

Active Transportation



Green Streetscape



Toledo Social Innovation District



Connecting Toledo Neighborhoods to Opportunity

From Redlining to Green Streets

Project Description

EXECUTIVE SUMMARY

Connecting Toledo Neighborhoods to Opportunity (CTNO) will comprehensively modernize the public infrastructure of Toledo, Ohio’s disadvantaged Junction and Uptown neighborhoods. Located adjacent to the city’s downtown core, these once-thriving communities now suffer from some of the city’s highest rates of poverty, unemployment, and blight. Historically, this majority-Black area has been disproportionately impacted by harmful transportation policy decisions. The construction of Interstate 75 (I-75) in the 1960s isolated Junction from Uptown and downtown Toledo, and – along with later urban renewal efforts – caused displacement from which the area has never fully recovered.

The impacts of discriminatory infrastructure planning continue to be felt in Junction and Uptown today. As population and investment have fled the area, the area’s aging, car-centric roadways have fallen into disrepair and become increasingly unsafe. Although a high proportion of residents lack access to a car, there are few protections for non-motorized or public transportation users, and the area has high bicycle and pedestrian crash rates.

Recently, however, a resurgence of community-driven revitalization efforts has brought new attention and investment to these neighborhoods. In Junction, neighborhood groups and public agencies collaborated to win a prestigious Choice Neighborhoods Initiative planning grant in 2020. In Uptown, the creation of a new regional innovation district is beginning with the renovation of the long-vacant US Main Post Office building; when renovations are complete in summer 2023, the facility will anchor the Toledo Social Innovation District (TSID). The TSID implements a core recommendation of the region’s 2021 Comprehensive Economic Development Strategy (CEDS); it will catalyze job creation, investment, and workforce development and bring equitable, broad-based economic opportunity to one of Toledo’s most disadvantaged areas.

In many ways, Junction and Uptown are poised for transformation. However, fully capitalizing on this momentum – and, crucially, ensuring that all neighborhood residents have safe and equitable access to its benefits – will require a fundamental transformation of the area’s infrastructure. CTNO aims to bring about that transformation by introducing a comprehensive suite of bicycle and pedestrian infrastructure improvements, new supports for public transit, and neighborhood-wide green streetscapes. Together, these improvements will

1. catalyze the growth of the Uptown TSID entrepreneurial ecosystem;
2. address key safety, mobility, and connectivity challenges that disproportionately impact the area’s most disadvantaged residents, improving their access to economic opportunity in the TSID and downtown Toledo; and
3. improve individual and environmental health and quality of life.



Figure 1: Project Location



PROJECT LOCATION

The CTNO project is located in the Junction and Uptown neighborhoods of Toledo, Ohio, in Lucas County (see Figure 2). The project area is within the existing right-of-way in Uptown, bounded by 21st Street to the north, 13th Street to the south, Adams Street to the east, and Monroe Street to the west, as well as existing right-of-way in Junction, along Dorr Street's northern boundary from I-75 to the Mott Branch Library.

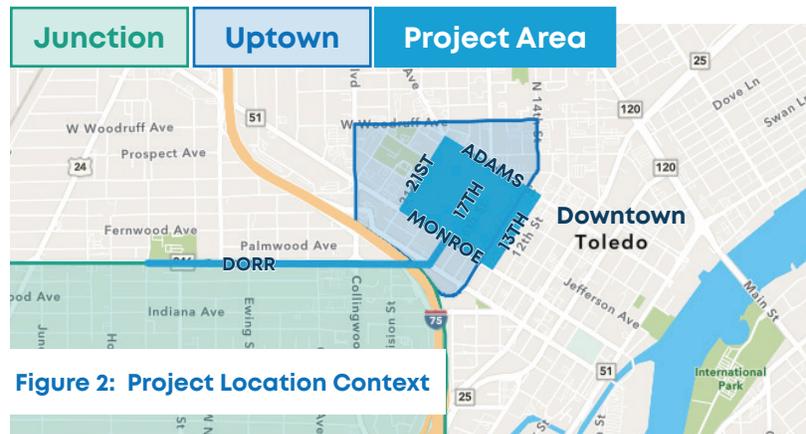


Figure 2: Project Location Context

CTNO will improve infrastructure and connectivity in four census tracts (Lucas County census tracts 26, 27, 28, and 34). Three of these census tracts (27, 28, and 34) are designated as Areas of Persistent Poverty. None are considered Historically Disadvantaged Communities. The median household income for Junction is \$30,743 and 58% of residents have a high school diploma/GED or less. The median household income for Uptown is \$21,858 and 50% of residents have a high school diploma/GED or less, compared to the national average of \$67,521.

PROJECT HISTORY

Junction and Uptown were once thriving, walkable neighborhoods. By the middle of the 20th century, Uptown had developed a dense mix of residential and commercial housing stock, and Junction was home to a growing Black middle class, centered on the Dorr Street corridor – known by long-time residents as the Black Downtown and “our Times Square.” Decades of disinvestment and harmful policies have reduced these neighborhoods to shadows of their former selves. The construction of I-75 cut Junction and Uptown off from one another, created a barrier between Junction and downtown and displaced much of the area’s Black community. In the 1970s, Dorr Street was widened to speed vehicle traffic between downtown and west Toledo and the suburbs. Hundreds of homes and businesses were demolished in the process, transforming the once-walkable street into a high-speed, high-traffic arterial. Much of Uptown’s building stock was demolished during the same period of urban renewal. Today, these neighborhoods – both majority-Black – have some of the highest poverty rates in the city.

Despite the challenges these neighborhoods face, revitalization efforts – led by dedicated coalitions of community organizations and anchor institutions – have begun to gain steam. In Junction, the Junction Coalition, Lucas Metropolitan Housing, and the City collaborated with a broader network of partners to win a prestigious Choice Neighborhoods Initiative planning grant, and developed a comprehensive plan to transform Junction into a “neighborhood of choice.” The plan’s core goals include fostering upward economic mobility for disadvantaged residents and strengthening connections to downtown and the nearby Warehouse District.

In Uptown, the City collaborated with residents and stakeholder groups to develop the Toledo Social Innovation District Framework Plan (Framework Plan), which aims to provide equitable access to workforce development opportunities, jobs, services, and amenities in the area. The Framework Plan provides a roadmap for implemen-

tation of one of the core recommendations of the region's 2021 CEDS: to help diversify the region's economic base by establishing an innovation district to catalyze job creation. The Framework Plan proposes the creation of the TSID in Uptown, which aims to catalyze resource-sharing, investment, R&D, and job creation in a mixed-use, mixed-income neighborhood served by a multimodal transportation network. The Framework Plan identified Uptown as an ideal location for the TSID because of the neighborhood's proximity to both key regional assets and to some of the region's most disadvantaged communities. The TSID aims to bridge the gap between the two, simultaneously catalyzing economic growth and job creation and ensuring that disadvantaged communities have safe, equitable access to the resulting resources and economic opportunities.

Both the Uptown and Junction communities have articulated clear, complementary plans for transformation, and many of the pieces are in place for those visions to become reality. By leveraging community partnerships and building on private investment as well as previous federally-funded efforts, this project sets out to provide the missing piece in the puzzle: addressing the inequities in transportation infrastructure that have long held these neighborhoods back from achieving equitable prosperity.

TRANSPORTATION CHALLENGES

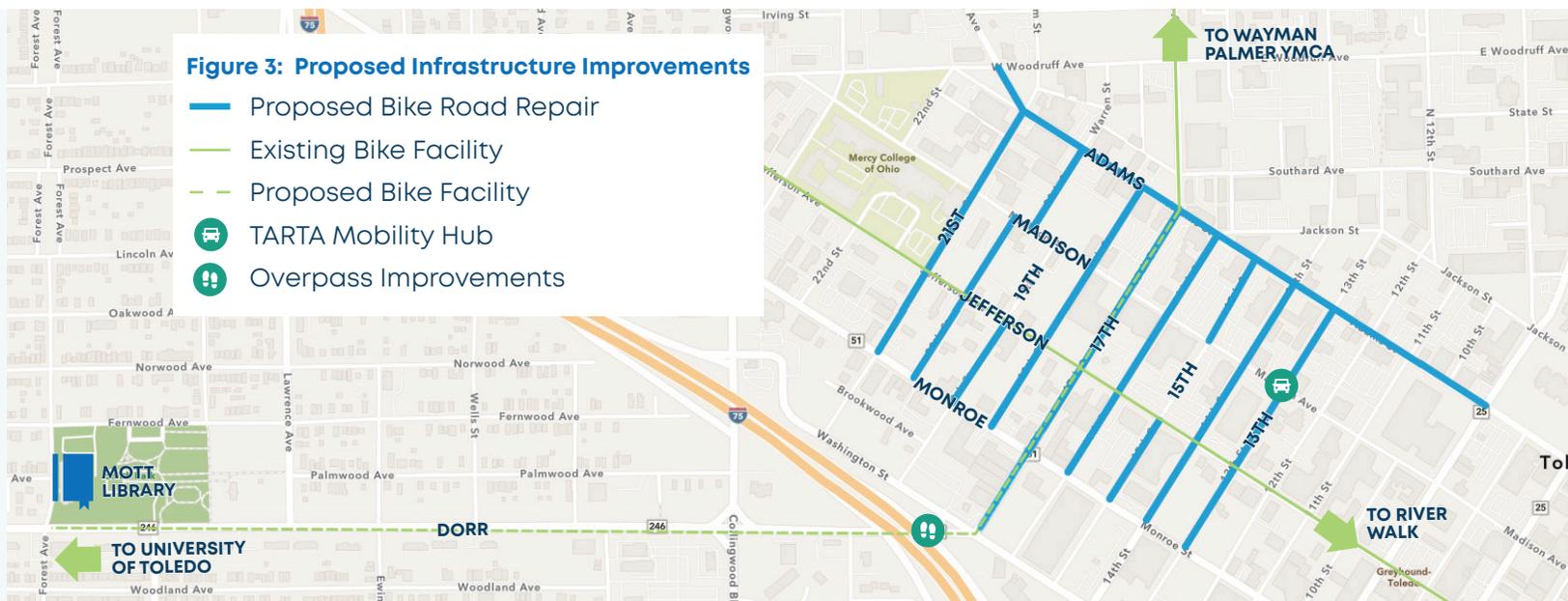
Roadway Safety. The roadways in the TSID have a high crash rate, particularly for pedestrians and bicyclists. The TSID area has a significantly higher proportion of pedestrian and bicycle crashes than the city as a whole, and the per-capita crash rate for bicyclists and pedestrians is more than seven times the citywide rate. Several roadways and intersections that are crucial for local connectivity are particularly unsafe for vulnerable road users, such as the Dorr Street corridor and the intersection of 17th St. and Monroe St., which have seen fatal crashes and rank high in severity for crashes in the Toledo region.

