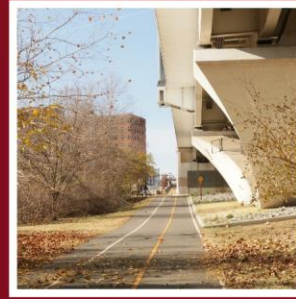


MD 210 Bicycle and Pedestrian Connectivity Project: Phase I Improvements



2024 RAISE Grant Application: Merit Criteria



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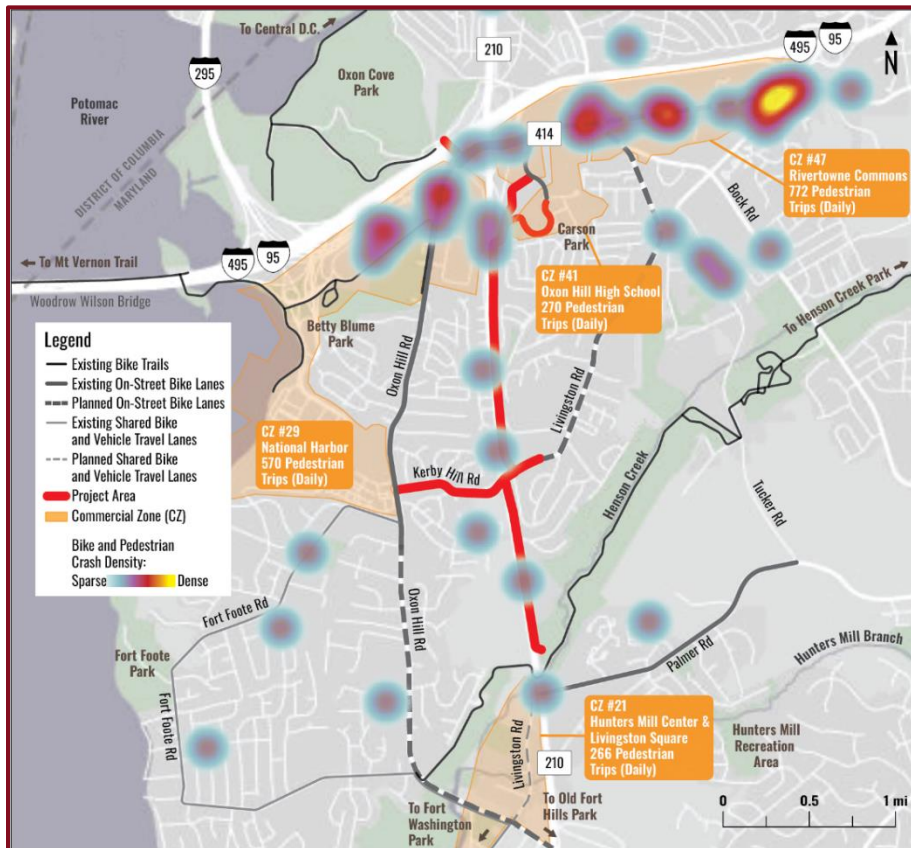
1. Safety

Protects Nonmotorized Travelers from Safety Risks

Bicyclists and pedestrians from underserved communities surrounding the Maryland Route 210 (MD 210) corridor currently face challenging conditions that limit or prohibit access to key destinations, as shown on Figure 1. **Safety is a primary project purpose of the MD 210 Bicycle and Pedestrian Connectivity Project (project).** The project includes construction of 2.2 miles of shared-use paths and 1.8 miles of on-road bicycle facilities to protect nonmotorized travelers, including those living in disadvantaged communities, from safety risks.

The MD 210 corridor is a non-interstate arterial roadway located in the southwestern corner of Prince George’s County with an average annual daily traffic (AADT) of 79,532 in 2022 within the project area ([MDOT AADT](#)) and a posted speed limit of 55 miles per hour. From the intersection with Livingston Road, extending toward the Capital Beltway interchange, MD 210 operates functionally as an expressway, with access to intersecting streets limited by the existing noise barrier. The future vision for the MD 210 corridor is an access-controlled roadway, with the remaining signalized intersections being upgraded to grade-separated interchanges. The high traffic volumes and speeds make shoulder usage by bicyclists and pedestrians challenging. This project ensures that bicyclists and pedestrians are accommodated before the -access controlled roadway comes to fruition and worsens these issues. The current conditions on the corridor, including crash density, pedestrian trips, existing infrastructure, and the proposed project, are shown on Figure 1.

Figure 1. Crash Density and Multimodal Usage surrounding the Project Area (2019-2022)



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The MD 210 Pedestrian/Bicycle Study prepared by the State Highway Administration (SHA) studied routes where bicyclists may already be traveling. The study could not establish typical existing travel patterns due to few bicyclist trips. Despite the small number of bicyclists, the study still captured 9 pedestrian crashes and two bicycle crashes, which resulted in 3 fatalities and 2 injuries, along MD 210 within the project area during the 7-year period between 2016 and 2022. In addition, three pedestrian crashes and one bicycle crash were reported along a segment of Oxon Hill Road within the project area.

