

Goal 1: Build Connected Networks

Expand walking and bicycling networks, remove barriers, and enhance connections with transit and travel destinations.

To support biking and walking, bicycle and pedestrian facilities need to form complete networks to connect people, as directly as possible, to their desired destinations. Walkers and bikers demand a safe and comfortable experience across the entire length of their journey. Due to the relatively low speed of these transportation modes, even small detours may significantly increase the amount of time required to make a trip. Planning for these modes requires careful consideration of complete networks, rather than individual facilities. For this reason, bicycle and pedestrian improvements should be targeted to fill gaps in network connectivity to have the biggest impact.

Network connectivity involves filling gaps in sidewalks and bicycle facilities along state roadways, as well as increasing attention to connections with local routes and trails. Careful attention to crossing state highways is critical, as these facilities tend to be the busiest and most uncomfortable places for walking and biking. Connectivity between biking and walking networks and transit is critical to enabling multimodal travel. While the State will continue working to improve bicycle and pedestrian conditions statewide, a community-based approach that increases focus on areas with the highest demand for walking and biking will leverage the greatest benefits.

Estimated Cost: \$1.2-2.0 billion (*not for programming purposes*)

Objective 1A: Develop connected and accessible networks of bicycle and pedestrian accommodations along state roadways.

Strategies	2013-2018	Ongoing
1. Complete retrofits of existing facilities to achieve full ADA compliance of existing facilities to the maximum extent feasible.		✓
2. Identify and eliminate short gaps in existing sidewalk and bicycle transportation systems, including pinch points where bikeable shoulders disappear.	✓	
3. Promote timely and effective coordination with utility companies (e.g., to relocate utility poles outside of sidewalk paths and encourage clear zones for possible future sidewalks).		✓
4. Develop strategies for addressing bicycle and pedestrian barriers created by limited access highways, free flow ramps, railroads, and major arterials.	✓	
5. Improve bicycle facilities as part of routine maintenance and system preservation activities.		✓

Objective 1B: Improve integration of bicycle and pedestrian transportation with transit.

Strategies	2013-2018	Ongoing
1. Support implementation of bicycle and pedestrian improvements as identified in station access and other plans.		✓
2. Provide covered bicycle parking spaces at rail transit stations and park & ride lots where demand for bicycle access exists or is likely. Provide high security bike parking at stations and lots where needed.	✓	
3. Work with local governments, regional planning agencies, developers and transit agencies to build needed facilities along prioritized pedestrian routes within 1 mile of transit stops and park & ride lots, and prioritized bicycle routes within 3 miles of transit stops and park & ride lots.	✓	
4. Support installation of bike share stations at transit hubs and other high demand locations, and incorporate siting guidelines into appropriate guidance documents.	✓	
5. Support Transit Oriented Development (TOD) that is designed to improve bicycle and pedestrian access.		✓
6. Incorporate bicycle and pedestrian access, safety and comfort in bus stop location decisions.		✓
7. Evaluate and pursue policies that facilitate the accommodation of bicycles on transit vehicles.	✓	

Objective 1C: Increase focus on areas with high potential for walking and biking trips

Strategies	2013-2018	Ongoing
1. Identify areas of the state with high potential for bicycle and pedestrian travel and tailor planning and design guidelines for these areas.	✓	
2. Designate Bicycle Pedestrian Priority Areas (BPPAs) in coordination with local governments for focused planning, funding and intervention to improve bicycle and pedestrian networks.	✓	
3. Increase coordination between road, transit and land development managers to enhance pedestrian and bicycle environments in high demand areas.		✓

Objective 1D: Improve linkages between shared-use paths and on-road facilities and address key gaps in transportation trail systems

Strategies	2013-2018	Ongoing
1. Prioritize completion of identified missing links in state and local transportation trail networks that enhance active transportation options.		✓
2. Work with local partners to improve access between existing shared-use paths and nearby roads, activity centers and communities by encouraging private sector participation, and coordinating signage and connector facilities.		✓
3. Improve bicycle and pedestrian access to major trails and public lands.		✓
4. Investigate innovative approaches to stormwater management appropriate for non-motorized public trails and shared-use paths.	✓	
5. Engage utility companies/commissions about the use of utility corridors for shared-use paths.	✓	

Goal 2: Improve Safety

Enhance pedestrian and bicycle safety to reduce injuries and fatalities and to make walking and biking comfortable and inviting.

