeological and cultural resource reviews will be conducted for the corridor in 2024, along with the identification of any potential wetlands and review of nearby threatened and endangered species. The project will follow all local, state, and federal permitting and regulatory approvals.

A Phase 1 environmental site assessment (ESA) will be conducted for the entire project corridor in 2024 to identify potential recognized environmental conditions (RECs) by reviewing site records, visiting the site and interviewing individuals with site knowledge. Due to the nature of historic uses of the rail corridor and adjacent parcels by industry over the last century, it is likely that there will be RECs found along the rail corridor. There are a couple of dozen parcels adjacent to the railroad which are known to have contamination, and it is inevitable that the trail design will need to take this into consideration. A Phase 2 ESA is anticipated to be required based on the likely results of the Phase 1 source identification; the Phase 2 testing will identify the contaminant constituents and extents along the corridor. The Wisconsin Department of Natural Resources will have regulatory authority over the management of soils and groundwater along the project limits, per the requirements of state administrative code. Depending on the need, the Phase 2 investigations will include a series of geoprobes regularly spaced along the trail alignment and at locations where RECs were identified in the Phase 1 ESA.

For this project, where contaminated soil is encountered by the Phase 2 testing, a soil management plan will be prepared. Strategies for mitigation will likely include excavation and removal (to a qualified landfill) of hazardous soils which cannot remain on site, capping the remaining areas with pavement and/or clean soil and topsoil and geotextile fabric to provide an environmental demarcation as well as to prevent surface contact. Where feasible and safe, berming and capping of excess soils will be provided to reduce the cost of hauling and the quantity that needs to be disposed of at a landfill.

The project is anticipated to be phased over a several year period of design and construction (starting in quarter four of 2023 through late 2027). Portions of the trail will require access and right-of-way easements from landowners such as the railroad, Wisconsin Southern and Railroad (WSOR). Areas of the trail, such as the northern segments which are owned by the State of Wisconsin, will likely be the first areas to be constructed since WisDOT has control over the land. In addition, flat portions of the trail which require less infrastructure for access or have more simplified construction requirements (without the need for bridges, ramps, or elevated segments) will be the first to be implemented due to ease of design and construction access. Some of the most challenging segments of the trail will be phased in towards the end of the implementation window to allow more time for design, right-of-way coordination, and potential need for environmental remediation.

An anticipated timeline is included as Figure 20. This includes an initial two-year period to complete the engineering feasibility study, preliminary design report, planning, engineering, permitting, environmental reviews, and the Phase 1 and 2 investigations. As segments of the trail are designed, they will be put out to bid and constructed while later sections are still in design. Therefore, there is overlap in the schedule between planning/engineering/permitting and construction. Per the proposed schedule, final design (100% plans, specifications, and estimates) of all trail segments is planned to be finished in late 2025 or early 2026; the first segments of trail could start construction as early as the second quarter of 2025. In addition, some of the rail improvements and rail relocations that are needed could be implemented in 2024, while the trail project is still in the planning and design phase.

Risks to the proposed timeline include the potential for segments to be delayed due to access permissions or right-of-way agreements, the discovery of unknown conditions that require additional or lengthy regulatory reviews, constructability challenges in certain segments, and the variable rate of inflation that has been present since the pandemic causing bids to be higher than anticipated; impacting how far funding can be stretched. The greatest risk to the schedule is a lack of funding; an award of this grant will allow this project to proceed on a more aggressive timeframe than would be otherwise possible and would help mitigate some of the other risk factors.

The public involvement and engagement for this project has already been initiated; and there is a broad coalition of stakeholders and residents who support this project. The intent is to continue this grassroots engagement and champion-building throughout the duration of the project, which will keep the community informed and allow their voices to be heard as the design develops.

Project Schedule

		2023	2024				2025			
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
PLANNING/ ENGINEERING/ PERMITTING	Community and Stakeholder Engagement	[Yellow bar]								
	Engineering Feasibility Study	[Blue bar]								
	Preliminary Design Report				[Blue bar]					
	Design Development (30% PS&E)					[Blue bar]				
	Final Design (100% PS&E)						[Blue bar]			
	Phase 1 Environmental		[Green bar]							
	Phase 2 Environmental			[Green bar]						
	ROW Acquisitions		[Green bar]							
CONSTRUCTION PHASES	Permitting/NEPA			[Green bar]						
	Rail Improvements			[Orange bar]						
	Rail relocations				[Orange bar]					
	Construct Flat Tr						[Orange bar]			

FIGURE 18. PROJECT SCHEDULE
 Master Timeline for Planning through Implementation

	2026				2027			
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
&E)								
ail Segments								
	Construct At-Grade Street Crossings							
			Construct Ramps, Bridges, Elevated Segments					
						Landscape, Lighting, Wayfinding, etc.		