To address this concerning history, the project will substantially reduce crashes that lead to injuries and fatalities. Improvements that are generally consistent across all sections of the proposed route are a shared-use path and dedicated cycling facilities. **Adding the shared-use path has the potential to reduce all pedestrian collision types by a crash modification factor of 59.8 percent, while the installation of a cycling lane could reduce cycling collision types by a crash modification factor of 75 percent** (please refer to the Benefit-Cost Analysis Technical Memorandum, attached, for additional detail). The analysis acknowledges that certain improvements will deliver a sharrow too, however, reviewing crash data shows no occurrence of crashes at that location currently. As such the CMF selected is reflective of the crash data shows incidents of crashes along the route currently, where a dedicated cycling lane is now being proposed. The analysis only considered crash data that is along the project improvements that are being proposed. A conservative approach has been undertaken in that the team only considered that 30 percent of the accidents could be avoided due to the project (pedestrian and cyclists). The projected benefits of these safety improvements are anticipated to make active transportation choices more feasible for the traveling public.

Given the focus on the most vulnerable roadway users and significant impact on crashes, the project aligns with Prince George’s County’s Vision Zero pledge to eliminate traffic deaths within the county. Currently, within Prince George’s County, four bicyclists are involved in a crash every 2.5 weeks and one bicyclist is involved in a crash that is fatal or severely disabling each year (Prince George’s County [Vision Zero](#)). The State of Maryland has also proactively addressed safety for the most vulnerable roadway users: The state adopted its own [Vision Zero](#) plan in 2019, setting the goal of eliminating all traffic-related fatalities and serious injuries statewide by 2030. The Maryland Department of Transportation (MDOT) [Pedestrian Safety Action Plan](#) lays out a path to achieve this vision through working with communities to identify challenges, set goals, and take action to improve roadway safety. MD 210 has a particularly bad reputation for traffic deaths, [due to speeding](#) as well as other factors, even as enforcement has increased.

In addition to safety improvements for surrounding communities, the project will also address regional safety issues that are present throughout the Prince George’s County trail network: The project closes a critical gap within the existing trail network while adding safer alternatives to traveling along MD 210, close to high-speed vehicular traffic. The project connects and leverages existing trail systems in Maryland and Virginia, including the Henson Creek Trail, the Oxon Run Trail, the Woodrow Wilson Bridge Trail, the Potomac Heritage Trail, and the Mount Vernon Trail, to improve safety for nonmotorized travelers and communities. Planned -shared use trails identified in the countywide bike plan will connect to the Anacostia River Trail and will further enable safe bicycle and pedestrian access to more daily destinations and recreational opportunities once completed. These improvements are consistent with the recently completed Maryland statewide long-range transportation plan, or [the Playbook](#), and the statewide [Bicycle and Pedestrian Master Plan](#).

Reduces Fatalities and/or Serious Injuries in Underserved Communities

This project works to combat pedestrian and bicycle infrastructure inequity by promoting safe and accessible active transit options for historically disadvantaged communities located within and near the project area. Two census tracts adjacent to the project are classified as disadvantaged under the Climate and Economic Justice Screening Tool (CEJST) criteria: tracts 8014.05 and 8015. In addition, census tract 8016 is just outside of the project area and is an Area of Persistent Poverty as well as an Opportunity Zone. Although they do not live directly inside the project area, residents of these communities are also expected to benefit from the project’s safety improvements and nonmotorized access improvements to local essential destinations.

Figure 2. Clipper Way Bike Lane



The project creates a safer travel environment for households requiring or preferring active transportation facilities to attain mobility (Figure 2). Currently, three census tracts within the project area have higher-than-average percentages of households without a vehicle. In the census tract nearest to Oxon Hill Road to the east of MD 210, 13.2 percent of households do not have a vehicle ([Prince George’s County Health Department](#)).

Specific Actions and Activities Identified in the National Roadway Safety Strategy

As a National Roadway Safety Strategy (NRSS) [Ally in Action](#), SHA is deeply committed to U.S. Department of Transportation (USDOT) NRSS goals and has expertise in implementing the improvements identified in the NRSS. This project creates safer roads for all users by adding protections for nonmotorized travelers through enhancement of on-road facilities and expansion of shared-use path facilities, improvements aligned with the USDOT NRSS. The [2022 USDOT NRSS](#) indicates that fatalities among pedestrians and bicyclists have been increasing faster than roadway fatalities overall in the past decade, and non-interstate arterials and roadways of three or more lanes make up 90 percent of the top pedestrian fatality hot spots nationwide. The MD 210 corridor is an example of one of these road types.

In response to this national crisis in roadway safety, particularly for bicyclists and pedestrians, the project aligns with NRSS objectives of [safer roads](#) by implementing proven safety countermeasures including separated bicycle lanes, which can reduce crashes by up to 49 percent. The project also includes a [high -visibility crosswalk](#) to improve pedestrian safety at Kerby Hill Road. High-visibility crosswalks are an additional proven safety countermeasure included in the NRSS and have been found to reduce pedestrian injury crashes by as much as 40 percent. Under a separate effort, the State of Maryland is also addressing the NRSS objective of [safer speeds](#) in the project area by installing a speed camera along the roadway. The speed camera aligns with the NRSS action of promoting the equitable application of enforcement strategies, including automated enforcement and its derived revenue will be a matching funding source for this application to promote safer streets and roads.