Roadway Condition. The utility and roadway infrastructure in the TSID is in poor condition. Roadways have deteriorated and are missing or have damaged sidewalks, and there is a lack of bicycle facilities. The City measures the performance of roadway infrastructure using a Pavement Condition Index (PCI), with the average PCI rating for roadways in the project area at 42, which is considered serious. Nearly half of the blocks in the project area are rated as poor, very poor, serious, or failed. The age and condition of the subsurface water and sanitary sewers, which exceed the useful life identified by the American Water Works Association, further accelerate the decline of these roadways. This aging infrastructure occasionally leaks or breaks, causing roadway deterioration.

Lack of Connectivity. The construction of I-75 has created a barrier that separates the Junction neighborhood from the TSID and downtown Toledo, and reduced the number of roadway connections from 13 to four, with two of the remaining connections being high-traffic volume and high-speed ramps to the interstate. The overpasses that exist do not provide safe or pleasant conditions for pedestrians and cyclists. The lack of connectivity is exacerbated by the high percentage of households without a car in both Junction (13%) and Uptown (40%).

SCOPE OF WORK

To address the challenges identified above, this project will comprehensively modernize the roadway infrastructure of the project area. It will involve the overhaul of 38 city blocks with new water and sanitary utilities, roadwork, sidewalks, and streetscapes, and will include the installation of a new TARTA Mobility Hub in the TSID and a 0.75-mile multi-purpose path in Junction. The project aims to bring the city’s utilities and roadways up to a state of good repair, while also enhancing the urban tree canopy and promoting environmental sustainability. The work will take place within the existing publicly dedicated right-of-way, improving connectivity between neighborhoods and creating a safer and more accessible corridor for all users. The project is expected to cost \$54.9 million and will be partially funded by a \$25 million RAISE grant. A benefit-cost analysis (BCA) estimated a return in public benefits of \$5.62 for every \$1 spent on this project (details in BCA attachments).



Detailed Scope of Work. All projects will be designed by a licensed engineer and will be competitively bid to find the most qualified contractor with the most competitive proposal. The contractor will install new water or sanitary sewer lines in the right-of-way and terminate service to the old lines once the new lines are in place. The costs for the water and sanitary sewer replacement will be exclusively paid with the City’s local match and not RAISE grant proceeds.

After the water and sanitary sewer lines have been installed, the hired contractor will then remove the entire roadway down to the soil, including curbs, curb ramps, and drive approaches and replace it with new curbs, curb ramps, and asphalt that is a minimum of 6 ¼-inch thick. As specifically detailed for each roadway improvement project below, streetscape elements, generally including sidewalk, landscape and decorative lighting will be installed. An experienced licensed City engineer will inspect the work for compliance with design plans and construction standards before the project’s completion is finalized. Below are detailed scopes of work for each roadway that will be improved by this project. Roadways that will receive improvements are shown in Figure 3.

Community Connector Street (17th Street). Starting in 2027, the 17th Street corridor will undergo a transformation to become safer, more accessible, and have lower emissions. An 8-inch waterline and 24-inch sanitary sewer will be installed, after which 1.76 lane miles will be resurfaced. Additionally, on-street protected bike lanes will be installed in both directions between the I-75 Overpass and Adams Street. The streetscape will be upgraded to include sidewalks that are compliant with the Americans with Disabilities Act (ADA), pedestrian scale energy efficient LED lighting, artistic crosswalks, street trees, and bike shelters. These improvements will help to make the corridor more accessible to all users, including pedestrians, cyclists, and motorists.

I-75 Overpass & Dorr Street Multi-Use Path. The I-75 Overpass will be improved in 2027 to create a safe and friendly connection for pedestrians and bicyclists between Junction and the TSID. The existing 14-foot sidewalk will be enhanced with the installation of 12 large concrete planters and 12 pedestrian-scale energy-efficient LED lights to separate non-motorized users from vehicular traffic. The overpass's sidewalk will also feature artistic elements similar to the crosswalks in the TSID to create a consistent and inviting experience. A new 10-foot-wide multi-use path will be constructed along Dorr Street between I-75 and the Mott Branch Library and Smith Park, creating a 0.75-mile bike parkway. The new path will include trees, landscaping, lighting, bike shelters, and seating areas.

Neighborhood Streets (13th, 14th, 15th, 16th, 18th, 19th, 20th, 21st). Neighborhood Streets will receive new water and sanitary sewer lines and a full depth roadway reconstruction. The addition of ADA-compliant sidewalks, pedestrian scale energy efficient LED lighting, seating, and trees will enhance the streetscape and make it more welcoming for residents and visitors alike. A large number of trees, specifically 1,068, will be planted as part of this project, which will help to improve the local environment and provide numerous benefits, such as shade, improved air quality, and reduced stormwater runoff.

TARTA Mobility Hub. Toledo's first TARTA Mobility Hub will be installed on Madison between 13th St. and 14th St. in 2029. The hub will serve as a centralized node of multi-modal activity, providing amenities and real-time information to riders. This will include an elevated bus stop for safer and faster boarding, decorative seating, energy efficient LED lighting, free wi-fi, modern bus fare collection kiosks, and bike and scooter shelters.

Community Gathering Street (Adams Street). The Adams Street corridor will undergo significant renovation to support community gathering and enhance the streetscape. The project will begin with the installation of new water and sanitary lines in some sections of the street, followed by the resurfacing and upgrading of the entire 0.67-mile roadway from Woodruff Avenue to Michigan Street in 2028. The streetscape improvements will include six upgraded intersections with artistic crosswalks, new curb bump-outs, ADA-compliant sidewalks and pedestrian ramps, improved on-street parking, pedestrian scale energy efficient LED lighting, seating, street trees, and six decorative arches that will promote walkability and enhance tourism. This project is expected to enhance the unique ambiance of Adams Street and support regional events like Toledo Pride and Zombie Crawl.

Merit Criteria

Safety

Currently, the Connecting Toledo Neighborhoods to Opportunity (CTNO) project area has a disproportionately high crash rate and is especially hazardous for pedestrians and bicyclists. This project proposes infrastructure improvements that will significantly increase safety for non-motorized roadway users in the project area and surrounding community.

CURRENT CONDITIONS

The overall average annual per-capita crash rate for the project area is approximately five times the rate for the City as a whole (Figure 1b). Pedestrian and bicycle crashes occur with disproportionate frequency in the project area, relative both to population and to total crashes: the average annual per-capita crash rate for pedestrians and bicyclists within the project area is more than seven times the citywide rate (Figure 1b). Accordingly, pedestrian- and bicycle-involved crashes also make up a higher proportion of total crashes within the project area (11.1%) than they do citywide (7.4%). A pedestrian fatality occurred within the project area in 2021, and the project area's average annual per-capita crash fatality rate is more than three times the citywide rate (Figure 1b). Crash data was obtained from the Toledo Metropolitan Area Council of Governments (TMACOG). Detailed crash data is included in Appendix.

Figure 1a: All Crashes within Project Area 2017-2021

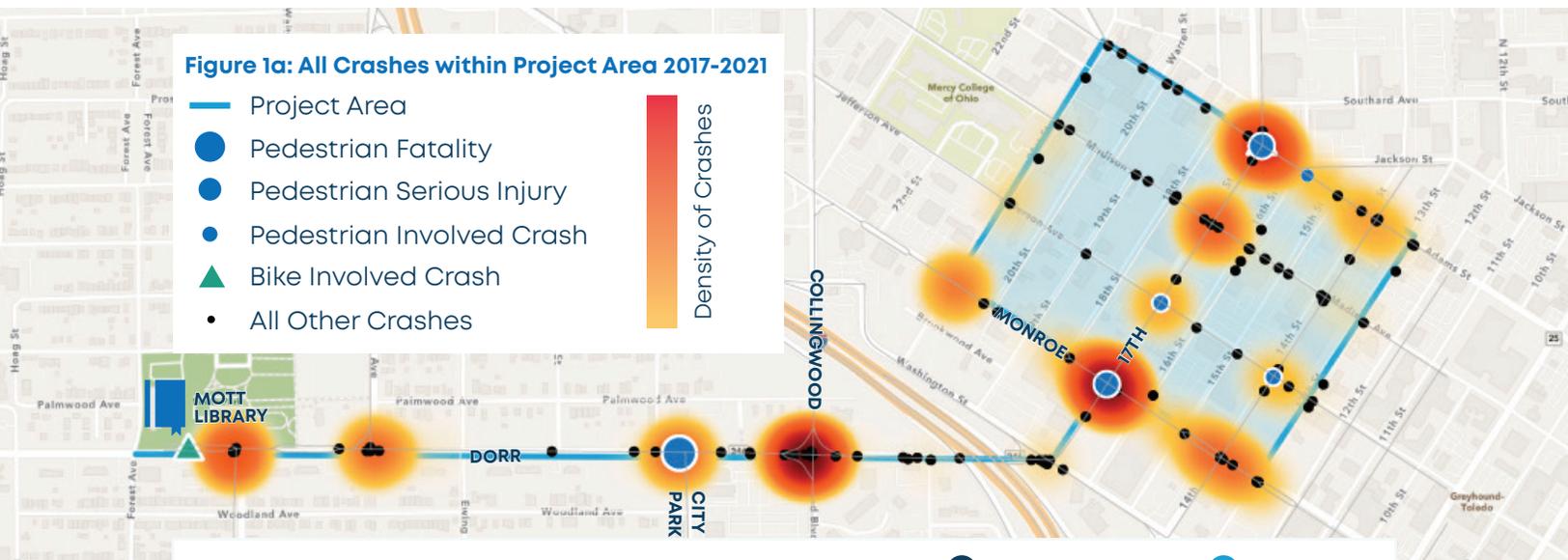
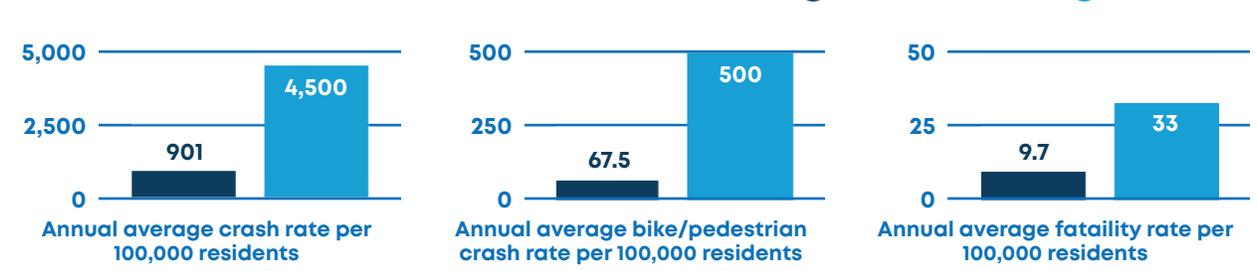


Figure 1b: Non-Property Damage Only Crash Rate Data 2017-2021



The project area has multiple hazardous intersections and roadway segments, including the intersection of 17th Street and Monroe Street, which ranked in the top 11% of all intersections in TMACOG's jurisdiction for severity of crashes. The portion of Dorr Street within the project area is also a high-risk corridor, with a pedestrian fatality occurring at the intersection of Dorr and City Park in 2021. TMACOG's Long-Range Transportation Plan identifies Dorr Street as an area prone to bicycle crashes and recommends the development of a sidepath along Dorr Street as a priority safety project. The two traffic stations on the segment of Dorr Street within the project area recorded 85th percentile speeds exceeding 40 mph, posing a high level of risk for non-motorized roadway users. At these speeds, more than 80% of pedestrian-involved crashes are expected to result in severe injury for pedestrians, and more than 50% are expected to result in a pedestrian fatality.¹

The introduction of the Veo electric scooter share program in August 2021 has led to an increase in vulnerable road user traffic volume in the Junction and Uptown neighborhoods. In 2022, there were 14,085 Veo trips in the area, with a trip origin/destination hotspot near the Mott Branch Library. While it is difficult to draw precise conclusions about injury risk for Veo riders due to the lack of Ohio Department of Transportation (ODOT) crash reports specifically identifying scooters, the known hazards to vulnerable road users in the project area - and the increasing trend of scooter-related injuries and emergency room visits globally - suggest that scooter users may be at high risk in the area, particularly on the Dorr Street corridor where the hotspot is located.