Safety is paramount in all of MDOT's work. Pedestrians and bicyclists are particularly vulnerable users of the transportation system, and though pedestrian and bicyclist fatalities and serious injuries have decreased in recent years, improving safety must continue to be a priority. In addition, improving the perception of safety is also important to increasing levels of walking and biking. For Marylanders to consider walking or bicycling as a viable means of transportation, they must feel safe doing so. Providing appropriate facilities, educating the public on safe travel behavior, and promoting enforcement of traffic laws most likely to reduce crashes, injuries and fatalities are important steps toward this aim. Improving actual and perceived safety will continue to be a collaborative effort that must include state agencies, local agencies, law enforcement, advocacy organizations and the general public.

Improving non-motorized crash and injury data collection, analysis and report dissemination will help the state identify better safety strategies. This includes beginning to systematically collect crash and injury information from trail users, EMS and hospital emergency room reports. Continued education and training of professionals, other policy makers, and the public will improve safety by constructing safer facilities and improving behavior of all road users. Likewise, performing regular maintenance of bicycle and pedestrian facilities is critical for ensuring safety.

Estimated Cost: \$40-100 million (*not for programming purposes*)

Objective 2A: Improve education and training of professionals involved in bicycle and pedestrian safety.

Strategies	2013-2018	Ongoing
1. In cooperation with the Maryland State Police and other partners, continue to develop methods to ensure that Maryland's traffic enforcement officers receive adequate training about current bicycle and pedestrian laws and crash investigation protocols.	✓	
2. Continue to incorporate bicycle and pedestrian safety in professional training opportunities and increase participation in bicycle and pedestrian safety audits.		✓

Objective 2B: Improve education and training of the public regarding safe driving, walking, and biking.

Strategies	2013-2018	Ongoing
1. Continue public education for all road users about current laws and best practices for bicycle and pedestrian safety.		✓
2. Ensure that public and private driver training schools are providing correct and adequate training related to bicyclist and pedestrian safety.		✓
3. Ensure bus driver and commercial vehicle training includes bicycle and pedestrian related safety information	✓	

Objective 2C: Use best practices to analyze bicycle and pedestrian crashes and identify countermeasures.

Strategies	2013-2018	Ongoing
1. Incorporate new research and best practices for crash analysis, safety audit, and mitigation regularly.		✓
2. Work to increase and improve bicycle and pedestrian crash data available to support analysis by the State as well as local governments and stakeholders through the use of bicycle and pedestrian counts, user surveys, EMS and hospital reports as well as police reports. Work to improve data for crashes occurring on shared use paths.	✓	
3. Develop and publish bicycle and pedestrian crash reports analyzing crash types, trends and other relevant data.		✓

Objective 2D: Ensure consistent operations and maintenance to provide safe access for pedestrians and cyclists.

Strategies	2013-2018	Ongoing
1. Review maintenance and temporary traffic control protocols to ensure consistent, safe access for pedestrians and cyclists.	✓	
2. Provide information on appropriate State and local contacts for reporting maintenance concerns.		✓

Goal 3. Plan and Design for Everyone

Effectively balance the needs of all transportation users to promote travel choices, ensuring that bicyclists and pedestrian needs are prioritized in appropriate locations.

Working toward an integrated, multimodal transportation system requires all modes of transportation be considered, respected and balanced appropriately as a routine part of all decision making. Maryland has been a leader among state transportation agencies in adopting this approach, beginning with Thinking Beyond the Pavement in the mid-1990s continuing recently with the adoption of a Complete Streets policy in 2012. Yet, there is much work to be done. Balancing user needs involves recognizing different opportunities and priorities available in different types of places, and prioritizing bicycle and pedestrian improvements accordingly. Also different subgroups of pedestrians and bicyclists (such as children, the elderly, inexperienced bicyclists, people with limited mobility, and others) may have different facility needs. Evaluating these needs comprehensively and striving to accommodate as many user types as possible is an important element of Complete Streets and critical to increasing walking and biking in Maryland.