Benefit-Cost Analysis

A. PROJECT BENEFITS

A.1 User Demand

The first step in calculating the benefits associated with the proposed facility is to calculate the user demand for this facility. It is anticipated that this separated shared-use path will be utilized mainly by bicyclist but also pedestrians and people with scooters. However due to the lack of available data, pedestrian and scooter demand could not be estimated for this grant application. The following sections describe how the Bicycling Demand was calculated.

A.2 Bicycling Demand

The Bicycling Demand was calculated based on [NCHRP Report 552, Guidelines for Analysis of Investments in Bicycle Facilities](#). Based on the study findings, bicyclist are more likely to use the new facility if they live within 5400 ft from it. This likelihood increases for people who live within 2600 ft and even more for those who live within 1300ft of the facility. Also, this study assumed that all the existing bicyclists would shift from traveling on road to the new path. In the project area, there are no existing off-road bicycle facilities within the influence boundaries and continuous on-road bike accommodations are not provided. Since the path will be more comfortable and safer, it is assumed that existing bicyclists will shift to the new facility. The steps described below followed the NCHRP Report 552 to calculate the bicycling demand:

1. The [2020 US Census Tract](#) population density was applied to the areas of each of the three boundaries to estimate the total residents within each boundary (see Figure 19).

- 1300 ft Boundary: 17,088 residents
- 2600 ft Boundary: 25,738 residents
- 5400 ft Boundary: 27,988 residents
- Total Residents: 70,814

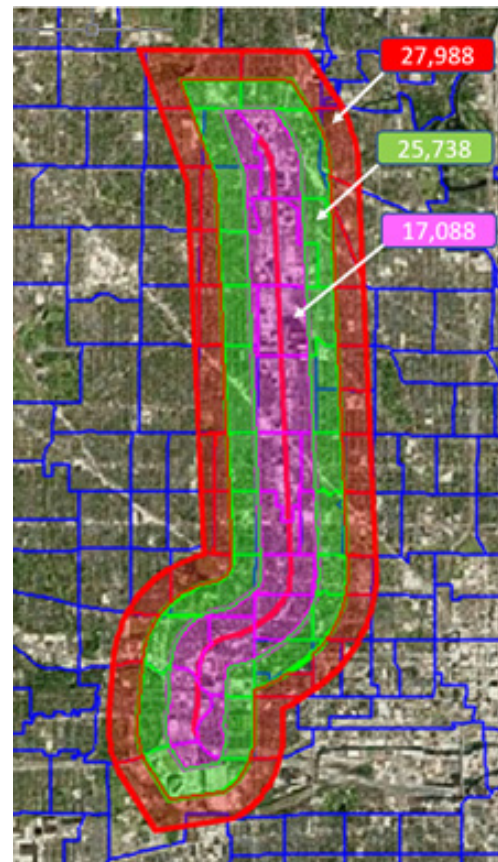


Figure 19. Influence Boundaries

2. NCHRP Report 552 recommends the following formula to calculate the Daily Existing Bicycle Demand:

$$\text{Daily Existing Bicycle Commuters} = R \times C \times (0.75 \times 0.50)$$

- R is the number of residents in the influence area.
- C is the Bicycle Commute Share. Based on [US Census](#) data pre-pandemic, the bicycle commute share for the city of Milwaukee is 0.80%.
- Based on [US Census](#) data, less than 75% of the population within the project influence area are adults compared to the nationwide average of 77.9%. For this B/C Analysis 75% was used (the NCHRP Report used 80%).
- Also based on the NCHRP Report 552 it is assumed that 50% of the adults are commuters.



Figure 20. US Census-Percent Population aged >18

	Boundary 1 (1300')	Boundary 2 (2600')	Boundary 3 (5400')	Total
R (# of residents)	17,088	25,738	27,988	70,814
C (Regional Adult Bicycle Commute Share %)	0.80	0.80	0.80	0.80
Daily Existing Bicycle Commuters	51	77	84	212

Table 3. Daily Existing Bicycle Commuters

This methodology produced a total of 212 Daily Existing Bicycle Commuters as it is shown in Table 3.