CTNO TREATMENTS

Dorr Street Multi-Use Path. The project area lacks dedicated infrastructure for bicyclists and other low-speed vehicles, and pedestrian sidewalks are narrow and close to the roadway. To address this issue, the project proposes to install a 10-foot-wide multi-use path along Dorr Street, separated from the roadway by physical barriers. Studies included in the Federal Highway Administration's (FHWA's) "Evaluation of Bicycle-Related Roadway Measures" indicate that shared-use paths have been associated with significant reductions in bicyclist injury risk and fall or crash risk.²

Pedestrian Improvements. The project will introduce improvements to pedestrian crosswalks throughout the area, including curb extensions in areas with on-street parking lanes to decrease pedestrian crossing distance, improve visibility, and reduce vehicle turning speed. Curb extensions have been shown to reduce the number of vehicles that pass before pedestrian crossings. The project will also add high-visibility crosswalks, which have been proven by FHWA to reduce pedestrian injury crashes by up to 40%.³

Colored and protected bike lanes (cycle tracks) will be added on 17th Street, which will make up part of the main corridor for non-motorized travel between Uptown and Junction. Studies included in FHWA's Evaluation concluded that colored bike lanes appear to create safer bicycling environments by heightening bicyclist and

¹ Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death (Technical Report). Washington, DC: AAA Foundation for Traffic Safety.

² Mead, J. et al. Evaluation of Bicycle-Related Roadway Measures: A Summary of Available Research (February 2014). Federal Highway Administration (DTFH61-11-H-00024), pp. 61-62.

³ Federal Highway Administration Office of Safety, Countermeasure Tech Sheet: Crosswalk Visibility Enhancements.

motorist awareness in conflict zones.⁴ Studies in the FHWA Evaluation also associated cycle tracks with statistically significant reductions in bicycling injury risks of 89 to 95%, and with reductions in bicycle crash rates relative to comparable roads without cycle tracks.⁵ Other research has associated protected bike lanes with improvements in bicyclist safety beyond those provided by bike lanes without physical barriers and has estimated that protected bike lanes reduce fatalities by up to 44% and serious injuries by up to 50%.⁶ Protected bike lanes also significantly increase cyclists' perceptions of safety, reducing a known barrier to active transportation use in the project area.⁷

Street Trees. 1,068 trees will be planted throughout the project area. In addition to providing environmental and quality-of-life benefits, street trees place a physical barrier between pedestrians and motor vehicles. Roadside trees have been found to have a traffic-calming effect, and have been associated with crash rate reductions of up to 46% in urban environments.⁸

Roadway Improvements. Roadway reconstruction throughout the project area will improve safety for all roadway users. Poor pavement condition has been associated with higher overall crash rates and with higher rates of fatal and serious injury crashes.⁹ Poor pavement conditions, particularly potholes, impact cyclists' perceptions of roadway safety, deterring usage. The City evaluates roadway pavement conditions using a Pavement Condition Index (PCI) system based on ODOT rating procedures. A PCI score of 55 or below indicates poor pavement condition requiring resurfacing or reconstruction. PCI inspections were last conducted in the project area in 2020; of the 38 blocks in the Uptown portion of the project area, 18 – more than 47% – received ratings of 55 or below.

Increased Lighting. Increased lighting is a key factor in reducing pedestrian crashes, particularly at night or in low-light conditions. The additional streetlights in the project area will improve visibility for both drivers and pedestrians, making it easier for drivers to see pedestrians crossing the street and for pedestrians to see oncoming traffic. The increased lighting at intersections is also expected to help reduce the number of crashes by improving visibility and reducing driver confusion. According to FHWA, intersection lighting can help reduce pedestrian crashes by up to 40%.¹⁰ The project will increase the number of streetlights in the project area from 160 to 320. Additionally, 12 pedestrian-scale decorative lights will be added to the Dorr Street overpass.

CTNO TREATMENT EXAMPLES

Strategically targeting and combining safety countermeasures will have a synergistic impact, creating the conditions for a safe, inviting, multimodal Toledo Social Innovation District (TSID).

⁴ Mead et al., pp. 27-28, 30.

⁵ Ibid., pp. 38-42.

⁶ Marshall, W. and N. Ferenchak. "Why cities with high bicycling rates are safer for all road users. *Journal of Transport & Health* 13 (June 2019).

⁷ Monsere, C. et al. "Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S. Portland, OR: Transportation Research and Education Center, 2014.

⁸ Mok, J. et al. "Landscape improvement impacts on roadside safety in Texas." *Landscape and Urban Planning* 78 (2006), 263-274.

⁹ Li, Y. and J. Huang. "Safety Impact of Pavement Conditions." *Transportation Research Record* 2455.1 (January 2014).

¹⁰ FHWA Countermeasure Tech Sheet: Crosswalk Visibility Enhancements.



Figure 2: Rendering of Proposed Improvements to Adams Street

Adams Street (Figure 2) already plays an important role in the neighborhood's economy and cultural life, but a high number of crashes and multiple pedestrian or bicyclist injuries have occurred along the corridor (Figure 1a, p. 1). Six intersections on Adams Street will be upgraded with artistic crosswalks, new curb bump-outs, ADA-compliant sidewalks and pedestrian ramps, improved on-street parking, pedestrian scale energy-efficient LED lighting, seating, street trees, and six decorative arches. These upgrades are expected to increase walkability and pedestrian safety, enhance tourism by supporting regional destination events like Toledo Pride and Zombie Crawl, and contribute to the unique ambiance of Adams Street.

The intersection of 17th Street and Monroe Street (Figure 3) is currently among the



Figure 3: Rendering of Proposed Improvements to Monroe Street and 17th Intersection

most dangerous intersections in the region by crash severity. The intersection lacks tree cover and meaningful pedestrian and bicycle infrastructure and has poor pavement conditions. However, Monroe Street also provides important access between the TSID and downtown Toledo, and 17th Street makes up one half of the main corridor for bicycle travel between Uptown and Junction. A combination of protected bike lanes, street trees, and crosswalk visibility improvements will result in significant safety benefits at this intersection, as well as transform the experience of multimodal travel through the area – creating a safe, inviting gateway to the TSID for all road users.

Environmental Sustainability

The infrastructure improvements proposed in this project will significantly reduce emissions, improve air quality, increase the resilience of at-risk infrastructure, and address the disproportionate negative environmental impacts of transportation infrastructure on disadvantaged communities.

Transportation-Related Emissions Reductions. This project introduces significant new bicycle and pedestrian infrastructure in the project area, which will promote the adoption of low-emission modes of transportation over driving, decreasing overall transportation emissions. Following the U.S. Department of Transportation’s guidelines and using data from the U.S. Environmental Protection Agency and Bureau of Transportation Statistics (BTS), the BCA for this project estimates decreases in emissions of CO₂ (approx. 2,260 metric tons/yr), NO_x (approx. 3.3 kg/yr), and PM_{2.5} (approx. 93 g/yr).

These estimates are likely conservative. The National Cooperative Highway Research Program’s model for forecasting increased bicycle use, for example, does not differentiate between protected and unprotected on-street bicycle lanes, and some research indicates that protected lanes increase cyclists’ perceptions of safety and/or result in larger increases in bicycle usage than unprotected lanes.¹¹ Additionally, the underlying model does not account for the potential complementary effects of the other safety measures (street trees; curb extensions; high-visibility crosswalks), which may drive additional increases in active transportation usage. This project is also likely to result in further emissions reductions outside the project area by opening key corridors for medium and long-distance low-stress bicycle travel (north/south from Dorr to City Park to south Toledo and Maumee via the Riverside Trail; east/west on Dorr to the University of Toledo and the western suburbs). Incorporating lower-carbon pavement and construction materials wherever possible will also reduce this project’s greenhouse gas (GHG) footprint.

Trees. The project area currently has 8 to 16% tree canopy cover, well below the climatically appropriate goal of 35 to 40%. The 1,068 trees that will be planted during this project will significantly reduce CO₂ emissions. In addition to carbon sequestration, tree cover directly reduces GHG emissions by providing shade and reducing the amount of energy required for indoor heating and cooling. These reductions are likely to be especially significant in the project area, where the median age of housing stock is 76 years. Using a formula developed by the U.S. Forest Service, the BCA for this project calculates the nominal CO₂ reduction benefits of this project at approximately 3,621 metric tons over the 20-year project life.

¹¹ Marshall and Ferenchak 2019.

Increased tree canopy also provides significant urban stormwater management benefits. Urban tree canopy can significantly reduce stormwater loading by retaining an average of up to 20% of annual rainfall.¹² This loading reduction will increase the resilience of Toledo's at-risk combined sewer overflow system. Urban tree canopy significantly reduces stormwater runoff into waterways, a major cause of non-point source pollution.

Quality of Life

This project will result in significant quality-of-life benefits for residents of underserved Toledo neighborhoods by increasing affordable transportation choices, improving access to daily destinations, and mitigating urban heat islands.

Addressing the Legacy of Redlining and Urban Renewal. The Junction neighborhood was redlined in the 1930s, leading to disinvestment that laid the groundwork for the displacement of communities associated with Interstate 75 (I-75). The construction of I-75 fragmented Toledo's Black community and created a barrier for the Junction neighborhood between downtown, the Toledo Museum of Art, and other assets. Urban renewal in the 1970s bulldozed buildings on Dorr Street, the heart of Toledo's Black community, and displaced over 100 Black businesses. Today, Junction is a food desert and 40% of the neighborhood is vacant.

Junction Momentum. Despite this challenging history, dedicated neighbors and anchor institutions have begun to revitalize Junction. In 2018, the City adopted a master plan completed by the Junction Coalition and Toledo Design Collective. In 2019, the Toledo Lucas County Public Library opened its \$9 million Mott Branch Library on Dorr Street. ProMedica, in partnership with Owens Corning, committed \$2.8 million in late 2020 to nonprofit organizations in the Junction neighborhood. This funding supports education and training, health and wellness, jobs and finances, stable housing, and basic needs.