Figure 33. Existing Bicycle Lane on MD 210 intersecting the Service Road with Evidence of a Recent Collision



Implementing proven safety countermeasures in the project area will be critical to ensuring the safety of bicyclists and pedestrians along the corridor. The current configuration along the MD 210 roadway north of Kerby Hill Road is a painted bicycle lane on the shoulder. The safety risk of a crash is doubled when sharing the road with vehicle traffic and 3.6 times greater when the bicyclist is riding against the flow of traffic ([Shared Use Paths, MDOT](#)). The segment of MD 210 south of Kerby Hill Road has only shoulders, which are not striped or painted for bicycles. The project improves the safety of pedestrians and bicyclists in the project area significantly through widening the sidewalk by 5 feet on Oxon Hill Road and creating a separated shared-use path along

MD 210, eliminating conflicts with vehicular traffic traveling at high speeds. Creating a separated path in line with NRSS objectives would reduce fatalities by physically separating vulnerable road users from vehicular traffic, further reducing conflict points, such as the entrance to the MD 210 service road (Figure 2), where bicyclists must complete an unmarked cross to continue north in the existing bicycle lane.

2. Environmental Sustainability

Reduces Transportation-related Air Pollution and Greenhouse Gas Emissions in Disadvantaged Communities and Reduces VMT through Modal Shift

A primary benefit of this project will be reducing greenhouse gas (GHG) and air pollution emissions in neighboring disadvantaged communities through a modal shift from carbon-intensive single-occupancy vehicle trips to zero-carbon bicycling and walking trips. The project incentivizes first- and last-mile active transportation choices by constructing a safe and comfortable environment for bicyclists and pedestrians. Survey research suggests that, in some cases, providing protected bicycle and pedestrian infrastructure will increase ridership ([Lessons from the Green Lanes](#)). Furthermore, this project will enable direct active transportation connections to Washington Metropolitan Area Transit Authority (WMATA) and TheBus bus stops in the National Harbor area, Oxon Hill, and intersecting residential streets, which promotes low-carbon transportation options. Metrobus stations located at the National Harbor are part of the Metrobus Priority Corridor Network servicing the Washington, D.C. region ([METRO](#)).

The MDOT MD 210 Pedestrian/Bicycle Study identified seven main commercial zones that attract the most pedestrian trips. These zones consist of shopping centers, retail malls, and tourism destinations such as National Harbor. Most non-internal trips originated within directly adjacent zones and reduced significantly farther away. The project extends existing infrastructure and promotes additional bicyclist and pedestrian trips from more distant zones.

Research indicates that most bicyclist and pedestrian trips range from 1 to 3 miles, whereas short automobile trips compose the majority of trips within the range ([CC Mitigation Active Travel](#)). Short automobile trips within this range are especially harmful to the environment and contribute significantly more air pollution than longer trips. Most of the carbon and hydrocarbon emissions in the atmosphere are from the extra emissions from a “cold start.” A cold start typically occurs when a driver starts a car in cold weather and when the duration between trips is longer than 2 hours ([Cold](#)

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[Start](#)). This project will reduce short automobile trips, replacing them with active pedestrian or bicycle trips and promoting a reduction in emission-heavy cold starts.

The new multimodal option that will become available through the project is estimated to reduce personal vehicle miles traveled by 8,189 miles annually, based on an assumed 1.2 percent growth in cycling demand. This will also reduce usage of the corridor by 3,441 car trips annually. Based on U.S. Environmental Protection Agency (EPA) averages, the project will result in a reduction of over 3.3 metric tons of transportation-related GHG emissions annually.

Addresses the Disproportionately Negative Environmental Impacts of Transportation on Local Communities

The active transportation project serves several historically and transportation disadvantaged community census tracts including tracts in Fort Washington and Oxon Hill. Initiatives such as this project to address climate change and GHG emissions are especially important for this community due to flooding risks anticipated to be exacerbated by climate change. Additionally, according to EPA data, several census tracts within the project area are within the 80th percentile nationwide in traffic proximity. Traffic proximity measures counts of vehicles per day divided by distance. Reducing the number of shorter automobile trips of 1 to 3 miles will have a dramatic impact, potentially reducing traffic proximity measures and therefore the harmful effects of traffic proximity on the Oxon Hill and Fort Washington communities. Replacing these short automobile trips can also greatly improve air quality within the project area. Air quality indicators within the project area currently show above-average ozone levels (70th to 80th percentile) and diesel particulate matter (80th percentile) ([EJSCREEN](#)). However, traffic proximity's negative effects extend beyond air pollution: living near high levels of traffic can lead to negative mental and physical health effects of noise pollution as well, which can contribute to stroke risk as well as anxiety according to EPA.

Aligns with Local GHG Reduction Plans and the U.S. National Blueprint for Transportation Decarbonization

The Metropolitan Washington Council of Governments serving the greater Washington region, including the project area, published its 2030 Climate and Energy Action Plan in 2020. Outlined in this plan is a goal to reduce GHG emissions 50 percent by 2030 from a 2005 baseline as well as mitigation actions that contribute to this goal. The MD 210 project is aligned with this plan, implementing two of the plan's priority collaborative mitigation actions: (1) Invest in Infrastructure that Increases Transit, Carpooling, and Non-Motorized Travel and (2) Enhance Options for Commuters.

At the state level, MDOT's most recent carbon reduction plan, the 2023 Climate Pollution Reduction Plan, outlines committed strategies and policies to support the statewide goal of reducing GHG emissions by 60 percent by 2031 from a 2006 baseline. The current project supports the bicycle and pedestrian strategies outlined in this MDOT plan.