As bicycle and pedestrian treatments continue to innovate and evolve, the State must keep abreast of the latest research and guidance. Tools for planning, design, and evaluation of bicycle and pedestrian facilities should be improved and shared broadly across agencies at all levels. Increasing funding over time will allow for greater implementation of walking and biking networks.

Estimated Cost: \$10-30 million *(not for programming purposes)*

Objective 3A: Strengthen evaluation of bicycle and pedestrian conditions to support multimodal decisions.

Strategies	2013-2018	Ongoing
1. Enhance evaluation of the needs of "interested but concerned" cyclists, pedestrian comfort and expectations in different roadway environments and land use contexts.	✓	
2. Refine design guidelines and policies to incorporate sensitivity to context and bicycle and pedestrian trip potential when balancing user needs in multimodal roadway environments. Consider potential performance measures to evaluate complete streets and context sensitive design process.		✓
3. Improve bicycle and pedestrian data collection, analysis and publication, including existing and planned facility mapping and non-motorized counts.		✓

Objective 3B: Increase professional capacity to effectively plan, design, implement and maintain infrastructure for bicycling and walking.

Strategies	2013-2018	Ongoing
1. Expand support of training opportunities for transportation professionals and others regarding non-motorized transportation issues.	✓	
2. Support and encourage educational opportunities for local leaders and elected officials as well as students in the transportation engineering and planning fields related to bicycle and pedestrian accommodation.		✓

Objective 3C: Increase use of innovative design solutions to enhance safety and comfort of bicycle and pedestrian users.

Strategies	2013-2018	Ongoing
1. Encourage the use of existing processes to implement pilot projects on State roadways to test innovative design treatments such as cycle tracks, colored bike lanes, and new pedestrian crossing treatments, following a context sensitive design approach.	✓	
2. Increase flexibility to implement alternative bicycle and pedestrian improvements beyond state facilities, where effective and appropriate.	✓	
3. Leverage existing protocols to seek input from leading transportation planning and design professionals regularly to stay current with proven approaches to road design that make bicycling and walking safer and more attractive.		✓

Objective 3D: Leverage funding opportunities to improve bicycle and pedestrian networks.

Strategies	2013-2018	Ongoing
1. Support bicycle and pedestrian facility improvements both as an integral element of all transportation projects as well as through dedicated funding for bicycle and pedestrian projects.		✓
2. Leverage local funding contributions and incorporate bicycle and pedestrian improvements by private developers through transportation impact mitigation processes where feasible.		✓

Goal 4: Strengthen Communities

Partner with local governments to support walkable and bikeable communities to achieve sustainability, livability, health, equity and economic benefits.

Walkability and bikeability of the places we live is widely supported by public health organizations for its benefits to community health both from increased activity and the potential for decreased pollution. It is often supported by citizens and neighborhood groups for the improvements to mobility choices and quality of life. Places that can support vibrant foot traffic also benefit local businesses, especially small businesses. This benefit comes not only in direct ways because of increased access by customers, but indirectly through the ability to capture disposable income not spent on owning and maintaining a vehicle, attracting workers that don't require covering the cost of driving, parking and added health care associated with a car-oriented lifestyle, and serving customers that don't require a parking space for their visit. The State can support local efforts to achieve these benefits by educating and sharing success stories, being flexible to support and encourage local efforts to improve bikeable and walkable environments.

These efforts can be direct, through assistance and incentives to local governments, or indirect, through supporting local planning efforts as stakeholders and property owners. The State can help improve coordination between agencies, with local governments, and with educational institutions. Improved outreach and engagement with the community on all projects is critical to supporting its goals and vision .

Estimated Cost: \$30-200 million *(not for programming purposes)*

Objective 4A: Provide assistance and incentives to local governments to improve biking and walking.