CTNO Builds on Other Federal Investments to Improve Quality of Life. In 2020, Lucas Metropolitan Housing (LMH) was awarded a Choice Neighborhoods planning grant from the U.S. Department of Housing and Urban Development (HUD) for the revitalization of the Junction neighborhood and McClinton Nunn Homes. The Choice Neighborhood grant involves significant engagement from neighbors and has gathered neighborhood input at dozens of public meetings. As a part of the Choice Neighborhood planning grant, the Junction transportation working group looked closely at the neighborhood's transportation infrastructure. The working group identified assets, challenges, and opportunities and made some key recommendations, including developing direct routes to nearby Metroparks, creating a gateway into and out of the Junction neighborhood, enhancing bus shelters, implementing Toledo Area Regional Transit Authority (TARTA) Next (a bus system redesign), and promoting walkability. To further this work, LMH submitted an application to HUD for a \$40 million Choice Neighborhoods Implementation Grant in January 2023.

The City is working with HUD to designate the Junction neighborhood as a Neighborhood Revitalization Strategy Area and is investing its American Rescue Plan allocation in and around the Junction neighborhood, including the construction of a new Wayman D. Palmer Young Men's Christian Association (YMCA). However, due

¹² Gaffield, S. et al. Watershed Science Bulletin, 2017.

to the location of the interstate, Junction residents do not have convenient and safe non-motorized access to the new facility. The CTNO project will provide a new off-road multipurpose path along Dorr Street, enhanced Dorr Street Overpass over I-75, and new protected bike lanes on 17th Street to safely connect users to the YMCA and complete a critical missing link in the City’s regional bike network (see Figure 4).



CTNO Expands Toledo’s Active Transportation Network and Increases Affordable Transportation Choices. There is increasing evidence of the growing need for safe, reliable multi-modal transportation in Toledo. In 2021, the City launched a micro-mobility pilot program in partnership with Veo, which offers residents and visitors access to 300 electric scooters and 100 pedal bicycles. Since the launch of the program in August 2021, there have been 6,506 trip originations and 6,689 trip destinations in Uptown, and 771 trip originations and 1,079 trip destinations in Junction. According to Veo, the program has been one of the most successful in the company’s history, further highlighting the need for affordable and reliable transportation options in the city. Despite a successful launch, there have also been seven accidents related to Veo in the project area, which highlights the need for safer infrastructure for non-motorized transportation users.

The project aims to build on other federal and private sector investments to improve public health by providing safe and equitable access to multi-modal transportation. CTNO’s proposed 0.75-mile multi-purpose trail on Dorr Street between the Mott Library and I-75, the enhanced Dorr Street Overpass over I-75, and redesigned streetscape and protected bike lanes on 17th Street will improve Junction resident’s access to daily destinations like jobs, healthcare, workforce training, grocery stores and recreation in the TSID and downtown areas.

CTNO Mitigates Urban Heat Islands. The CTNO project aims to reduce urban heat islands in the project area, which was identified as the second-hottest urban heat island in Lucas County. The area has a high percentage of impervious surfaces and sparse urban tree coverage, resulting in high surface temperatures. The U.S. Department of Agriculture recommends that Toledo’s neighborhoods have 35-40%

tree canopy cover, but the project area currently only has 8-16% tree canopy cover. Increasing the tree canopy with the CTNO project’s proposal to plant 1,068 trees will not only help to reduce surface temperatures but will also provide significant urban stormwater management benefits by retaining up to 20% of annual rainfall and reducing stormwater runoff into waterways, which is a major cause of nonpoint source pollution. This will increase the resilience of Toledo’s at-risk combined sewer overflow system. The CTNO project will not only protect the health of at-risk residents and outdoor workers but also provide long-term environmental benefits.

Improves Mobility and Connectivity

The lack of physical connectivity caused by the construction of I-75 has had significant negative impacts on the social and economic health of the Junction, Uptown, and Downtown neighborhoods. The physical barriers created by the limited roadway connections have contributed to a sense of isolation and detachment between the neighborhoods, making it difficult for residents and businesses to connect and interact with each other (see Figure 5). This lack of connectivity has also made it difficult for residents to access employment, education, and other opportunities available in other parts of the city.

The decline of the neighborhoods over the past 60 years has been a result of several factors, including disinvestment, job loss, and the decline of the manufacturing industry. However, the lack of physical connectivity has exacerbated these challenges by limiting the ability of residents and businesses to connect with each other and with the broader city. The Junction and Uptown neighborhoods have suffered from high rates of poverty, crime, and blight, and have struggled to attract investment and economic development.

This project seeks to address these challenges by improving system-wide connectivity and safety for all roadway users, including pedestrians and bicyclists, and by creating a more inviting and accessible environment for businesses and residents. By improving physical connectivity, the project aims to encourage economic development, improve public safety, and promote social cohesion within and between the neighborhoods.

CTNO Reconnects Communities Divided by Physical Barriers. The construction of I-75 in the 1960s physically disconnected the Junction, Uptown, and Downtown neighborhoods. Before the interstate, there were 13 roadway connections between the Junction and Uptown/Downtown neighborhoods. Today, there are only four, two



Figure 5: Historic and Current Junction Connections to Downtown/Uptown

of which are on/off-ramps to the interstate that support high traffic volumes and high speeds. Additionally, the four overpasses were designed to primarily accommodate automobile traffic and are characterized by poor lighting and sidewalks without physical barriers for pedestrians. The CTNO project will improve pedestrian and bicycle infrastructure on the existing Dorr Street I-75 overpass to increase connectivity between the Junction, Uptown, and Downtown neighborhoods. The project will include a 10-foot-wide multi-use path that will connect the overpass to the Mott Branch Library, as well as a protected on-street bike lane on 17th Street. The overpass will also feature 12 large planters and 12 pedestrian lights to act as a physical barrier between automobile traffic and non-motorized traffic on the multi-purpose path. These improvements will allow for safer, easier travel between the neighborhoods, encouraging more social and economic activity in the area (see Figure 6).



Figure 6: Rendering of Proposed Improvements to Dorr Street I-75 Overpass

CTNO Improves Systemwide Connectivity with Access to Transit and Micro-Mobility. The CTNO project aims to improve safety, connectivity, and mobility in Toledo's Junction, Uptown, and Downtown neighborhoods by adding more streetlights, reconstructing roadways, adding bike lanes and multi-use paths, and improving transit with a new TARTA Mobility Hub. The TARTA Next Vision Plan, completed in 2021, includes the development of several mobility hubs throughout the region. These facilities are designed to make connections between transit services comfortable, safe, and dignified, offering enhanced amenities like clear signage, real-time passenger information, and covered waiting areas. Mobility hubs aim to provide a higher level of comfort and security for passengers, allowing for easy and safe transfers between other routes and modes of transportation like bikes and scooters.

The CTNO Project will include the construction of a new TARTA Mobility Hub in the TSID area to improve transit activities and connectivity to regional assets (see Figure 7). The mobility hub will have an elevated bus stop to improve accessibility for boarding and exiting buses. It will be located on TARTA's Route 22, which connects to important locations such as Mercy College, Toledo-Lucas County Library Main



Figure 7: Rendering of the Proposed TARTA Mobility Hub at Madison and 13th

Branch, Toledo Museum of Art, University of Toledo, Westgate (a major retail node), and the Franklin Park Mall. In 2021, Lucas County voters approved a levy that will generate \$32 million in additional revenue to fund the TARTA transit system. The funding increase will be used to implement the TARTA Next Vision Plan.

CTNO Increases Accessibility for Non-Motorized Road Users in Underserved Communities. The CTNO project in Toledo aims to improve mobility and connectivity by enhancing the city’s bike, pedestrian, and mass transit networks. The project includes the development of pedestrian and bicycle infrastructure that encourages non-motorized travel within and between communities, including key east-west and north-south connections. The infrastructure will meet ADA requirements and use Universal Design principles to ensure accessibility for those with disabilities. Upgrades to bicycle infrastructure will also enhance the city’s recent micro-mobility share program, which includes electric scooters and bicycles launched in partnership with Veo in 2021.

CTNO Builds on Other Federal Investments to Improve Connectivity. The CTNO project will also build upon the \$23.6 million Better Utilizing Investment to Leverage Development grant awarded to Metroparks Toledo in 2020 for the construction of the Glass City Riverwalk (Riverwalk). The Riverwalk is a transformational \$200 million project that will create 300 acres of new and revitalized downtown riverfront green-space that will be connected by five miles of multi-use trails spanning both sides of the Maumee River. In 2021, the City finished construction on the Jefferson Cycle Track which runs the entire length of Jefferson Avenue from the Maumee Riverfront to the edge of the Toledo Museum of Art’s campus. The project uses a median to protect bicycle traffic from auto traffic, and it features bike traffic signals and upgraded signage. The cycle track project provides an important connection between the Riverwalk and the proposed improvements of the CTNO project. Once complete, the CTNO project will allow residents in the Junction neighborhood to safely access the Riverwalk project using non-motorized transportation on newly built protected pedestrian-scale infrastructure (see Figure 4, p. 7).

Economic Competitiveness and Opportunity

This project is a key component of a larger regional workforce and economic development initiative to improve northwest Ohio's economic competitiveness. Following the peak of the COVID-19 pandemic, regional leaders created the Toledo Region Comprehensive Economic Development Strategy (CEDS) in 2021. The primary goals of the CEDS are to improve the region's resiliency, cultivate a diverse workforce, and promote a high quality of life and place. One of the strategy's core recommendations is to establish a regional innovation district that will cluster start-ups, academic institutions, entrepreneurial support organizations, job-training programs, and corporate R&D in a mixed-use community to drive collaboration, resource-sharing, investment, and knowledge spillovers, and catalyze high-tech job creation.

The Toledo Social Innovation District Framework Plan was created to guide the planning and development of northwest Ohio's innovation district, which focuses on developing new technologies to improve the region's economic competitiveness while also strengthening the region's people, particularly low-income, minority, and people of color living in the most distressed neighborhoods adjacent to downtown Toledo. The plan envisions a comprehensive approach to economic development that includes workforce training, clustering of high-tech businesses, strategic purchasing, workforce housing, and access to recreational amenities, with a focus on minority and women-owned businesses, non-traditional healthcare solutions, technology innovation, and medical devices and clinical innovations.

In 2022, the City and its partners broke ground on the Toledo Innovation Center (TIC), a \$38 million business incubator for both technology and non-technology start-ups, including those focused on alternative energy, biotech, logistics, and digital health services, among others. The TIC will be located in the Uptown neighborhood, anchoring the TSID in the CTNO project area. The City and its partners attracted Bitwise Industries, a minority-led technology company, to be the anchor tenant at the TIC located in the TSID. Bitwise trains low-income individuals, mainly women and minorities, for jobs in the digital economy through its earn-as-you-learn model that pairs workforce development in coding and technical support with referral to life-essential services. Their programs have prepared more than 5,000 student workers for tech jobs, with 80% of their students gaining employment in the tech sector and increasing their annual income from under \$21,000 to over \$61,000.