At the national level, the United States departments of Energy, Transportation, and Housing and Urban Development and EPA jointly released in 2023 a framework of strategies and actions to remove all emissions from the transportation sector by 2050 in their U.S. National Blueprint for Transportation Decarbonization. The proposed project aligns with multiple research and investment strategies outlined in the blueprint, including the following:

- Support land-use, street design, and development policies that make walking, biking, and rolling easier, safer, and more convenient
- Improve reliability, frequency, accessibility, and affordability and expand service for rail and public transportation, and invest in active transportation infrastructure to provide options to safely use more energy-efficient forms of transportation

- Fully leverage the potential for efficient travel modes like rail, transit, shared multimodal mobility, and maximize vehicle efficiency

Incorporates Energy-efficient Investments

The project enhances access for zero-emission micro-mobility options including Capital Bikeshare, electric bikes, and electric scooters, creating an active connection with bike share stations in National Harbor and Oxon Hill. These bike share locations are heavily used, specifically the National Harbor station, which recorded nearly 40,000 rides in 2022 ([Capital Bikeshare](#)). These bikes have a pedal assist electric motor, enabling longer travel distances. In addition, the bike share stations can charge electric bikes and thereby facilitate longer trips of electrified micro-mobility transit. Protected shared-use paths offer the safest environment for micro-mobility users by reducing conflicts with vehicles as much as possible. These trips are especially effective in reducing VMT and GHG from transportation. Constructing first- and last-mile infrastructure can greatly encourage low-carbon transportation modes including Capital Bikeshare to activity centers such as the National Harbor and Oxon Hill. This strategic infrastructure will encourage both commuter trips and non-commuter trips to these premier regional destinations.

The project also closely aligns with Maryland Senate Bill 528, the [Climate Solutions Now Act of 2022](#), which requires the state to reduce statewide GHG emissions by 60 percent from 2006 levels by 2031. The proposed multimodal improvements along the MD 210 corridor align with the legislation's definition of climate mitigation projects by improving access to clean, reliable transportation, through the expansion of bicycle facilities and pedestrian walkways. These are also consistent with the MDOT [Commuter Choice Maryland Program](#), which promotes transportation demand management strategies to reduce driving alone.

3. Quality of Life

Increases Affordable Transportation Choices

The project aims to reduce automobile dependency for residents of surrounding communities by creating direct and convenient active transportation connections to key activity hubs, dramatically improving their access to affordable transportation. The MD 210 corridor, in its current form, is not conducive to multimodal use, with high vehicular traffic speeds and a lack of dedicated infrastructure for nonmotorized travel methods (such as sidewalks or bike lanes) through the majority of the area. People walking or bicycling currently avoid the roadway entirely, traversing the corridor via circuitous routes composed of lower-traffic-volume residential streets. This situation limits mobility and access to daily destinations for residents.

Figure 4. Bicycle Lane and Bus Stop on Oxon Hill Road



Communities surrounding and near the project area, with an average household income less than half of the statewide average, currently face steep barriers to commuting and traveling throughout the MD 210 corridor and even crossing it, which requires a personal vehicle for trips of only a couple of miles. The planned alignment for the project intersects or borders three census tracts designated as disadvantaged communities: census tracts 8014.05 and 8015 are disadvantaged communities that intersect with the project area, while tract 8017.07, also designated as disadvantaged in the CEJST, is located just outside the project area to the north. Enhancing multimodal connections to essential services, employment opportunities, and recreation hubs previously restricted to car users has the power to greatly improve quality of life within these communities.

The project will serve to counteract the car-centric transportation planning of the past by providing a direct link among residential, commercial, and recreational destinations for people walking and bicycling. The results of a recent study undertaken by SHA clearly demonstrate the need for multimodal connections along MD 210 to destinations such as the National Harbor district, Oxon Hill Park, and Oxon Hill High School. In the study of the residential and commercial areas along MD 210, MDOT analyzed over 268,000 pedestrian trips between 2019 and 2020 and found that 93 percent originated and ended within the same defined zone (the study area was divided into 50 zones, dependent upon land use and activity). MDOT also analyzed bicycle trips across the same time period, finding that 64 percent of daily trips originated and ended within the same zone. In other words, the study could not find clear origin and destination pairs within the study area despite heavy pedestrian and bicyclist traffic. The lack of origin and destination pairs throughout the corridor demonstrates that although bicyclists and pedestrians have a desire to use more active forms of transportation, the existing conditions (for example, Figure 3) are not designed to accommodate and promote active transportation for every day, nonrecreational use, such as trips to essential services, retail destinations, and work commuting.

The same study also showed a dramatic increase in bicyclist travel in 2020 during a time when the hazard of using a shared facility with vehicles was significantly reduced due to a dramatic reduction in vehicular traffic: Daily bicycle trips increased by 36 percent in 2020, compared to the previous year, likely due to the reduction in vehicular traffic during the COVID-19 pandemic. This finding could indicate the degree of unmet demand for a safe bicycle facility and be representative of the type of increase in active transportation use that could result from the project. The project will improve the quality of life of bicyclists and pedestrians by designing infrastructure for recreational bicyclists as well as commuters and residents who cannot or choose not to take on the burden of car ownership.

Improves Access to Daily Destinations

The project will connect underserved residents with destinations that were previously designed and constructed to accommodate car users and are challenging for pedestrians and bicyclists to access. The project will serve multiple activity hubs, encompassing entertainment, employment, and recreational destinations. One of the largest attractions within the project scope is National Harbor, which draws frequent visits not only from residents along the corridor but also residents in the region at large. Improving nonmotorized access to National Harbor is a key community priority for

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employees who work nearby. The area is home to over 3,800 residents while attracting more than 11 million visitors annually. Also, on the northern segment of the proposed project is the Oxon Hill development, a regionally significant commercial hub featuring a diversity of employment opportunities and essential services. The project targets shifting the high volume of car trips to destinations such as these with more active and sustainable modes. In addition to providing a safe, sustainable, and equitable transportation option, the new multimodal connection will result in an estimated annual reduction of 3,441 vehicle trips, and 8,189 VMT, per year. This estimate demonstrates the transformative power of transportation options that remove the financial burden of personal car ownership, working to mitigate car-centric planning and design that have isolated and historically disadvantaged communities.