3. Commuter Bicyclists represent only a portion of the overall bicyclists. The next step calculates the Total Daily Existing Adult Cyclists as function of the Daily Existing Bicycle Commuters. The NCHRP Report 552 determined three equations to calculate the Total Adult Bicycling Rate:

$$T_{\text{high}} = 0.6 + 3C$$

$$T_{\text{moderate}} = 0.4 + 1.2C$$

$$T_{\text{low}} = C$$

C : Bicycle Commute Share

For this project all three formulas were used, and it was determined the average between T_{moderate} and T_{high} yielded a reasonable number of users for this type of facility. Therefore, a T of 2.18 was used to calculate the total bicyclists.

$$\begin{aligned} T_{\text{moderate}} &= 0.4 + 1.2 \times 0.8 = 1.36 \\ T_{\text{high}} &= 0.6 + 3 \times 0.8 = 3 \end{aligned}$$

Considering that only 75% of the population are adults the Total Daily Existing Cyclists are calculated using the following formula:

$$\text{Total Daily Existing Adult Cyclists} = T \times R \times 0.75$$

R: Number of residents in the influence area

This methodology produced 1,158 Total Daily Existing Adult Cyclists as it shown in Table 4.

	Boundary 1 (1300')	Boundary 2 (2600')	Boundary 3 (5400')	Total
R (# of residents)	17,088	25,738	27,988	70,814
T Total Adult Bicycle Share %	2.18	2.18	2.18	2.18
Total Daily Existing Adult Cyclists	279	421	458	1,158

Table 4. Total Daily Existing Adult Cyclists

- The final step is to calculate the New Daily Commuters and New Total Daily Adult Cyclists. Research conducted as part of NCHRP Report 552, concluded that people are more likely to bike if they live closer to the facility. The study established the following likelihood multipliers for each of the three boundaries (1,300ft 2,600ft, and 5,400ft). Based on this study the induced cyclists are a product of the existing cyclists and the likelihood multipliers:

$$\text{New Commuters} = \sum (\text{Existing Commuters} \times (L_d - 1))$$

$$\text{New Adults Cyclists} = \sum (\text{Existing Adult Cyclists} \times (L_d - 1))$$