The community is working to connect the TSID and its projects to surrounding neighborhoods that struggle with poverty. Recommendations for improving connectivity are outlined in the Toledo Social Innovation District Framework Plan, which guided the improvements proposed in this project.

The CTNO project aims to promote greater public and private investments in land use productivity in the Uptown neighborhood. The neighborhood currently has a high percentage of land use dedicated to surface parking lots, exceeding 8,000 parking spaces, while the percentage of land use for buildings is only 33%. This is well below the research-driven land-use targets identified in the Uptown Master Plan (60% of land for buildings, 20% for parks and open space, and 20% for surface parking). By investing in public infrastructure in Junction and Uptown neighborhoods, CTNO hopes to attract private sector investment to increase density in both neighborhoods.

Inclusive Opportunity & Robust Job Creation for Toledoans. The City is implementing the CTNO project to improve safety, connectivity, and mobility in the Junction, Uptown, and Downtown neighborhoods by adding more streetlights, reconstructing roadways, adding bike lanes, and improving transit with a new TARTA Mobility Hub. The project will also meet Americans with Disabilities Act requirements and include Universal Design principles to ensure accessibility to those with disabilities. The project aims to support good-paying jobs in the region with a free and fair choice to join a union, and the City is committed to involving minority and woman-owned firms in the project. The City is updating its procurement policies and practices based on a Disparity Study commissioned in March 2021 to make it easier for minority-owned and non-minority woman-owned businesses to successfully bid and be awarded projects.

In addition to updating procurement policies and practices to remove barriers for minority-owned and non-minority woman-owned businesses, the City has several existing requirements and goals, that are codified in the Toledo Municipal Code and bidding process, to ensure the project will support good-paying jobs within the city with a free and fair choice to join a union:

Project Labor Agreements. On May 24, 2016, Toledo City Council passed Ordinance 200, which amended the Toledo Municipal Code Chapter 187 to enact a Project Labor Agreement provision. The Ordinance requires all construction contracts, \$100,000 or greater, to negotiate and execute a Project Labor Agreement with the Northwest Ohio Building Construction Trades Council. The CTNO project will be subject to the project labor requirements of Ordinance 200-16.

Local Preference. The City recognizes the importance of insuring that local persons, entities, and businesses have a fair opportunity to meaningfully compete for and participate in City projects. Therefore, the City enacted a Local Preference provision for its formal bids and requests for proposals. The City's Local Preference provision is outlined in Toledo Municipal Code Chapter 187.34.

Minority-Owned Business Enterprise (“MBE”). The City has a goal that 15% of the project cost for construction contracts will benefit minority-owned business enterprises. The City's MBE goal will apply to the construction contracts that will be required for the infrastructure improvements related to CTNO.

Living Wage. The City's municipal code requires that firms who receive a contract from the City meet the minimum compensation levels for their employees. The City's Living Wage provision is outlined in Chapter 187.36 of the Toledo Municipal Code.

Prevailing Wage. Prevailing wage law is generally contained in Ohio Revised Code Chapter 4115. Toledo Municipal Code Chapter 187 also requires the payment of prevailing wages. Prevailing wages must be paid for any “public improvement” with total costs at or above \$10,000. Public improvement includes all buildings, roads, streets, alleys, sewers, ditches, sewage disposal plants, water works, and all other structures or works constructed by a public authority or by any person pursuant to a contract with a public authority.

State of Good Repair

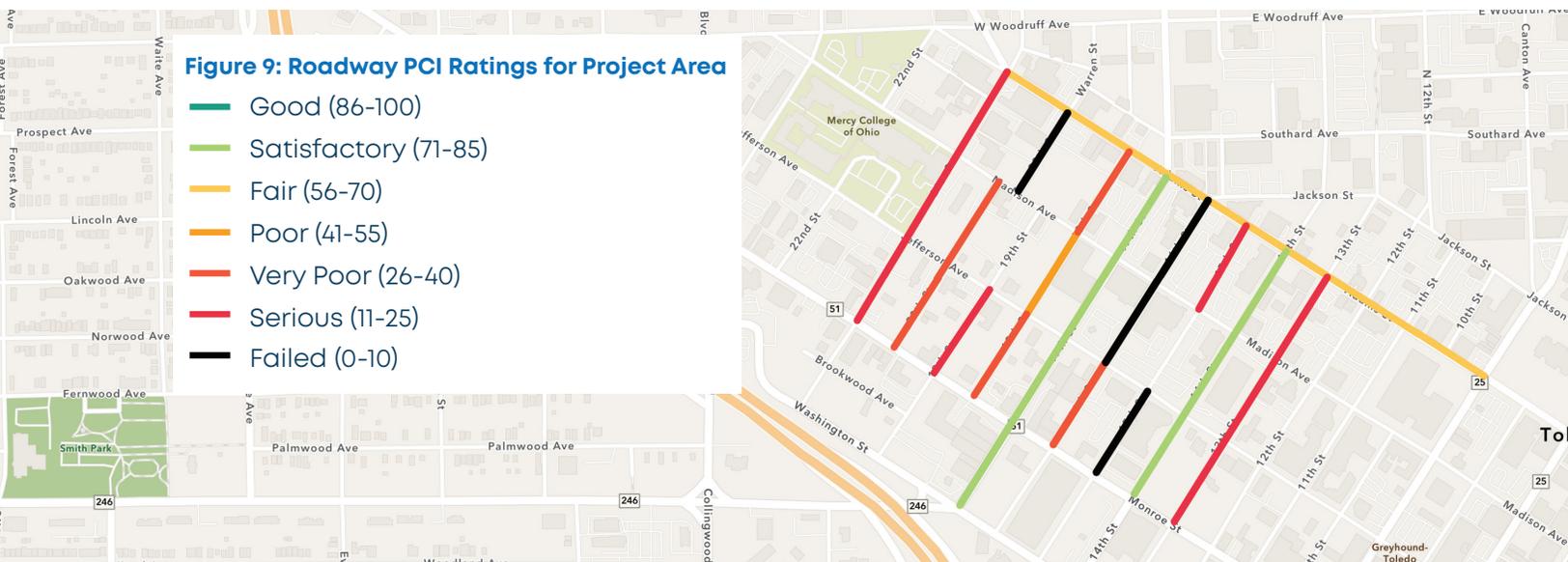
A primary goal of the CTNO project is to bring transportation infrastructure into a

state of good repair by comprehensively addressing deficiencies with utility, roadway, and streetscape assets within the existing right-of-way.

Public water and sanitary utilities in the project area are some of the oldest in the city with an average age of 146 years, far exceeding industry best practices. For example, according to the American Water Works Association, water mains installed before 1920 have a 120-year useful life. Water and sanitary utilities in the project area have experienced breaks from time to time, which has exacerbated their vulnerability and caused roadways to further deteriorate. The City plans to replace antiquated subsurface water and sanitary utilities within the project area to mitigate current system vulnerabilities and safeguard roadway and streetscape improvements. Replacement of all water and sanitary utilities in the project area will prevent future utility breaks thus reducing related roadway maintenance burdens and ensuring utility, roadway, and streetscape assets will be maintained in a state of good repair.

Figure 9: Roadway PCI Ratings for Project Area

- Good (86-100)
- Satisfactory (71-85)
- Fair (56-70)
- Poor (41-55)
- Very Poor (26-40)
- Serious (11-25)
- Failed (0-10)



Roadway infrastructure in the project area is in a severe state of disrepair. The City uses a Pavement Condition Index (“PCI”) to measure the performance of roadway infrastructure. PCI is a numerical index between 0 (failed) and 100 (good), which is divided into seven classes to indicate the general condition of a pavement section. The average PCI rating for roadways in the project area is 42, which is considered serious – one class above failed. Of the 38 city blocks in the project area, 4 have a PCI rating considered failed, 8 have a PCI rating considered serious, 5 have a PCI rating considered very poor, 1 has a PCI rating considered poor, 12 have a PCI rating of fair and 8 have a PCI rating of satisfactory (see Figure 9). 47% of the blocks in the project area are rated poor, very poor, serious, and failed. As discussed in “Safety,” the poor condition of roadway infrastructure directly contributes to safety issues in the area. The CTNO project will reconstruct or resurface all 38 blocks thus bringing them into a state of good repair and a “Good” PCI rating.

The current transportation infrastructure in the project area is inadequate for the community’s vision for multi-modal transportation. The existing facilities prioritize automobiles and lack pedestrian and bicycle accommodations. The CTNO project aims to modernize all 38 blocks to conform to the City’s Complete Streets Policy,

which accommodates all users, including pedestrians, bicyclists, public transit users, and motorists. This will involve reappropriating space in the right-of-way to install a new TARTA Mobility Hub, bicycle lanes and stations, ADA-compliant sidewalks, decorative pedestrian crosswalks and enhanced signals, improved wayfinding, and greater street amenities, including benches, lighting, and landscaping. The new infrastructure will encourage active transportation, decrease stress on roadways, and reduce overall life-cycle costs.

To maintain the integrity and reliability of the infrastructure, all roadways in the project area will be inspected every three years to identify any needed repairs and update PCI ratings. The City will perform routine maintenance, including crack sealing and resurfacing, according to ODOT's standards. This will allow for smooth drives, keep repair costs low, and prevent roadway hazards such as potholes that can damage vehicles.

The City is requesting a \$25 million RAISE Grant for the project, which aims to revitalize infrastructure and create an innovation district in the Uptown and Junction neighborhoods. If the grant is not awarded, the project will face funding challenges, and the infrastructure in the area will continue to deteriorate until other funding sources can be secured. The total cost of the project is \$52.9 million, which is considered too great for the City to address itself without external support.

