

Montgomery Planning Pedestrian Master Plan

Walkability Roadblocks & the Montgomery County Experience

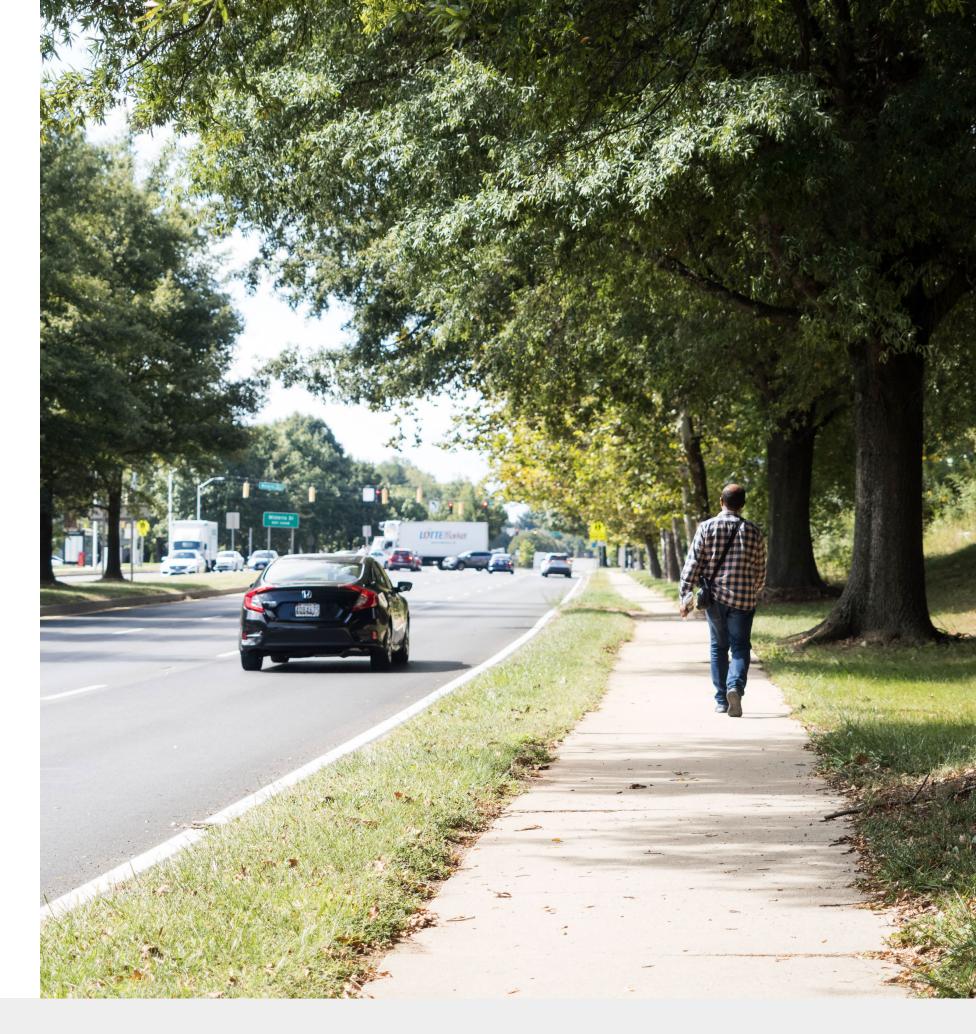
Presentation Roadmap

What is the Pedestrian Master Plan?

Why is it important to plan for walkability?

How are we addressing walkability roadblocks?

- Question/Answer
 - What are walkability roadblocks in your community?