$$L_{1300\text{ft}} = 2.93$$

$$L_{2600\text{ft}} = 2.11$$

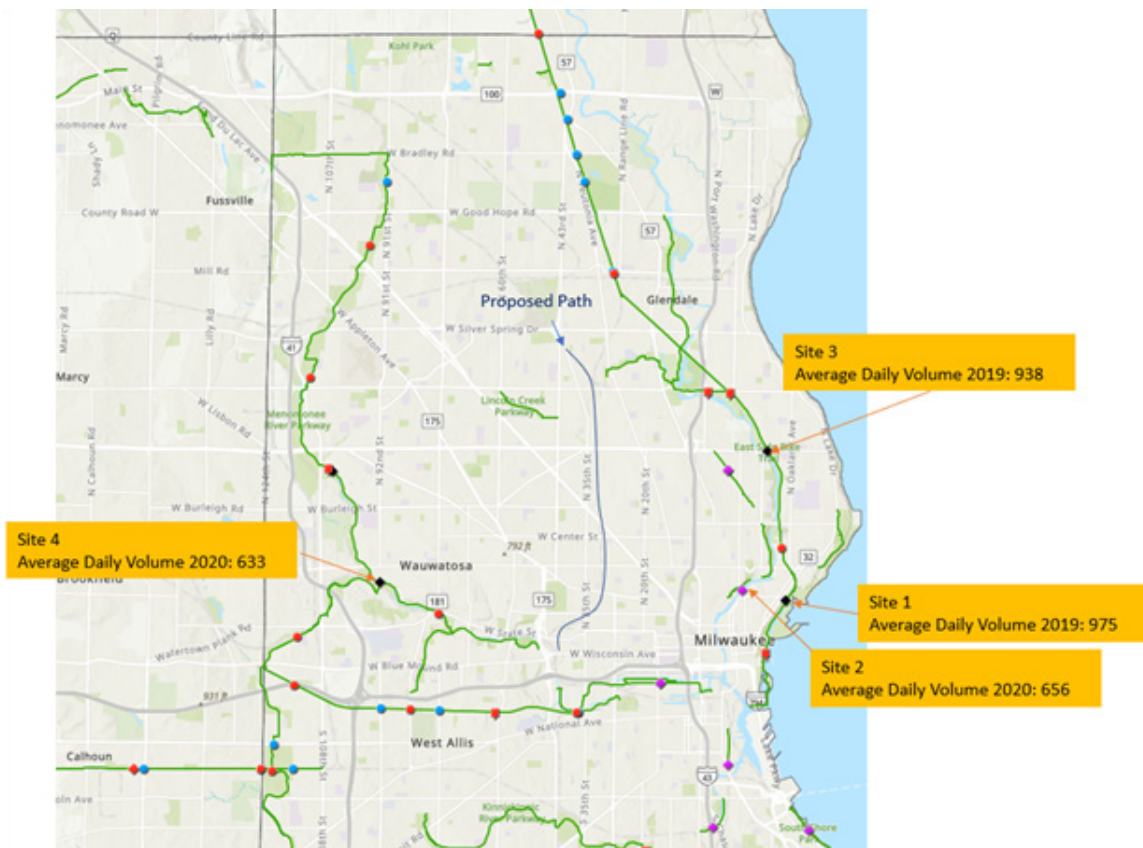
$$L_{5400\text{ft}} = 1.39$$

Table 5 shows that the new facility has the ability to induce 217 New Daily Bicycle Commuters and 1,185 new Total Daily Adult Cyclists. The total daily anticipated bicyclists (existing + new) are 2,343.

	Boundary 1 (1300')	Boundary 2 (2600')	Boundary 3 (5400')	Total
Daily Existing Bicycle Commuters	51	77	84	212
Total Daily Existing Adult Cyclists	279	421	458	1,158
New Daily Commuters	99	86	33	217
New Total Daily Adult Cyclists	539	467	178	1,185

Table 5. New Daily Commuters and New Total Daily Adult Cyclists

The results were compared with [Non-motorized \(bicycle/pedestrian\) traffic counts](#) from various off-road trails in the Southeast Region of Wisconsin. It should be noted that those counts include pedestrians. The few counts that collected distinct pedestrian and bicycle volumes indicate that cyclists often comprise 80% or more of a trail’s ridership in Milwaukee. The following map (Figure 21) shows the locations of those counts.



29 Figure 21. Non-motorized traffic counts on off-road trails (Source SEWRPC).

In terms of population density, sites 1, 2, and 3 seem to better represent the project area. These areas have access to more trails which might distribute some of the non-motorized traffic. For example, Sites 1 and 2 are in close proximity to each other but the project area has no other bicycle facility in the vicinity. Additionally, as it was noted in the narrative, 40% of the residents in some of the Census Tracts do not have access to vehicles, which creates a potential for higher bicyclist demand. Finally, the potential to connect the proposed path to existing paths has the potential to draw even more bicyclists.

A.3 Benefits

The construction of the path is anticipated to take place in 2026 and therefore the benefits will start being realized in year 2027. A 30-year analysis period from 2027 to 2056 is selected for this project consistent with the US DOT Guidance.

All the benefits and costs are presented in real (constant) dollars for year 2021. The present value of these dollars is calculated using a discount rate of 7% consistent with the US DOT Guidance.

A.3.1 Mobility Benefits

Based on the US Department of Transportation Benefit Cost Analysis Guidance for Discretionary Grant Programs 2023, dedicated bicycle facilities can improve the quality and comfort of travel in addition to the travel time savings. This guidance provides monetization values of those benefits per person-mile for various facility types in Appendix A, Table A-9.

The value of \$1.77 per cycling mile was used for this project. Based on the US DOT guidance this value can be applied only for sections that do not have a parallel comparable facility in the vicinity, which is true for this project. Additionally, the guidance caps the trip to 2.38 miles to represent the average trip length. The rule of half was applied to calculate the benefits for the New (Additional) Cyclists.

Table 6 below shows the total Mobility Benefits per year as well as the Discounted benefits for the 30-year analysis period.

	Users #	Trip Length (miles)	US DOT Value for Dedicated Cycling Lane \$/mile (\$2021)	Mobility Benefits * \$/Day (\$2021)	Mobility Benefits \$/Year \$2021)	Discounted Mobility Benefits at 7% (2027-2056)
Total Daily Existing Adult Cyclists (Existing Users)	1,593	2.38	\$1.77	\$6,712	\$2,449,880	\$21,675,248
Total Daily New Adult Cyclists (Additional Users)	1630			\$3,434	\$1,253,487	\$11,090,198
Total Cyclists	3224			\$10,146	\$3,703,367	\$32,765,445

* Calculation based on US DOT Discretionary Grants Guidance

Table 6. Mobility Benefits

A.3.2 Health Benefits

Active modes of transportation such as biking and walking can have a multitude of physical and mental health benefits for users. This project goes through areas where a high proportion of the residents has asthma and heart disease based on the EPA EJ Tool and it has the potential to significantly improve the health of the resident within it's influence area.