Partnership and Collaboration

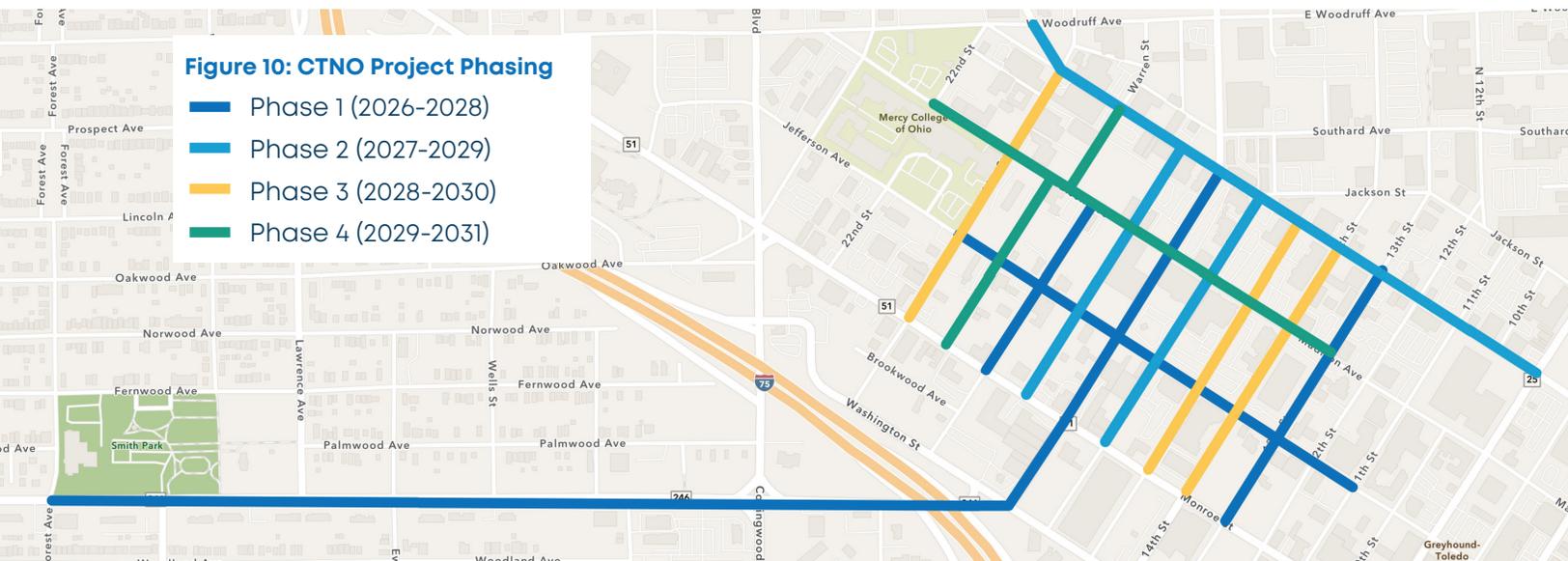
The CTNO project builds on multiple collaborative efforts to improve the Toledo region's economy and employment opportunities for all residents. The region's 2021 CEDS, developed by local leaders, calls for diversifying the region's economic base by establishing a regional innovation district to develop new technologies and catalyze high-tech job creation activities. In response to this recommendation, the City collaborated with residents and stakeholder groups to develop the Toledo Social Innovation District Framework Plan (Framework Plan). The Framework Plan outlines a strategy for establishing a regional innovation district in Uptown and sets a vision for improving connections between the Junction, Uptown, and Downtown neighborhoods to allow for equitable access to workforce development, jobs, services, and community amenities. The following organizations make up the stakeholder groups and organizations involved in the creation of the framework plan and the core planning team for the CTNO project.

The CTNO planning team engaged with over 100 stakeholders, including residents, businesses, service providers, non-profits, and government agencies, to guide the project's development and ensure equity for underserved communities is at the forefront of planning and implementation. In addition, this project directly addresses recommendations and issues identified through previous community engagement efforts in Junction, one of Toledo's most underserved communities, as previously detailed in "Quality of Life." The coalition will continue to be involved in the project's design process and help implement a communication strategy to prevent major disruptions during construction. The City's application for a \$25 million RAISE Grant to fund the CTNO project is widely supported by political, institutional, and community-based organizations, as demonstrated in the letters of support and commitment included in the application. The last meeting between the partners occurred on February 9, 2023, to discuss the City's application to the 2023 RAISE Grant

Program.

Innovation

Project Delivery. The City plans to overhaul 38 city blocks between 2026 and 2032 in a densely populated urban setting, which is a comprehensive infrastructure project involving multiple utilities and roadways. The project will be divided into four phases to allow for the optimal flow of motorized and non-motorized travelers through the area during the five-year construction period (see Figure 10). Projects have been carefully assigned to each phase to create an optimal construction setting and provide travelers with several convenient detour options to help manage congestion within the project area.



Project Communication Strategy. The City plans to implement a comprehensive communication strategy for the CTNO project that will utilize various platforms, including social media, text alerts, newsletters, and public meetings to keep the public informed about the project’s progress. Additionally, the City will create a dedicated page on its website to provide real-time updates and serve as an information hub for the project.

Funding. The City created the 2% Water and Sewer Infrastructure Development Funds in 2002 to address public utility needs associated with major housing and economic development projects. The City’s proactive creation of these funding sources is one of the primary reasons the City can comprehensively address the utility and roadway improvements associated with the CTNO project. In 2019, the City created the City Center Tax Increment Financing area to redirect increased property taxes from new private development to finance public infrastructure improvements in the TIF area. The City’s major investment in Uptown’s public infrastructure will attract new private-sector investment and development in the area. The City plans to reinvest City Center TIF revenues into preventive and ongoing maintenance associated with the CTNO project to create a sustainable long-term source of funding for infrastructure maintenance.

Project Budget

The City of Toledo requests a \$25,000,000 RAISE Discretionary Grant from the U.S. Department of Transportation to provide 47% of the funding needed to deliver the CTNO project. The total project cost is \$52,914,025. The City will provide the 53% local match contribution of \$27,914,025 (see funding commitment letter) using all non-federal funds. Therefore, the City’s RAISE grant request is well below the statutory cost-sharing/matching funds threshold of 80%.

CTNO TOTAL BUDGET

Given the comprehensive nature and scale of the proposed infrastructure improvements, the CTNO project will be completed in four phases over six years. Table 1 details the total budget by phase and infrastructure improvement for the CTNO project. The City of Toledo and its consultants prepared the Opinion of Probable Costs based on the most recent unit costs from similar City road and utility projects in 2022. The budget reflects estimated expenses plus a 10% contingency, 15% design allowance and 15% inflation factor. Project costs were estimated based on 10% design completion. Since Phase One work will not start bidding until Q3 2027, the City included an inflation factor to account for increases in material and labor costs that may arise between now and then. The budget also includes a 10% cost estimate for water taps and connections to replace and upgrade water lines. The budget does not include any previously incurred expenses.

Table 1: CTNO Total Budget by Phase and Project

	Project	Water	Sanitary	Road Reconst	Road Resurf	Streetscape	Other	Total
Phase 1 2026 - 2028	Jefferson	\$ 605,000	\$ 1,350,000					\$ 1,955,000
	Dorr Street Multi-Use Path						\$ 500,000	\$ 500,000
	Dorr Street Planters & Lighting						\$ 270,000	\$ 270,000
	13th	\$ 495,000	\$ 600,000	\$ 810,000		\$ 862,500		\$ 2,767,500
	17th	\$ 165,000	\$ 900,000		\$ 1,144,000	\$ 3,700,000		\$ 5,909,000
	19th	\$ 594,000	\$ 425,000	\$ 270,000		\$ 287,500		\$ 1,576,500
Phase 2 2027 - 2029	Adams	\$ 123,750	\$ 750,000		\$ 1,495,000	\$ 4,596,000		\$ 6,964,750
	16th	\$ 495,000	\$ 600,000	\$ 1,350,000		\$ 862,500		\$ 3,307,500
	18th	\$ 495,000	\$ 800,000	\$ 891,000		\$ 862,500		\$ 3,048,500
Phase 3 2028 - 2030	TARTA Mobility Hub						\$ 220,000	\$ 220,000
	Bike Shelters						\$ 88,000	\$ 88,000
	14th	\$ 330,000	\$ 600,000		\$ 650,000	\$ 862,500		\$ 2,442,500
	15th	\$ 495,000	\$ 600,000	\$ 648,000		\$ 575,000		\$ 2,318,000
	21st	\$ 330,000	\$ 350,000	\$ 891,000		\$ 862,500		\$ 2,433,500
Phase 4 2029 - 2031	20th	\$ 330,000	\$ 600,000	\$ 850,500		\$ 862,500		\$ 2,643,000
	Madison	\$ 638,000	\$ 350,000					\$ 988,000
	Taps / Connections (10%)	\$ 509,575						\$ 509,575
	Inflation (15%)	\$ 764,363	\$ 1,188,750	\$ 856,575	\$ 493,350	\$ 2,150,025	\$ 161,700	\$ 5,614,763
	Contingency (10%)	\$ 509,575	\$ 792,500	\$ 571,050	\$ 328,900	\$ 1,433,350	\$ 107,800	\$ 3,743,175
	Design (15%)	\$ 764,363	\$ 1,188,750	\$ 856,575	\$ 493,350	\$ 2,150,025	\$ 161,700	\$ 5,614,763
TOTAL		\$ 7,643,625	\$ 11,095,000	\$ 7,994,700	\$ 4,604,600	\$ 20,066,900	\$ 1,509,200	\$ 52,914,025

Funding Uses. Table 2 details the total uses by phase and funding source for the CTNO project.

Table 2: CTNO Total Budget by Phase & Funding Source

Stage	Project	Total Cost	FY 2023 RAISE		Local Match Total		Local Match		Water Enterprise Ft. Sanitary Enterprise		2% Water Fund		2% Sanitary Fund		Capital Improve		
			Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
Phase One (2026-2028)	Jefferson	\$ 1,955,000	\$ -	0%	\$ 1,955,000	100%	\$ -	0%	\$ -	0%	\$ 605,000	22%	\$ 1,350,000	32%	\$ -	0%	
	Dorr Street Multi-Use Path	\$ 500,000	\$ 500,000	100%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	
	Dorr Street Planters & Lighting	\$ 270,000	\$ 270,000	100%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	
	13th	\$ 2,767,500	\$ 1,672,500	60%	\$ 1,095,000	40%	\$ -	0%	\$ 495,000	18%	\$ 600,000	14%	\$ -	0%	\$ -	0%	
	17th	\$ 5,909,000	\$ 2,422,000	41%	\$ 3,487,000	59%	\$ -	0%	\$ 165,000	6%	\$ 900,000	21%	\$ 2,422,000	71%	\$ -	0%	
	19th	\$ 1,576,500	\$ 557,500	35%	\$ 1,019,000	65%	\$ -	0%	\$ 214,286	71%	\$ 594,000	21%	\$ 210,714	5%	\$ -	0%	
	Taps/Connections, Inflation, Contingency & Design	\$ 5,377,100	\$ 2,168,800		\$ 3,208,300		\$ -	0%	\$ 85,714	29%	\$ 929,500	33%	\$ 1,224,286	29%	\$ 968,800	29%	
	Total	\$ 18,355,100	\$ 7,590,800	41%	\$ 10,764,300	59%	\$ -	0%	\$ 300,000	100%	\$ 2,788,500	100%	\$ 4,285,000	100%	\$ 3,390,800	100%	
Phase Two (2027-2029)	Adams 16th	\$ 6,964,750	\$ 3,045,500	44%	\$ 3,919,250	56%	\$ -	0%	\$ 750,000	29%	\$ 123,750	9%	\$ -	0%	\$ 3,045,500	71%	
	Taps/Connections, Inflation, Contingency & Design	\$ 3,307,500	\$ 2,212,500	67%	\$ 1,095,000	33%	\$ 239,416	67%	\$ 600,000	23%	\$ 255,584	19%	\$ -	0%	\$ -	0%	
	Total	\$ 3,048,500	\$ 1,753,500	58%	\$ 1,295,000	42%	\$ -	0%	\$ 503,572	19%	\$ 495,000	38%	\$ 296,428	71%	\$ -	0%	
		Taps/Connections, Inflation, Contingency & Design	\$ 5,439,675	\$ 2,804,600		\$ 2,635,075		\$ 119,708	33%	\$ 741,429	29%	\$ 437,167	33%	\$ 118,571	29%	\$ 1,218,200	29%
	Total	\$ 18,760,425	\$ 9,816,100	52%	\$ 8,944,325	48%	\$ 359,124	100%	\$ 2,595,001	100%	\$ 1,311,501	100%	\$ 415,000	100%	\$ 4,263,700	100%	
		TARTA Mobility Hub	\$ 220,000	\$ 220,000	100%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%
Phase Three (2028-2030)	Bike Shelters	\$ 88,000	\$ 88,000	100%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	
	14th	\$ 2,442,500	\$ 1,512,500	62%	\$ 930,000	38%	\$ 330,000	19%	\$ 600,000	28%	\$ -	0%	\$ -	0%	\$ -	0%	
	15th	\$ 2,318,000	\$ 1,223,000	53%	\$ 1,095,000	47%	\$ 495,000	29%	\$ 600,000	28%	\$ -	0%	\$ -	0%	\$ -	0%	
	21st	\$ 2,433,500	\$ 667,143	27%	\$ 1,766,357	73%	\$ 330,000	19%	\$ 350,000	16%	\$ -	0%	\$ -	0%	\$ 1,086,357	71%	
	Taps/Connections, Inflation, Contingency & Design	\$ 3,116,300	\$ 1,484,257		\$ 1,632,043		\$ 577,500	33%	\$ 620,000	29%	\$ -	0%	\$ -	0%	\$ 434,543	29%	
	Total	\$ 10,618,300	\$ 5,194,900	49%	\$ 5,423,400	51%	\$ 1,732,500	100%	\$ 2,170,000	100%	\$ -	0%	\$ -	0%	\$ 1,520,900	100%	
Phase Four (2029-2031)	20th	\$ 2,643,000	\$ 1,713,000	65%	\$ 930,000	35%	\$ 330,000	23%	\$ 600,000	45%	\$ -	0%	\$ -	0%	\$ -	0%	
	Madison	\$ 988,000	\$ -	0%	\$ 988,000	100%	\$ 638,000	44%	\$ 350,000	26%	\$ -	0%	\$ -	0%	\$ -	0%	
	Taps/Connections, Inflation, Contingency & Design	\$ 1,549,200	\$ 685,200		\$ 864,000		\$ 484,000	33%	\$ 380,000	29%	\$ -	0%	\$ -	0%	\$ -	0%	
	Total	\$ 5,180,200	\$ 2,398,200	46%	\$ 2,782,000	54%	\$ 1,452,000	100%	\$ 1,330,000	100%	\$ -	0%	\$ -	0%	\$ -	0%	
	TOTAL	\$ 52,914,025	\$ 25,000,000	47%	\$ 27,914,025	53%	\$ 3,543,624	100%	\$ 6,395,002	100%	\$ 4,100,001	100%	\$ 4,700,000	100%	\$ 9,175,400	100%	