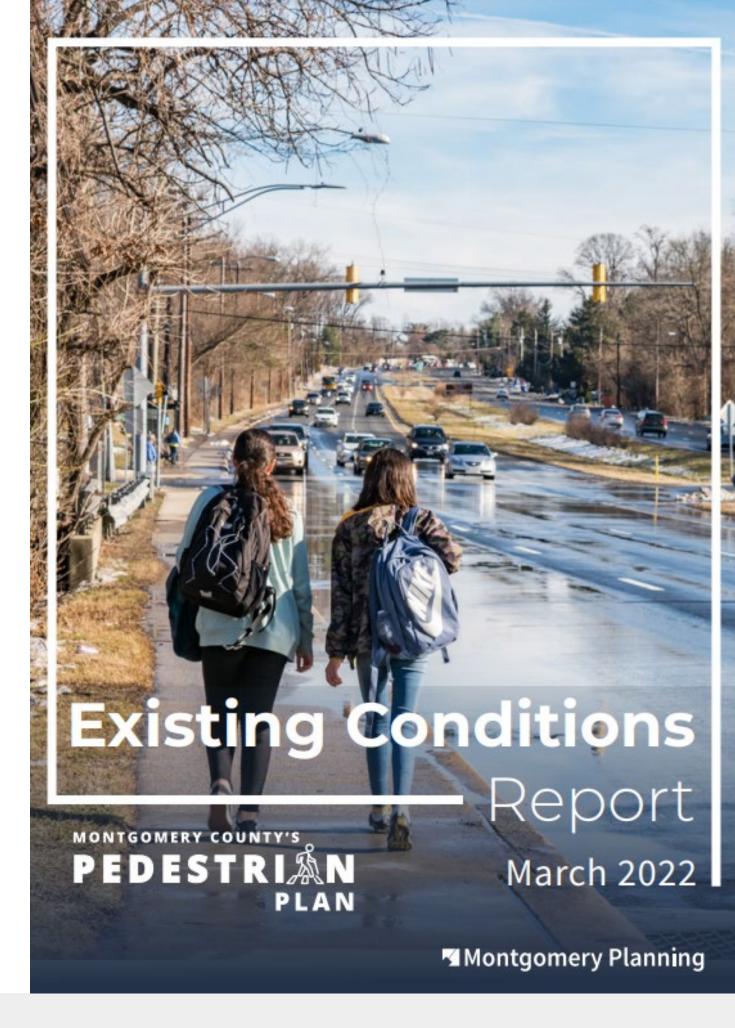
What is the Pedestrian Master Plan?

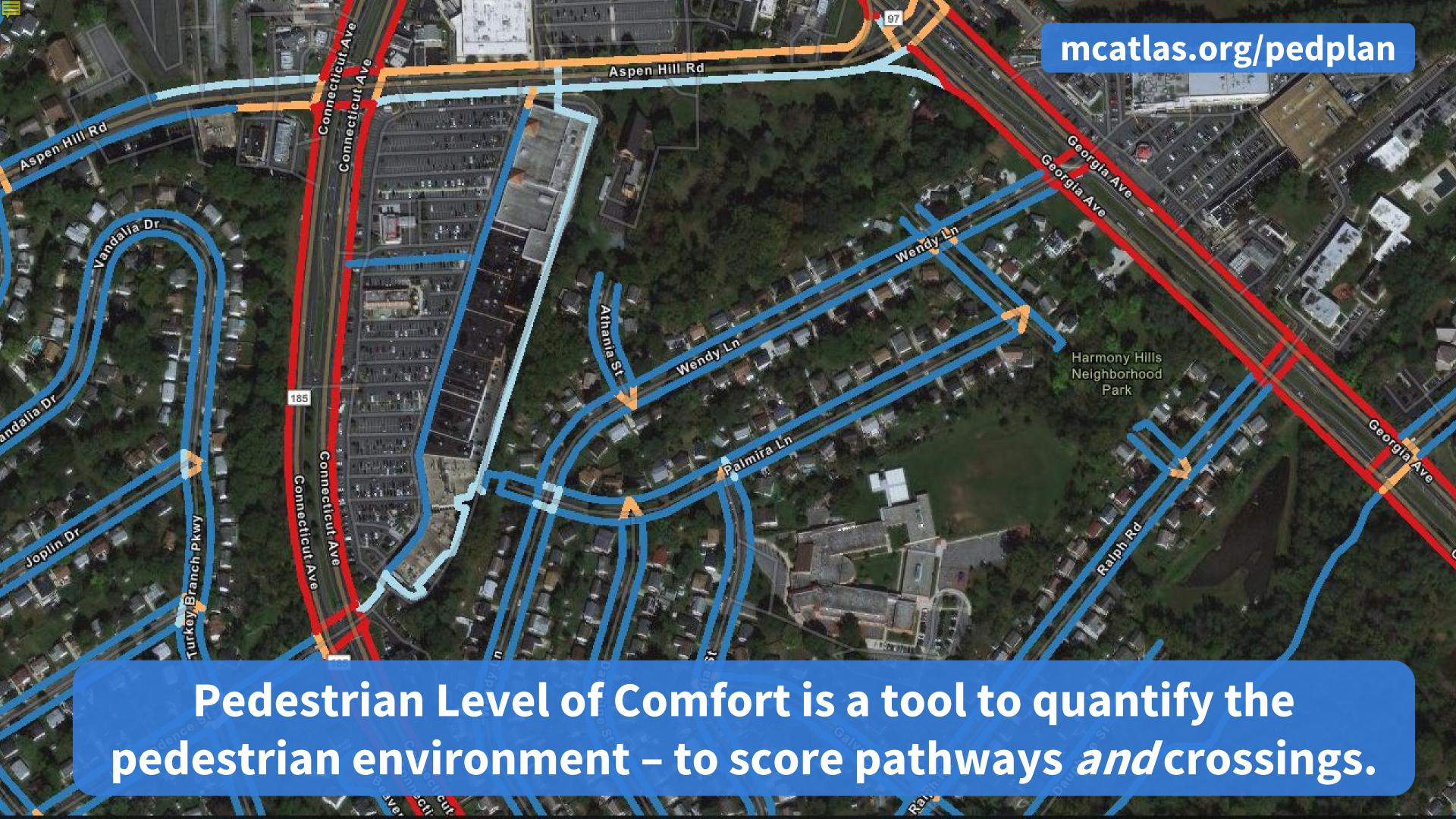
The county's first Pedestrian Master Plan will make walking and rolling safer, more comfortable, more convenient and more accessible for pedestrians of all ages and abilities in all parts of the county.