The project also promotes access to regional employment centers by closing gaps within the active transportation network. The project scope connects to several other trails including the Henson Creek Trail and Woodrow Wilson Bridge Trail. The Woodrow Wilson Bridge Trail connects to the Mount Vernon Trail on the Virginia side of the Potomac River and enables active transit access to the city of Alexandria and Belle Haven Park. Connecting to the overall active trail network opens the door for employment opportunities at nearby Joint Base Andrews. Joint Base Andrews, located a few miles east of the project area, will be connected to the Henson Creek Trail after its planned extension. Joint Base Andrews currently employs 9,800 workers, the majority of which drive to work ([Joint Base Andrews AFB, employment](#)). Similarly, Joint Base Anacostia-Bolling is located a few miles north of the project area and employs approximately 17,000 civilian and military workers ([JBAB, Employment](#)). Most military installations have extensive bicycle networks within their secure border, and enabling safer bicycle access will promote access for military and civilian employees living in the area.

Improves Public Health by Adding New Facilities That Promote Walking, Biking, and Other Forms of Active Transportation

The project will have immediate impacts on the health of residents by creating new multimodal connections between key destinations throughout the corridor. The shared-use path proposed by MDOT in coordination with Prince George's County aims to increase the comfort and safety of existing multimodal users while also attracting new users with dedicated facilities. Communities in surrounding census tracts face high rates of diabetes (above the 80th percentile in four of the five adjacent tracts according to the CEJST). With few opportunities for walking and bicycling to daily destinations currently, the community will strongly benefit from these new active transportation facilities.

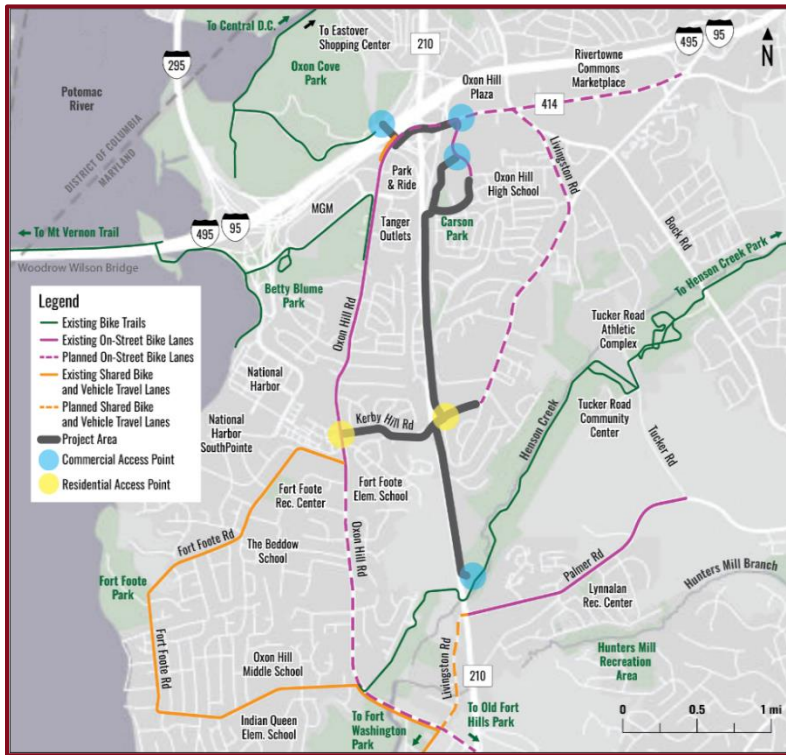
4. Mobility and Community Connectivity

Improves System-wide Connectivity

The project will remove barriers to access for the community's documented needs. The MD 210 project corridor is the most direct and efficient route between the residential areas to the south of the study and the commercial hubs located on the northern half of the alignment (Figure 4). The suburban development patterns, commonplace throughout the study area, reinforce the need for a direct connection between where people live, work, shop, and exercise.

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Figure 55. Current Conditions and Proposed Project Improvements



The most notable medium-density residential development along the project alignment is the Brookside Park Condominiums, which stretch approximately half a mile only 50 feet behind the MD 210 noise barrier. Originally constructed in 1966, the large residential development was previously connected to MD 210, prior to road widening and the noise barrier addition. Located in an area dominated by single-family homes and car-centric businesses, the condominiums feature increasingly limited multimodal access to not only MD 210 but also the surrounding businesses and essential services nearby. Only one bus stop services the development, often requiring residents to walk the length of the linear development to access the

network.

Implements Plans That Address Gaps Identified in the Existing Network

The neighborhoods intersecting and divided by MD 210 (defined here as the census tracts directly bordering the project alignment) are composed of primarily single-family homes and large apartment complexes, both of which are currently designed for car usage with limited access to the greater road network. Despite the built environment being tailored for personal vehicles, 4.1 percent of households lack access to a vehicle entirely, and a further 29 percent have one vehicle ([2021 American Community Survey](#)).