CTNO FUNDING SOURCES

The CTNO project will be funded from 6 sources.

1. The **Water Enterprise Fund** is a non-federal source of funding that generates revenue from water fees paid by users. The Water Enterprise Fund will be used to modernize water lines on all 9 numbered streets, plus Jefferson, Adams, and Madison. This funding source represents 7% of the total project cost.
2. The **Sewer Enterprise Fund** is a non-federal source of funding that generates revenue from sewer fees paid by users. The Sewer Enterprise Fund will be used to modernize sanitary sewer lines on all 9 numbered streets, plus Jefferson, Adams and Madison. This funding source represents 12% of the total project cost.
3. The **2% Water Infrastructure Development Fund** is a non-federal source of funding that was established by the City of Toledo to fund water infrastructure improvements that are necessary to support economic development projects within the City. The 2% Water Fund will be used to modernize water lines on all 9 numbered streets, Jefferson, Adams, and Madison. This funding source represents 8% of the total project cost.
4. The **2% Sewer Infrastructure Development Fund** is a non-federal source of funding that was established by the City of Toledo to fund sewer infrastructure improvements that support economic development projects within the City. The 2% Sewer Fund will be used to modernize sanitary sewers on all 9 numbered streets, plus Jefferson, Adams and Madison. This funding source represents 9% of the total project cost.
5. The City's **Capital Improvement Plan Fund** is a non-federal source of funding that is used by the City to fund public infrastructure improvements. The Capital Improvement Plan Fund will be used to fund 17% of the total project cost. Specifically, this funding source will fund the reconstruction of 17th, 21st and Adams Streets.
6. The **FY 2023 RAISE Grant** will provide 47% (\$25,000,000) of the total project costs. The \$25,000,000 RAISE grant will be used for planning, design, and reconstruction or resurfacing of 10 public roads that will receive major streetscape enhancements and safety upgrades, a 0.75-mile 10-foot wide multi-purpose trail that provides a primary multi-modal connection between Junction and the TSID, an enhanced Dorr Street I-75 Overpass with pedestrian-scale amenities that provide for safer travel, a TARTA Mobility, two additional bike shelters, 12 planters, 1,068 trees, and 140 additional pedestrian-scale, energy efficient, LED streetlights.

Table 3: CTNO Funding Sources

#	Source	Source of Funds	Source Type	Funding Type	Status	Amount	%
1	City of Toledo	Water Enterprise Fund	Non-Federal	Cash	Identified	\$3,543,625	7%
2	City of Toledo	Sewer Enterprise Fund	Non-Federal	Cash	Identified	\$6,395,000	12%
3	City of Toledo	2% Water Infrastructure Development Fund	Non-Federal	Cash	Identified	\$4,100,000	8%
4	City of Toledo	2% Sewer Infrastructure Development Fund	Non-Federal	Cash	Identified	\$4,700,000	9%
5	City of Toledo	Capital Improvement Fund	Non-Federal	Cash	Identified	\$9,175,400	17%
6	U.S. Department of Transportation	FY 2023 RAISE Grant	RAISE	Grant	Requested	\$25,000,000	47%
Total Sources						\$52,914,025	100%
Total Uses						\$52,914,025	100%

CTNO FUNDING BY CENSUS TRACT

Table 4 details CTNO’s investment by census tract. 99% of the project’s investment will be in census tracts that are designated as a historically disadvantaged community.

Table 4: CTNO Funding by Census Tract

#	Neighborhood	Census Tract	Project Investment per Census Tract	%	Area of Persistent Poverty	Historically Disadvantaged Community
1	Junction	002600	\$700,000	1%	No	No
2	Uptown	002700	\$42,270,020	80%	Yes	No
3	Uptown	002800	\$8,170,905	15%	Yes	No
4	Junction	003400	\$1,773,100	3%	Yes	No
Total Project Cost:				\$52,914,025	100%	

Project Readiness

If the CTNO project is awarded a RAISE Grant for \$25 million by the end of Q2 2023, construction is expected to be complete by Q1 2032.

Environmental Risk. The City has an aggressive pre-grant agreement timeline to ensure the Project begins construction in a timely manner consistent with all applicable local, State and Federal requirements. Table 1 identifies major milestones to comply with the requirements that are necessary to enter into a grant agreement with the U.S. Department of Transportation (USDOT). The City will take the necessary steps to obligate funding prior to the June 30, 2027 deadline, as outlined below.

Table 1: Pre-Grant Agreement Timeline

		2023				2024				2025				2026				2027			
		Q1	Q2	Q3	Q4																
Coordination and Engagement	Stakeholder Engagement																				
	Public Engagement																				
	Private Utility Coordination																				
Federal Environmental Reviews and Compliance	National Environmental Protection Act Compliance																				
	Right-of-Way Certification																				
State and Local Approvals	TMACOG Adds Project to STIP																				
	ODOT Right-of-Way Permit for Overpass																				
	Ordinance Authorizing Funding Project																				
Funding Obligation	Ordinance Authorizing City to enter into DOT Grant Agreement																				
	City and DOT Enter into Grant Agreement and Funds are Obligated																				

Coordination and Engagement. As further outlined in the Partnership and Collaboration section of this grant application, the project was conceived from meaningful regional and local involvement that has continued to occur up until the submission of this application. The City proposes to continue to have meaningful public engagement throughout the implementation process to ensure stakeholders, citizens and private utility companies are involved in the design and aware of the construction schedule. Additionally, the City will have several public meetings to discuss the project as it relates to the ordinances necessary to appropriate the matching funding and authorize the City to enter into the grant agreement.

Federal Environmental Reviews and Compliance. Based on discussions with the Ohio Department of Transportation (ODOT), the City will begin the C2 level National Environmental Policy Act review process shortly after being awarded the RAISE Grant in Q4 of 2023. ODOT estimates the NEPA process will take approximately six months, however the City has conservatively estimated nine months in its planning (see Table 1). The CTNO project will occur entirely within the existing right-of-way. Since the project will take place entirely within the existing right-of-way, the City does not anticipate challenges with obtaining the necessary environmental permits from regulatory agencies. The City will provide the necessary documentation to certify the right-of-way as required by the federal agency and has budgeted \$250,000 in its general fund as a placeholder for RMR Screening and Investigations.

State and Local Approvals. The City will work with the Toledo Metropolitan Area Council of Governments (TMACOG) to have the project added to the State Transpor-

tation Improvement Program (see TMACOG letter of support). If the City is awarded a RAISE Grant by June 2023, then TMACOG reasonably expects the project to be added to the STIP by October 2, 2023. Additionally, the City has been in communication with ODOT regarding the proposed improvements to the Dorr Street I-75 Overpass. The City will apply for an ODOT right-of-way permit for the proposed work, which is expected to be reviewed within four weeks from submission. Lastly, Toledo City Council will pass ordinances authorizing the City to enter into a grant agreement with USDOT and obligating the local match for the project. These authorizations will occur well in advance of the June 30, 2027 requirement. Given the amount of public participation and great deal of support for this project, the City does not anticipate challenges with obtaining the necessary approvals from Toledo City Council (see Toledo City Council President’s letter of support).

Funding Obligation. Upon passage of authorizing legislation by Toledo City Council in Q3 of 2024, the City will enter into a grant agreement with USDOT and officially obligate the funding for the project.

ASSESSMENT OF PROJECT RISKS AND MITIGATION STRATEGIES

The City departments of transportation and public utilities are responsible for maintaining utility and roadwork infrastructure. These departments regularly obtain federal and state funding to implement and manage complex public infrastructure projects. Table 2 provides an assessment of the potential risks and mitigations strategies for the CTNO project.

Table 2: Project Risks and Mitigations

Risk	Impact	Likelihood	Mitigation Strategy
Legislative Approval of Match Funding	High	Low	If awarded, the City will conduct public meetings to continue to receive input on the CTNO project and demonstrate the need for funding. 17% of the City’s sources of funding is from two sources of funding that were established to proactively improve water and sewer infrastructure for economic development projects. These funding sources were identified for this project to avoid impacts to planned water and sewer utility projects. Lastly, the City structured its Capital Improvement Funding across 2026-2032 to avoid a large upfront expense to the CIP budget in any given year and allow the City to plan for this future expense.
Obtaining Required Environmental Permits	Moderate	Low	The entire CTNO project will occur within the existing right-of-way. The City does not anticipate any challenges with obtaining necessary environmental permits and will begin the NEPA process quickly upon being awarded.
Delays in Construction	Low	Low	Potential construction delays have been taken into account in the City’s conservative project schedule.
Staffing to Complete the Project	Low	Low	The City intends to bid out the design work for the entire CTNO project. The City also intends to add positions over the next few years that will improve its ability to bid, award and inspect utility and roadwork projects.