US DOT Table A-13 in Appendix A provides recommended values for monetizing reduced mortality risks associated with walking, cycling of a per trip basis. The recommended value for cycling and ages 20-64 is \$6.42 per induced trip. For this analysis it is assumed that the induced cyclists make only one trip.

Table 7 shows the total Health Benefits per year as well as the Discounted benefits for the 30-year analysis period.

	Users #	US DOT Value for Health Benefit/Cyclist (\$2021)	Health Benefit Total/Day (\$2021)	Health Benefit Total/Year \$	Discounted Health Benefits at 7% (2027-2056)
Total Daily New Adult Cyclists (Additional Users)	1,185	\$6.42	\$7,606	\$2,776,323	\$26,282,889

Table 7. Health Benefits

A.3.3 Cyclist Safety Benefits

Since the proposed facility reduces/eliminates conflicts between bicyclists and vehicles, it could lead to a reduction of bicycle crashes, which typically are severity crashes. To estimate these safety benefits the team utilized the [Community Maps](#) to calculate the number of crashes per severity type (K, A, B, and C) for a 10-year period within an area bounded by the two major parallel routes; 27th Street and 35th Street. A path does not have a definitive CMF to use, however the team assumed a similar crash reduction as found from implementing a separated bicycle lane. [FHWA Developing Crash Modification Factors for Separated Bicycle Lanes](#) provides statistically significant CMFs ranging from .441 to .640. For this project, it was assumed that the new facility has the potential to reduce bicycle crashes by 50%.

Table 8 summarizes this analysis and shows the Cyclist Safety Benefits per year as well as the Discounted benefits for the 30-year analysis period.

	Existing Bicycle Crashes at parallel roads			
	K	A	B	C
2013	0	1	2	3
2014	0	0	4	4
2015	0	1	1	8
2016	0	2	4	3
2017	0	1	3	2
2018	0	1	5	5
2019	0	1	4	5
2020	1	0	2	3
2021	1	0	3	0
2022	0	0	2	1
Total for 10 Years	2	7	30	34
Accidents/year	0.20	0.70	3.00	3.40
Cost per accident	\$11,800,000	\$564,300	\$153,700	\$78,500
Accident cost/year	\$2,360,000	\$395,010	\$461,100	\$266,900
50% Reduction/Year	\$1,180,000	\$197,505	\$230,550	\$133,450
TOTAL Crash Reduction Benefit/Year (\$2021)	\$1,741,505			
Discounted Cyclist Safety Benefits at 7% (2027-2056)	\$16,486,476			

Table 8. Cyclist Safety Benefits

A.3.4 Pedestrian Safety Benefits

The proposed facility includes the addition of two pedestrian overpasses which have the potential of reducing the pedestrian crashes at the adjacent intersections. Overpasses are considered in the following two locations:

- At the intersection of Fond Du Lac Avenue and Locust Street. This overpass will cross the intersection diagonally and it was assumed that it can lead to 50% reduction in pedestrian crashes because its location does not require significant pedestrian detour.
- Over Capitol Drive between the train tracks and 35th Street. This overpass has the potential of reducing the crashes at the two adjacent intersections. In this case a 25% pedestrian reduction was assumed because the path is further from the intersections.

Tables 9 and 10 summarize the safety analysis results and the pedestrian Safety Benefits per year as well as the Discounted benefits for the 30-year analysis period for the two pedestrian overpass locations.

	Existing Pedestrian Crashes at Fond du Lac intersection			
	K	A	B	C
Crashes from 2013 to 2022	0	1	2	0
Total for 10 Years	0	1	2	0
Accidents/year	0.00	0.10	0.20	0.00
Cost per accident	\$11,800,000	\$564,300	\$153,700	\$78,500
Accident cost/year	\$0	\$56,430	\$30,740	\$0
50% Reduction/Year	\$0	\$28,215	\$15,370	\$0
Pedestrian Safety Benefit/Year (\$2021)	\$43,585			
Discounted Pedestrian Safety Benefits at 7% (2027-2056)	\$412,610			