The project will serve to increase connectivity across a wider geographic area than the roadway itself because the project will connect with notable dedicated bicycle infrastructure such as the already constructed Henson Creek Trail, which extends over 5 miles through Prince George’s County, connecting residential neighborhoods with community centers and parks. Introducing more dedicated bicycle and pedestrian infrastructure is vital for the neighborhoods surrounding MD 210, because community feedback has cited high-speed, high-volume automobile traffic on local roads as a detriment to the safety and comfort of nonmotorized modes. The project will serve as a building block to increasing multimodal connectivity throughout the region, as MDOT and Prince George’s County aim to grow the County’s network of multimodal facilities, as defined in its 2009 [Countywide Master Plan of Transportation](#).

Reconnects Communities to Affordable Transportation

Although there is a higher density of transit stops and routes north of the proposed alignment, the project will enable residents to more quickly and safely access both WMATA and TheBus routes. There are currently 14 bus stops (across both transit systems, with riders able to access both systems at multiple stops) within a quarter mile of the project alignment. Further multimodal connection opportunities are present north of the project alignment, where both WMATA and TheBus (Prince George’s County) operate on MD 210. Increasing access to the existing transit network in the project area has the ability to vastly increase transportation options for residents because the routes operating on or near the MD 210 corridor have direct connections (one-seat trips) to Alexandria, various activity and employment hubs throughout Prince George’s County, and notable connections to the DC Metro system via the Suitland and Southern Avenue Stations. Both stations are part of DC Metro’s Green Line, which travels directly through central Washington, D.C., connecting with the Red and Yellow Lines at the Gallery Place–Chinatown Station.

The addition of a safe, efficient, and comfortable walking and cycling route will encourage car-free trips, with the ability to connect with fixed-route bus and rail service operating throughout the region. The project will solve first–last-mile problems as residents are able to access protected bike lanes, in contrast to the current infrastructure (as shown in Figure 5). Currently, few residents in the study area are able to use these existing transit links, relying heavily on personal cars and rideshare platforms.

Figure 6. Current Bike Lane along MD210



Increases Accessibility through Universal Design

The majority of the project alignment will feature a shared-use pathway, designed specifically for people walking and bicycling. Sections of the project alignment will employ a Complete Streets approach, restriping existing low-traffic-volume residential streets and service roads to accommodate both low-speed motor vehicle traffic and bicyclists, with sidewalks for pedestrian use.

The project will employ elements of universal design to ensure the safety and comfort of users of every ability level. The project will include the following:

- Expanded curb ramps and tactile cues at intersections
- Pedestrian-scaled lighting throughout the alignment, particularly for new sidewalks and shared-use paths
- Audio and visual signals specific to people walking and cycling

MDOT will work diligently to incorporate all existing and future community feedback in regard to accessibility of the shared-use trail project. The agency has been in frequent contact with the community regarding the plans for MD 210 and will continue to engage local residents and stakeholders through meetings, mailers, and online and paper surveys. The agency is also prioritizing engagement with community groups in the area.

5. Economic Competitiveness and Opportunity

Promotes Long-term Economic Growth and Other Broader Economic and Fiscal Benefits

The project supports fundamental economic pillars including job access, reducing household transportation spending and business activity. The project itself will create an estimated 94 construction jobs and 25 professional services jobs. A key driver of the project includes connecting nearby communities to economic activity centers. The [Plan Prince George’s 2035 update](#) identifies National Harbor as one of its growth zones affiliated with existing transit and activity centers. The plan proposes high density, mixed use, and abundant connections within these growth zones to draw future development. The project forms an active transit connection with the National Harbor, promoting business activity throughout the study area. In addition, the State of Maryland promotes active transportation infrastructure through the Maryland Commuter Tax Credit. Businesses can claim a tax credit if their place of business accommodates active transportation commute trips for their employees in lieu of parking ([MDOT](#)).

Promotes Wealth Building

Households in historically disadvantaged communities suffer economic hardships including housing affordability and transportation cost burdens. Reducing the burden of these essential life pillars will promote economic opportunity and enable upward mobility. Transportation costs above 15 percent of household income are considered as cost burdens. The Prince George’s County population overall spends approximately 14 percent of household income on transportation, whereas portions of the project area spend within a range of 18 to 20 percent, or approximately \$16,000 annually ([CNT, Prince George’s County](#)). Understanding the unique economic conditions of the project area, constructing safe active transportation facilities will reduce many short trips that incur additional transportation cost. Households shouldering this cost burden will have more disposable income due to the reduction in automobile trips over the long run.

With two transit systems operating near the project corridor, the shared-use path will become an important tool for increasing transportation options for historically disadvantaged communities. There are 14 bus stops within a quarter mile of the proposed project, with increased levels of service north of the alignment. With both WMATA and TheBus operating throughout the corridor, riders have the opportunity to make connections to the DC Metro stations at Southern Avenue and Suitland, where riders can then connect to other DC Metro lines throughout the region. The census tract (8015) north of the proposed alignment is also a designated Opportunity Zone, with a high density of employment opportunities. Multimodal enhancements throughout the corridor will increase the cohesion of the nonmotorized network, enabling residents to connect with new opportunities.