Rising Cost of Construction

Moderate

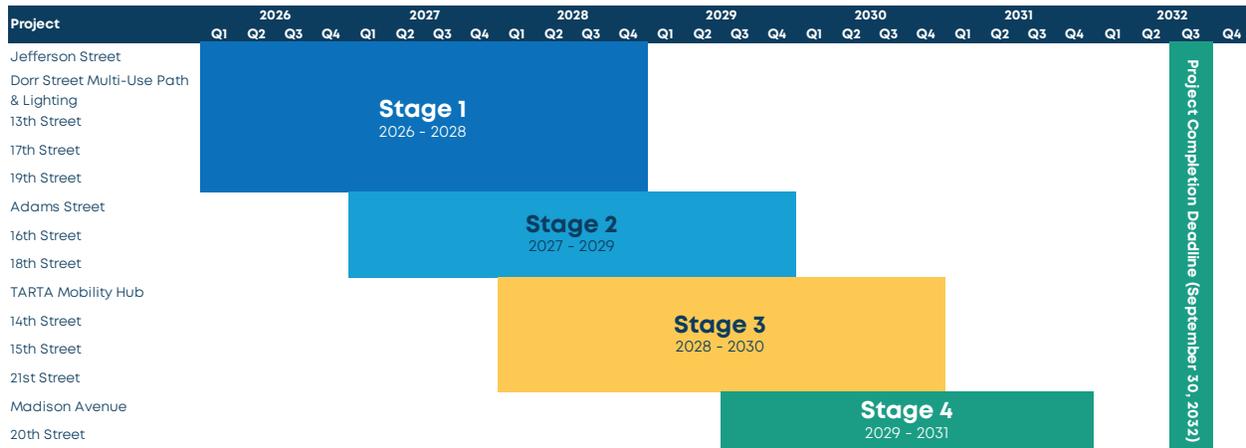
Low

The City included a 15% inflation factor and 10% contingency into the project budget. Additionally, the City has committed to funding any expenses that are more than the proposed budget.

DETAILED PROJECT SCHEDULE

Once the grant agreement has been executed and funding has been obligated, the City will be well positioned to start the project and maintain its aggressive timeline. Construction on the entire project will be complete by Q1 2032. Table 3 details the overall timeline by phase for the CTNO project.

Table 3: Overview Timeline by Construction Phase

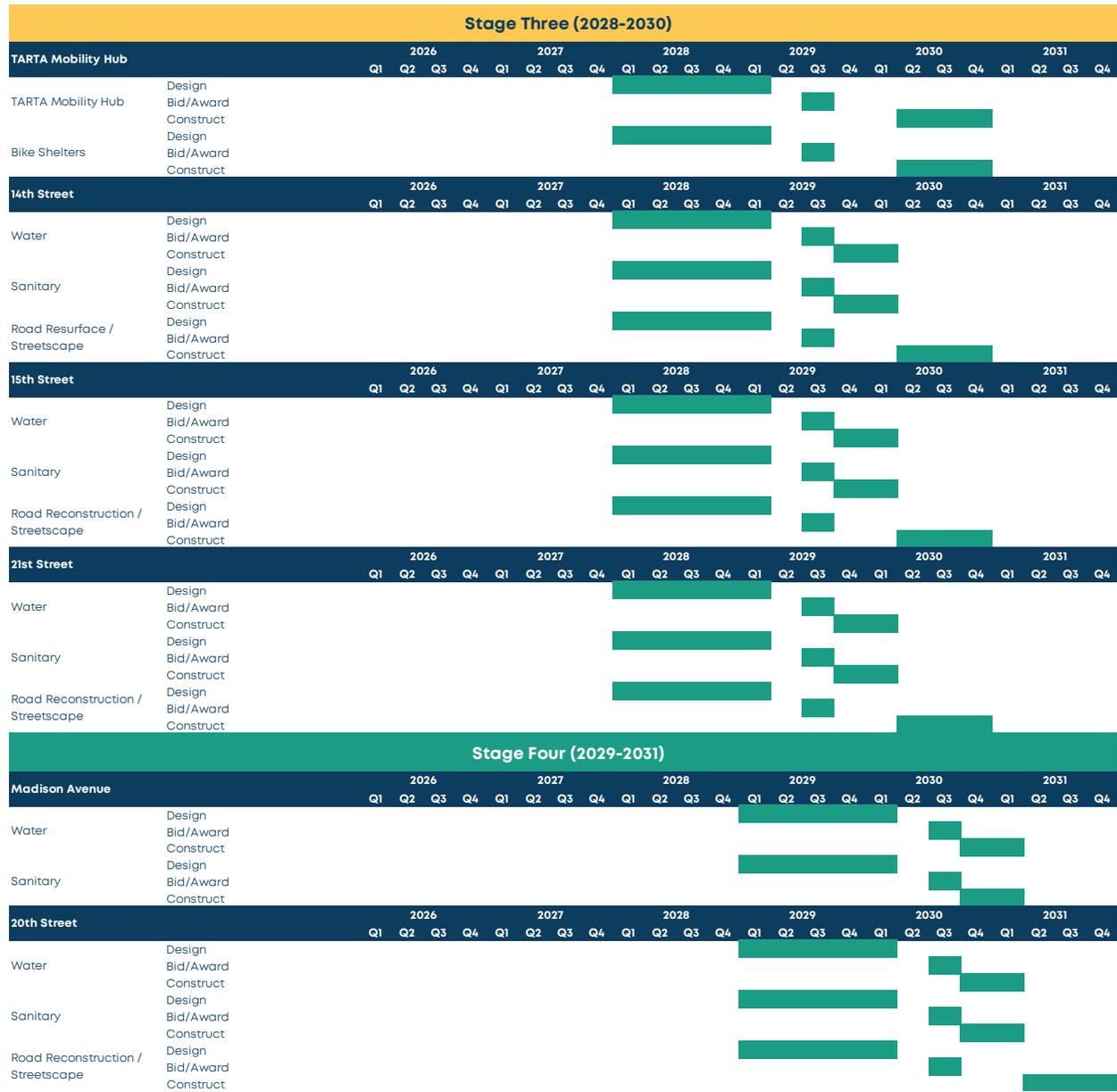


Given the comprehensive nature and scale of the proposed infrastructure improvements, the CTNO project will be completed in four phases over six years. A key consideration for assigning projects to phases is how the City will maintain traffic flow through the area and have the least disruption to the public over the course of the entire project. Table 3 depicts the projects by the year in which they will be under design and construction to show how access will be maintained through the area for the entire CTNO project (see the Innovation section for more information on phasing).

Table 4 provides detailed timelines for phases one through four. As shown, each phase will include several projects that involve some combination of water, sanitary, roadwork and/or other infrastructure improvements. The City intends to bid all elements (i.e. water, sanitary, and roadwork) of the project together to ensure competitive pricing and timeline for construction contracts. The City conservatively estimates that each phase will span three years beginning with 15 months of design, 3 months to bid and award a contract and 9 months for construction completion. The detailed timelines were created to allow maximum flexibility for design, bid/award and construction completion and include approximately 9 months of contingency time built into the schedule.

Table 4: Detailed Timeline

		Stage One (2026-2028)																							
		2026				2027				2028				2029				2030				2031			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Jefferson Street	Water	Design				Bid/Award				Construct															
	Sanitary	Design				Bid/Award				Construct															
		Design				Bid/Award				Construct															
Dorr Street Multi-Use Path	Multi-Use Path	Design				Bid/Award				Construct															
	Planters	Design				Bid/Award				Construct															
		Design				Bid/Award				Construct															
13th Street	Water	Design				Bid/Award				Construct															
	Sanitary	Design				Bid/Award				Construct															
	Road Reconstruction / Streetscape	Design				Bid/Award				Construct															
17th Street	Water	Design				Bid/Award				Construct															
	Sanitary	Design				Bid/Award				Construct															
	Road Resurface / Streetscape	Design				Bid/Award				Construct															
19th Street	Water	Design				Bid/Award				Construct															
	Sanitary	Design				Bid/Award				Construct															
	Road Reconstruction / Streetscape	Design				Bid/Award				Construct															
		Stage Two (2027-2029)																							
		2026				2027				2028				2029				2030				2031			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Adams Street	Water					Design				Bid/Award				Construct											
	Sanitary					Design				Bid/Award				Construct											
	Road Resurface / Streetscape					Design				Bid/Award				Construct											
16th Street	Water					Design				Bid/Award				Construct											
	Sanitary					Design				Bid/Award				Construct											
	Road Reconstruction / Streetscape					Design				Bid/Award				Construct											
18th Street	Water					Design				Bid/Award				Construct											
	Sanitary					Design				Bid/Award				Construct											
	Road Reconstruction / Streetscape					Design				Bid/Award				Construct											





Appendix

Additional Materials

2017-2021 Crash Data, RAISE Project Area and City of Toledo

All crashes by severity, 2017-2021

	Toledo	Project Area
Killed	132	1
Serious Injury	792	11
Non-incapacitating	4,704	52
Possible Injury	6,606	71
Property damage only (PDO)	32,940	280
Total	45,174	415

Non-PDO crashes by mode, 2017-2021

	Toledo	Project Area
Pedestrian	589	12
Bicycle	327	3
Other	11,318	120
Total non-PDO	12,234	135

Project Area crashes per year by severity, 2017-2021

	2017	2018	2019	2020	2021	Total
Killed	0	0	0	0	1*	0
Serious Injury	4	2	1	3	1	11
Non-incapacitating	11	12	3	16	10	52
Possible Injury	19	19	12	4	16	70
Property damage only	67	53	59	49	53	281
Total	101	86	75	72	81	414

*pedestrian fatality

5-yr. average crashes per 100,000 residents, 2017-21

	Toledo	Project Area
All non-PDO	901	4500
Bike and pedestrian	67.5	500
Fatality	9.7	33
Toledo population:	271,454	
Project Area population:	600	

Data source: Ohio Department of Transportation GIS Crash Analysis Tool (GCAT)
 Project Area population estimated using census block-level population data

Planning Documents

2011 Toledo Downtown Plan

2014 Toledo Lucas County Sustainability Plan

2015 MetroParks Vision Plan

2015 Toledo Bike Plan

2016-2020 Toledo Lucas County Public Library Strategic Plan

2017 Downtown Toledo Master Plan

2018 Junction Master Plan

2018-2021 Lucas County Community Health Improvement Plan

2019 UpTown Master Plan

2020 Downtown Toledo Transportation Study

2021 Toledo Museum of Art Strategic Plan

2021 Toledo Region CEDS Report

2021 Transforming TARTA Strategic Plan

2022 Active Transportation Plan DRAFT

2022 Toledo Social Innovation District Framework Plan