Table 9. Pedestrian Safety Benefits - Fond du Lac Ave Intersection

	Existing Pedestrian Crashes at Capitol Dr Intersections			
	K	A	B	C
Crashes from 2013 to 2022	0	3	1	4
Total for 10 Years	0	3	1	4
Accidents/year	0.00	0.30	0.10	0.40
Cost per accident	\$11,800,000	\$564,300	\$153,700	\$78,500
Accident cost/year	\$0	\$169,290	\$15,370	\$31,400
25% Reduction/Year	\$0	\$42,323	\$3,843	\$7,850
TOTAL Cyclist Safety Benefit/Year (\$2021)	\$54,015			
Discounted Pedestrian Safety Benefits at 7% (2027-2056)	\$511,349			

Table 10. Pedestrian Safety Benefits - Capitol Drive Intersections

A.3.5 Property Value Benefits

A study conducted by the Portland State University [“Impact of Bike Facilities on Residential Property Prices”](#) concluded that the proximity to bike facilities has a significantly positive impact on the property values of Single-Family Homes (SFH) and Multi-Family Homes (MFH). Different models predicted different increases ranging from 1.02% to 1.77% for SFH and from 6.42% to 8.22 for MFH.

Since the number of studies around this subject are limited and because the project area includes industrial and commercial areas in addition to the residential areas, a property value increase of 0.5% was selected to be conservative.

The City of Milwaukee Assessor’s office provided the total assessed values of all the parcels in one mile boundary around the project area. Table 11 shows the total assessed value of properties within this boundary, the total property value benefits in 2021 dollars and the Discounted Property Value Benefits for the 30-year analysis period.

	Parcels Existing Value \$2021	Property Value Increase Percentage	Total Property Value Benefits (\$2021)	Discounted Property Value Benefits at 7% (2027-2056)
Total Parcel Value	1,389,514,576	0.50%	6,947,573	4,953,523

Table 11. Property Value Benefits

B. PROJECT COSTS

The project cost included a Low-End and a High-End Option as it is shown in Table 12. These costs will be incurred in 2026 when it is anticipated this project will be constructed. It was assumed that at the end of the 30-year analysis period there is going to be a residual value of 20% of the original construction cost.

	Construction Cost Low End \$2021	Construction Cost High End \$2021	Discounted Construction Cost at 7% Low End	Discounted Construction Cost at 7% High End
Construction Cost	65,408,340	97,963,740	46,635,242	69,846,793
Residual Value	13,081,668	\$19,592,748	1,225,267	1,835,114

Table 12. Project Costs

C. BENEFIT COST ANALYSIS

The following table summarizes the benefits and costs that were described in the previous sections.

Benefit/Cost Summary		
Benefits 2021 Net Present Value		
Benefits	Mobility Benefits	\$23,809,557
	Health Benefits	\$26,282,889
	Safety Benefits Cyclists	\$16,486,476
	Safety Benefits Pedestrians	\$923,959
	Property Value Benefits	\$4,953,523
Costs	Construction Cost Low-End	\$46,635,242
	Construction Cost High-End	\$69,846,793
	Residual Value Low End	\$1,225,267
	Residual Value Low End	\$1,835,114
Benefit/Cost Ratio for Low-End Cost		1.60
Benefit/Cost Ratio for High-End Cost		1.07

Table 13. Benefit Cost Summary

D. ADDITIONAL NON-QUANTIFIABLE BENEFITS

The Corridor project offers benefits that applicants are unable to quantify at the time of the application submission. The following additional benefits represent both quantitative and qualitative benefits that the applicants believe will be derived from the project.

D.1 Freight Rail Improvements

Direct investments in the rail line will provide benefits through modal diversion. Improved freight service may reduce vehicle miles traveled as well as congestion caused by over the road shipping. The Corridor's location in the heart of the City of Milwaukee, surrounded by Wisconsin's busiest freeways and largest concentration of manufacturers means modal diversion is a quantifiable benefit. Modal diversion also represents the likely benefit of reduced emissions. More information is needed on current and projected freight usage of the Corridor in order to quantify these benefits.

The Corridor rail infrastructure is in disrepair and improvements will increase safety and reliability for freight operators and customers. Recent challenges have forced disruptions in service. Additional testing is necessary to assess possible contamination and necessary remediation, however, given the historic uses of the Corridor it is assumed that remediation benefits will extend to the rail right-of-way. Lastly, the recreational trail development paired with the rail investments ensure the Corridor is much more resilient to environmental challenges, especially flooding.

D.2 Additional Property Value Increases

The Benefits-Cost Analysis provided an estimated benefit to adjacent property values within one-half mile of the Corridor project. The analysis used 0.5% to best reflect the literature on the benefit associated with housing properties adjacent to similar bicycle infrastructure. Two additional property value benefits exist but could not be quantified.