Facilitates Tourism Opportunities and Promotes Greater Investments in Land-use Productivity including Mixed-income Residential Developments

Currently, MD 210 acts as a barrier dividing bicyclists and pedestrians from opportunities. The project will promote connectivity to local activity centers identified in the Plan Prince George’s 2035 update, including the Oxon Hill center and the National Harbor district as well as the planned National View mixed-use development and community currently planned adjacent to National Harbor. The project enables safe access to National Harbor through several bicycle facilities including a dedicated bike lane along MD 210 and will help provide seamless multimodal connections to the National View development. National Harbor is a unique economic hub hosting seven hotels with 3,300 hotel rooms, 160 retail outlets, and 40 restaurants. The National Harbor district is an [important tourism destination](#) actively promoted by the Maryland Office of Tourism and is a major driver of the local and regional economy. National Harbor is a master-planned micro-city designed for compact

development and walkable streets. In addition, there are 2,500 residential units planned, completing the dense neighborhood design to promote live, work, and play ([NH Facts](#)). [National View](#) will be a new neighborhood center, a mixed-use and mixed-income development with multifamily housing, retail, and offices just north of National Harbor.

6. State of Good Repair

Reduces Construction and Maintenance Burdens through Efficient and Well-integrated Design

The project relies on existing infrastructure to ensure that regular maintenance will be feasible for Prince George’s County and MDOT SHA, which will each hold responsibility for maintenance and operation of some project elements after completion. Most of the project alignment will require a 10-foot-wide shared-use path, running parallel to MD 210. The County will maintain this path. With a projected reduction of over 3,000 motor vehicle trips annually, the project will not only modernize the County’s transportation assets but also alleviate pressure on existing facilities. Shifting area residents and visitors to active forms of transportation is expected as the project will have an outsized impact due to its strategic location and connections to the broader regional bicycle and pedestrian network. The project will provide a more sustainable active transportation option for reaching key destinations along MD 210, reducing vehicular traffic, particularly for residents traveling to the various recreational hubs in the area.

Additionally, some project components, such as roadway improvements, will be maintained by MDOT over the long term. MDOT is a national leader in asset management policy and practice. SHA is home to a dedicated Asset Management Office (AMO) responsible for guiding the SHA Asset Management Program toward optimal performance, using risk-based resource allocation to maintain all roadway assets in a good state of repair. SHA maintains more than 75 types of transportation assets across 14 critical asset classes with a total replacement value of more than \$39 billion. This program continually prioritizes asset needs based on age, condition, criticality and risk. It implements standards, improves systems and data, fosters collaboration and strengthens institutional knowledge.

Restores and Modernizes (through a Complete Streets approach) Existing Core Infrastructure Assets That Have Met Their Useful Life

Near the connection with Henson Creek Trail, the alignment will use the MD 210 service road (Figure 6), prioritizing the safety of multimodal travelers and enhancing the existing roadway within the footprint of the existing transportation asset. The state -owned portion of the service road has reached the end of its useful life, and implementing a multimodal project using a Complete Streets approach on this roadway will restore and modernize this infrastructure.

The most recent inspection report of the service road was produced in 2019. This report indicates that the road surface is nearing the end of its useful life (Figure 7) and will need to be resurfaced based on cracking indexes: The Structural Cracking Index ranges from 25 to 47 with an average of 38, with the pavement reaching the end of its life at a value of 35. The Functional Cracking Index ranges from 6 to 24 with an average of 19, with the pavement reaching the end of its life at a value of 10. The project will also benefit from existing transportation infrastructure by

Figure 7. MD 210 Service Road



using the MD 210 noise barrier to separate the new shared-use path physically and visibly from the continuous flow of motor vehicle traffic. Using the existing footprint of the MD 210 service road will allow MDOT to reduce maintenance costs associated with new facilities and reduce environmental impact.

Improves Condition and Safety of Existing Transportation Infrastructure within the Existing Footprint

The project will employ a Complete Streets approach on segments where the project alignment uses existing infrastructure such as residential streets and service roads. The Complete Streets design ensures that all users, regardless of mode choice, are guaranteed access and comfort while traveling. Currently, the outdated, car-focused infrastructure creates safety concerns, as shown in [Figure 1](#). The project will create a safer roadway within the existing footprint by implementing [NRSS elements](#) and create a separated bikeway for safe and comfortable travel for the most vulnerable roadway users. In addition, the shared-use path has the potential to reduce all pedestrian cycling collision types by a crash modification factor of 59.8 percent, while the installation of a cycling lane could reduce cycling collision types by a crash modification factor of 75 percent (refer to the Benefit-Cost Analysis Technical Memorandum, attached). The approach of retrofitting existing infrastructure along the corridor also fits within SHA’s Context Driven approach, which provides guidelines that the agency uses to establish safe and effective multimodal options, dependent on the surrounding land uses, or contexts.

Figure 8. Poor Pavement Condition on Service Road



Just over 1 mile of the project alignment will involve restriping to create new 5-foot-wide bicycle lanes, to delineate bicycle traffic and increase user comfort. The project will also employ over 1 mile of sharrows on

low-traffic-volume streets, with signage indicating the shared use of the roadway to both motorists and bicyclists. On Oxon Hill Road, the existing sidewalk will be doubled in width to accommodate an increase in bicyclist and pedestrian traffic.

7. Partnership and Collaboration

The project is an ongoing partnership with several government agencies and key stakeholders. SHA has closely coordinated with the Prince George’s County Department of Public Works & Transportation and Maryland-National Capital Park and Planning Commission (M-NCPPC), partners in the development of this project. M-NCPPC cited the importance of this project in safely and directly connecting its facilities at Oxon Hill Park and Henson Creek and for promoting neighborhood and employee access to National Harbor. Additionally, M-NCPPC has pledged local funding support to demonstrate their strong commitment to the project and meet the cost-sharing requirements for RAISE funding (Financial Commitment Package). In close collaboration with these entities, as well as the local community, SHA incorporated several of their recommendations into the project.