Strategies	2013-2018	Ongoing
1. Provide funding support and technical guidance for the development of local bicycle and pedestrian plans and projects.		✓
2. Coordinate with regional and local partners on the development of a "reference library" to share successful bicycle and pedestrian policies and guidelines.	✓	
3. Review, approve and adopt, as necessary, any professionally published bicycle, pedestrian, or urban design guidelines including NACTO, AASHTO, ITE, and others as soon as they become available.	✓	
4. Encourage local jurisdictions to identify desired bicycle and pedestrian facilities in comprehensive plans, and then to secure those facilities through private development and other opportunities.		✓

Objective 4B: Improve coordination between state agencies, and with local governments to support bikeable and walkable communities.

Strategies	2013-2018	Ongoing
1. Coordinate with local jurisdictions and other State agencies to promote and facilitate bike and walk friendly street design, placemaking and development (ex. parklets, bicycle parking, plazas, seating, etc.).		✓
2. Coordinate with partner agencies to implement complete streets and trails	✓	
3. Promote siting and design practices that encourage biking and walking to public facilities (schools, medical centers, state offices, etc) and increase connectivity and access to and within adjacent neighborhoods.		✓
4. Lead by example by creating access and facility guidelines for State employment sites and educational institutions.	✓	

Objective 4C: Support efforts to increase biking and walking to schools, colleges and universities.

Strategies	2013-2018	Ongoing
1. Encourage local public school officials to support biking and walking to school, by providing reference materials, bike racks at schools and supporting bike-to-school day programs.	✓	
2. Provide infrastructure that supports safe bike and walk access for students, faculty, staff and visitors.		✓
3. Work with Maryland's colleges and universities to comply with § 21-1008 (b) and increase walking and biking to and on campus.		✓

Objective 4D: Expand outreach and engagement in bicycle and pedestrian initiatives.

Strategies	2013-2018	Ongoing
1. Increase outreach regarding funding opportunities and engagement in context sensitive project development and design.		✓
2. Promote innovative public involvement strategies for local and state projects, such as use of social media and text message surveys.		✓
3. Educate local leaders and elected officials on the benefits of biking and walking and opportunities for state support.		✓

Goal 5: Promote Walking and Biking in Maryland

Support walking and biking as everyday modes of transportation and recreation and vital elements of a livable community through encouragement, marketing, and information.

In addition to the perception that walking and bicycling are safe modes of transportation, feeling that they are enjoyable and encouraged can also help Marylanders consider these modes for certain trips. High quality information about available facilities, routes to important destinations, safe use of bicycle and pedestrian facilities, and recreational opportunities can also help both residents and visitors take advantage of the State's bicycle and pedestrian amenities and improvements.

Treating walking and bicycling as regular and expected modes of transportation with a broad diversity of participants can help improve perceptions. The State can provide better access to walking and bicycling information and wayfinding. It will also continue work to support Maryland's growing bicycle tourism industry.

Estimated Cost: \$20-100 million *(not for programming purposes)*

Objective 5A: Promote bicycling and walking as normal transportation modes that have a broad diversity of participants.

Strategies	2013-2018	Ongoing
1. Develop public outreach and education programs with information about benefits of biking and walking, such as: safety, economic development, community livability, public health, and decreased traffic congestion.	✓	
2. Develop marketing initiatives to promote bicycling and walking in key target audiences (eg. urban commuters, colleges and universities, employers, women, economically disadvantaged, non-English speakers).		✓
3. Support financial incentives for bicycle commuting in the Commuter Choice Maryland program.	✓	

Objective 5B: Improve access to bicycling and walking information and wayfinding.

Strategies	2013-2018	Ongoing
1. Develop print and electronic maps showing biking and walking facilities and ensure that information is consistent with signed bike routes.	✓	
2. Notify the public during and shortly after construction of improved bike and walk facilities by posting signs at or near work sites.		✓
3. Improve wayfinding signage to better orient cyclists and pedestrians to pathways and amenities. Establish a statewide bicycle wayfinding sign system that addresses on-road and off-road routes, and state, regional and local route systems.		✓

Objective 5C: Support growth in bicycle tourism in Maryland.

Strategies	2013-2018	Ongoing
1. Support the physical development and public awareness of major regional and national trails and bicycle routes that pass through Maryland.		✓
2. Support biking and walking improvements to help communities near major trails leverage economic benefits of trail tourism.	✓	