First, the largest land owner by acreage within the Corridor is the Redevelopment Authority of the City of Milwaukee (RACM). Thousands of parcels within the studied zone are owned by RACM and offer no assessed property value to calculate a benefit. While many of these properties were industrial and could be redeveloped with new use, the volume of residential properties currently owned by the City of Milwaukee within the Corridor is staggering. Thousands of homes or vacant parcels zoned residential within the Corridor's neighborhoods are owned by the City of Milwaukee. Numerous programs, organizations and efforts are underway to rebuild, renovate, and reclaim these city-owned homes.

Second, in Milwaukee, like in many cities, land use and zoning is changing. Recent housing developments, outlined in the project narrative, have reclaimed formerly industrial zoned parcels. More multi-family housing proposals have been advanced in recent years within the Corridor than in its history. While the applicants cannot quantify the benefits of reclaiming these residential properties, resident feedback on the project has shown a high priority for additional housing units in the area. The applicants are confident new housing units on currently unassessed land will result in substantial benefits to residents.

D.3 Environmental Remediation

The Wisconsin Department of Natural Resources has identified over 70 closed remediation sites and over 60 active contaminated sites currently in remediation adjacent to the Corridor project. This reflects only properties that are directly adjacent to the rail corridor. Additional remediation is likely necessary within the rail right of way. Environmental remediation is a major goal of this project and the extent of both the potential remediation cost and benefit are not known at this time, however, remediation efforts will have a substantial, positive benefit to both property values as well as the health of Corridor residents.

D.4 Pedestrian Mobility and Health Benefits

The Benefit-Cost Analysis estimated the number of existing and new cyclists to use the new facility, but did not provide an estimation on pedestrian using the shared-use path. The new path will provide a safe and comfortable place for people to walk to get to existing nearby jobs and businesses. Additionally, the facility will provide recreation space in an area of the city that lacks parkland. With few existing options for outdoor recreation, this facility will be the primary recreation amenity in the area and generate high pedestrian use.

D.5 Vehicle Miles Traveled Reduction Benefit

This project will induce cycling and walking trips, drawing away from other travel modes including motor vehicle use. Decreasing VMT provides safety and emissions benefits. City of Milwaukee produced a [2022 Crash Analysis Report](#) that identified 35th St and 27th St bordering the Corridor as part of its Driver High Injury Network. Eight streets that cross the Corridor are also identified as part of this high injury network: Silver Spring Dr, Villard Ave, Hampton Ave, Capitol Dr, Fond Du Lac Ave, Burleigh St, Center St, and North Ave. Each driving trip removed from these roadways provides that individual traveler a safety benefit. Lower the traffic volumes on the roadways in the project area that have multiple lanes assists in bringing their volumes within a suitable range for additional safety measures like road diets.

Shifting travel patterns toward active transportation and away from motor vehicle use, reduces emissions released. As discussed in the Health Benefits section of the Benefit-Cost Analysis, Corridor residents have high rates of asthma. Reducing emissions breathed by Corridor residents could have a significant health benefit.

Project Budget

30th Street Corridor Trail Conceptual Opinion of Probable Construction Cost

Prepared by SmithGroup, September 2023, as a baseline for application to the Reconnecting Communities and Neighborhoods grant program through U.S. DOT.