Engages Residents and Community-based Organizations

Engagement with neighboring communities has been a priority during all project phases. The project was initiated in fall 2021, and two community public meetings have been held, the first in November 2021 and the second in December 2022. The first meeting was to solicit feedback from the public on the area’s needs, and an online survey was live on the project website before and after the meeting.

MD 210 Bicycle and Pedestrian Connectivity Project Phase I Improvements

The second meeting was to present the study's recommended improvements and announce the transition to the preliminary design phase. SHA held a virtual meeting in 2021 updating the public on the preceding Bicycle/Pedestrian Study. Virtual tools improve transparency and access to information and participatory input on transportation-related decisions. Virtual formats of public engagement incorporate engaging interactive formats and align with USDOT's Promising Practices for Meaningful Public Engagement. The community meetings incorporated online surveys and adhered to Title VI requirements regarding equal treatment, access, and rights. The online presentations were offered with English and Spanish subtitles to promote equal access for Spanish-only speakers. SHA plans to have additional community meetings throughout the design and final design process. Recordings of both meetings already conducted are available on the project website and on SHA's YouTube page. Most recently, in May 2023, a newsletter was distributed to stakeholders and residents within the project area. The newsletter included design updates, notification of commencement of National Environmental Policy Act (NEPA) review, and a link to a survey for feedback regarding active transportation amenities along the project corridor. Survey feedback included safety concerns along MD 210 for cyclists and pedestrians. As the project progresses, SHA is developing a Public Involvement Plan on how to best continue connecting with the local community, including mailers, meetings with community groups, and surveys to be conducted throughout the project development process.

The SHA Public Involvement Plan provides a framework for community collaboration and outreach throughout the span of the project. The agency has identified four key milestones in the project schedule, including during project kickoff, prior to NEPA analysis, prior to construction, and after project completion. The agency has also developed a comprehensive list of community organizations to continue engaging and involving in the project including community and cultural centers, faith-based institutions, neighborhood associations, schools, and small businesses. One local organization, the Washington Area Bicyclists Association, has expressed supports for this project as it will contribute to transforming our transportation system and making it safer, easier to use, accessible to everyone, more affordable, and climate-resilient. Local community organization Fort Washington Forward has also expressed strong support for the project, citing safety concerns with the current roadway configuration and the opportunity for local residents to choose active transportation.

Partners with Disadvantaged Business Enterprises

MDOT partners with Disadvantaged Business Enterprises (DBEs) to deliver projects like the MD 210 Bicycle and Pedestrian Connectivity Project. SHA examines each contract based on the exact contract bid items, quantities, and other factors and then compares that information to the available DBE subcontractors in the geographic area of the state for each bid item. This information is used along with other factors to determine the DBE goal for each specific contract. Recent community enhancement contracts have yielded DBE goals in the range of 12 percent to 25 percent, and MDOT is targeting 28 percent DBE usage on the contract being used for preliminary design for this project.

8. Innovation: Technology, Delivery, and Financing

Innovative Technology: Enhance the Environment for Electric Vehicles

The project will focus on delivering a high-quality multimodal experience to all users, while adding innovative technologies and design elements to set the new shared-use path apart from standard options available to pedestrians and bicyclists. The project will be designed and constructed with users of all ability levels in mind, remaining mindful of grades, intersection crossings, and other conditions that may prove difficult to navigate for some users. While the alignment has been designed to increase access for as many users as possible, MDOT also strives to implement innovative technologies to increase access, comfort, and address barriers to access. Capital Bikeshare hubs are prevalent throughout the area (Figure 8), as well as the region at large, and the project will study locations to create new bike share and mobility hubs along the new alignment. Select Capital Bikeshare hubs will be equipped with electric bikes, enabling more users to take advantage of the new bicycling infrastructure. With bike share hubs located at many notable activity hot spots, including the National Harbor area, Tanger Outlets, and Oxon Hill Commercial Center, users will be able to seamlessly rent and dock their bikes in convenient locations. The project will examine strategies to add more Capital Bikeshare hubs throughout the new alignment, particularly among dense residential development, to ensure that users have options for renting and docking the rented bikes at both their origin and destination.

Figure 9. Capital Bikeshare Hub at National Harbor



Innovative Project Delivery: Up-to-date Programmatic Agreement

Practices that facilitate accelerated project delivery in use for this project include a programmatic agreement between the Federal Highway Administration and SHA to facilitate the NEPA review process, which allows SHA to finalize and sign Programmatic Categorical Exclusions (PCEs). A PCE is being pursued for the project. Additionally, a programmatic agreement is in place between SHA and the Maryland Historical Trust that empowers SHA cultural resources staff to complete historic and archeological assessments for projects including the proposed project. Both of these agreements establish streamlined processes for environmental consultations and permits for commonly encountered project types, including pedestrian and bicycle facilities.

Innovative Financing: Speed Camera Funds

In order to move the project forward while further protecting the safety of pedestrians, bicyclists, and all roadway users along the corridor, the State of Maryland has added speed cameras to address speeding along MD 210. As required by the Maryland General Assembly, funds generated from the speed camera are dedicated to supporting preliminary design on the project, allowing MDOT to leverage this innovative funding source to move the project forward quickly and implement critical improvements for bicyclists and pedestrians as soon as possible.