Item	Unit	Quantity	Price - Low	Price - High	Subtotal - Low	Subtotal - High	Description and Assumptions
TRACK REMOVAL	mile	0.37	\$100,000	\$500,000	\$37,000	\$185,000	Costs from feasibility analysis converted from LF to mile, escalated for inflation.
TRACK RELOCATION	mile	0.29	\$2,250,000	\$2,500,000	\$653,000	\$725,000	Costs from feasibility analysis converted from LF to mile, escalated for inflation.
RAIL SURFACE	mile	6.56	\$400,000	\$500,000	\$2,624,000	\$3,280,000	Benchmarked cost from Joe Louis trail in Detroit, assumes a 12-foot trail with 18-inch shoulders.
RAIL SPURS	mile	3.55	\$320,000	\$600,000	\$1,136,000	\$2,130,000	Benchmarked cost of Kinnickinnic River Trail Connections project, which includes protected bike lanes on-street (\$600k/mile) or an 8-ft wide at-grade trail (low cost).
RAMPS	EA	18	\$300,000	\$400,000	\$5,400,000	\$7,200,000	Assumes ramps from grade to below or above-grade trail are similar to the Oak Leaf Trail ramp south of North Ave (approximately 15 to 20 ft of grade change, CMU wall with railing, asphalt trail with grass shoulders).
RAIL CROSSING	EA	4	\$20,000	\$50,000	\$80,000	\$200,000	Assumes at-grade rail crossing with track inserts to create a flush surface for the trail, and signage for trail users to look for trains.
ELEVATED TRAIL	LF	1,060	\$6,000	\$8,000	\$6,360,000	\$8,480,000	Near Molson Coors, portions of the trail which are elevated to the rail level (above street level) but where there is no room for the trail on the existing tracks; assumes a 15-ft wide embankment that is approximately 20 ft high and a 20-ft high retaining wall with railing. Assumes \$65 - \$75/CY for fill, \$75 - 150/LF for railings, \$250-\$350/SF for walls.
RETAINING WALL RELOCATION	LF	1,000	\$11,000	\$15,000	\$11,000,000	\$15,000,000	Near Harley-Davidson, relocate a portion of an existing retaining wall by demolishing the wall and excavating the soil behind it; constructing a new wall closer to the parking lot, and grading the ground at the toe of the wall for the trail (below street level). Assumes \$30 - \$40/CY for excavation and disposal of clean soil, \$75 - 150/LF for railings, \$250-\$350/SF for retaining wall (assume wall is 15-ft tall). Assume 16 ft of excavation. Total length is from the feasibility report.
NEW PEDESTRIAN/BICYCLE BRIDGE	EA	3	\$770,000	\$1,720,000	\$2,300,000	\$5,200,000	Priced based on similar new prefabricated bridges spanning approximately 90 to 100 ft in length, approximately 12 to 14 ft wide.
LIGHTING	EA	260	\$11,000	\$13,000	\$2,858,000	\$3,377,000	Assumes 30% of the trail will have lighting. Lights will be solar-powered pedestrian-scaled lights (no conduit or power) with timers programmed to dim or go off after certain times. Assumes 40 ft spacing where the lights are included along the trail.
LANDSCAPING	ACRE	4.8	\$500,000	\$750,000	\$2,385,000	\$3,578,000	Native vegetation along trail, assumes ave. of 6' wide along full trail length.
STORMWATER TREES	EA	346	\$600	\$1,000	\$208,000	\$346,000	Assumes stormwater trees on average every 100 ft along the entire length of the trail.
RAILHEADS	EA	7	\$150,000	\$400,000	\$1,050,000	\$2,800,000	Assumes each trailhead, located at strategic points along the corridor to connect to community access points, include a small plaza, kiosk with trail map, bench, drinking fountain (where feasible), and bike repair station.
WAYFINDING SIGNAGE	LS	1	\$500,000	\$800,000	\$500,000	\$800,000	Allowance for wayfinding signage to be incorporated along the trail and at ramps and other trail connection points. Assumes 100 signs.
BRIDGE REPAIR	LS	1	\$1,000,000	\$3,000,000	\$1,000,000	\$3,000,000	Allowance for a bridge stability analysis and potential minimal repairs to existing bridges to accommodate the new trail.
Subtotal					\$37,591,000	\$56,301,000	
Mobilization and General Conditions	12%				\$4,510,920	\$6,756,120	
Bonds and Insurance	2%				\$751,820	\$1,126,020	
Planning, Engineering, and Permitting	15%				\$5,638,650	\$8,445,150	
Estimating Contingency	25%				\$9,397,750	\$14,075,250	
Construction Contingency	20%				\$7,518,200	\$11,260,200	
Total, Estimated Construction Range					\$65,408,340	\$97,963,740	

Exclusions and Notes:

- Trail alignment and features are based on the 30th Street Corridor Trail Feasibility Study (Feasibility Study) prepared by the Rails-to-Trails Conservancy (RTC) in 2020, with supplemental details provided by Rep. Evan Soyke and Willie Karidis of RTC. Segment map included as a reference.
- Unless noted, unit costs were derived from the Feasibility Study and escalated by 5% per year (for 4 years) to 2023 dollars. Cost range reflects a range in materials, actual geometry and constraints at each location, and the variability of the bidding climate and project schedule start date.
- Railroad track improvements are not included in this opinion of cost.
- Investigations, excavation, remediation or disposal of contaminated soil are not included in this opinion of cost.

FIGURE 22. PROJECT BUDGET

30th STREET CORRIDOR



CAPITOL DRIVE

JUST STREET

NORTH AVENUE

LISBON AVENUE

STATE STREET

to Sherman Park

to the TRAIL

to the TRAIL

to the TRAIL

to the TRAIL

to Washington Park