Plan Progress

- Plan Kickoff: September 2019
- **Existing Conditions Report:** March 2022
 - Countywide Pedestrian Level of Comfort Analysis
 - MCPS Student Travel Tally
 - 2015-2020 Pedestrian Crash Analysis
 - Countywide Pedestrian Survey
- **Recommendations:** October 2022
- **Draft Plan Complete:** December 2022
- **Planning Board/County Council: 2023**

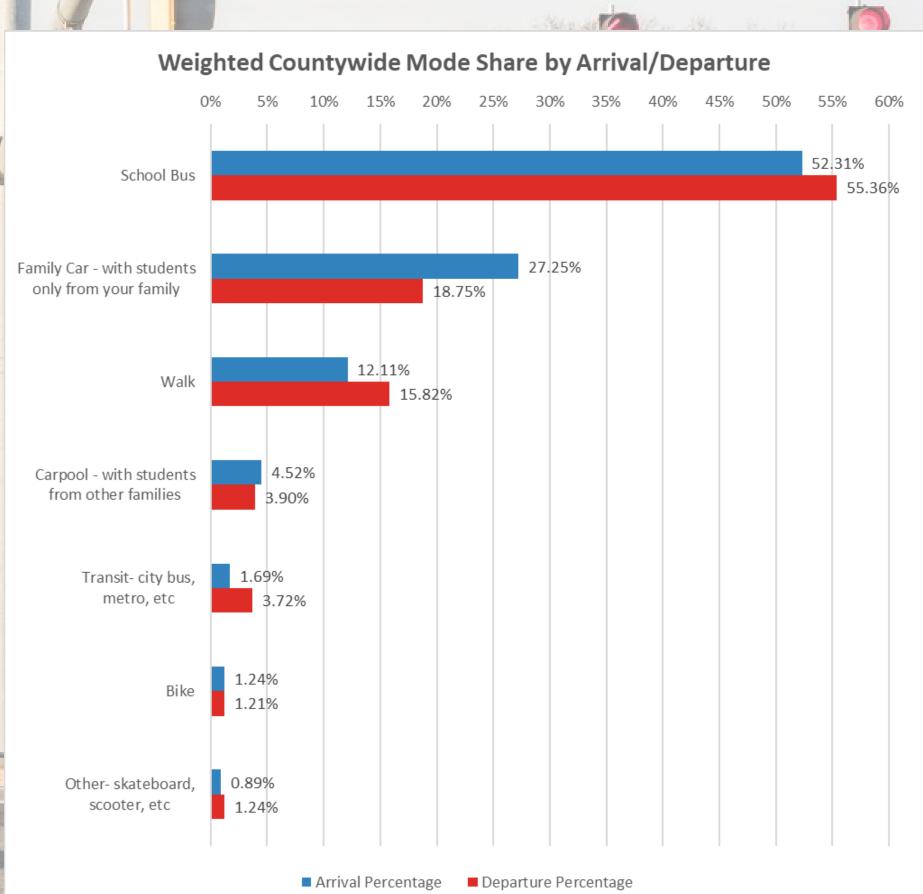


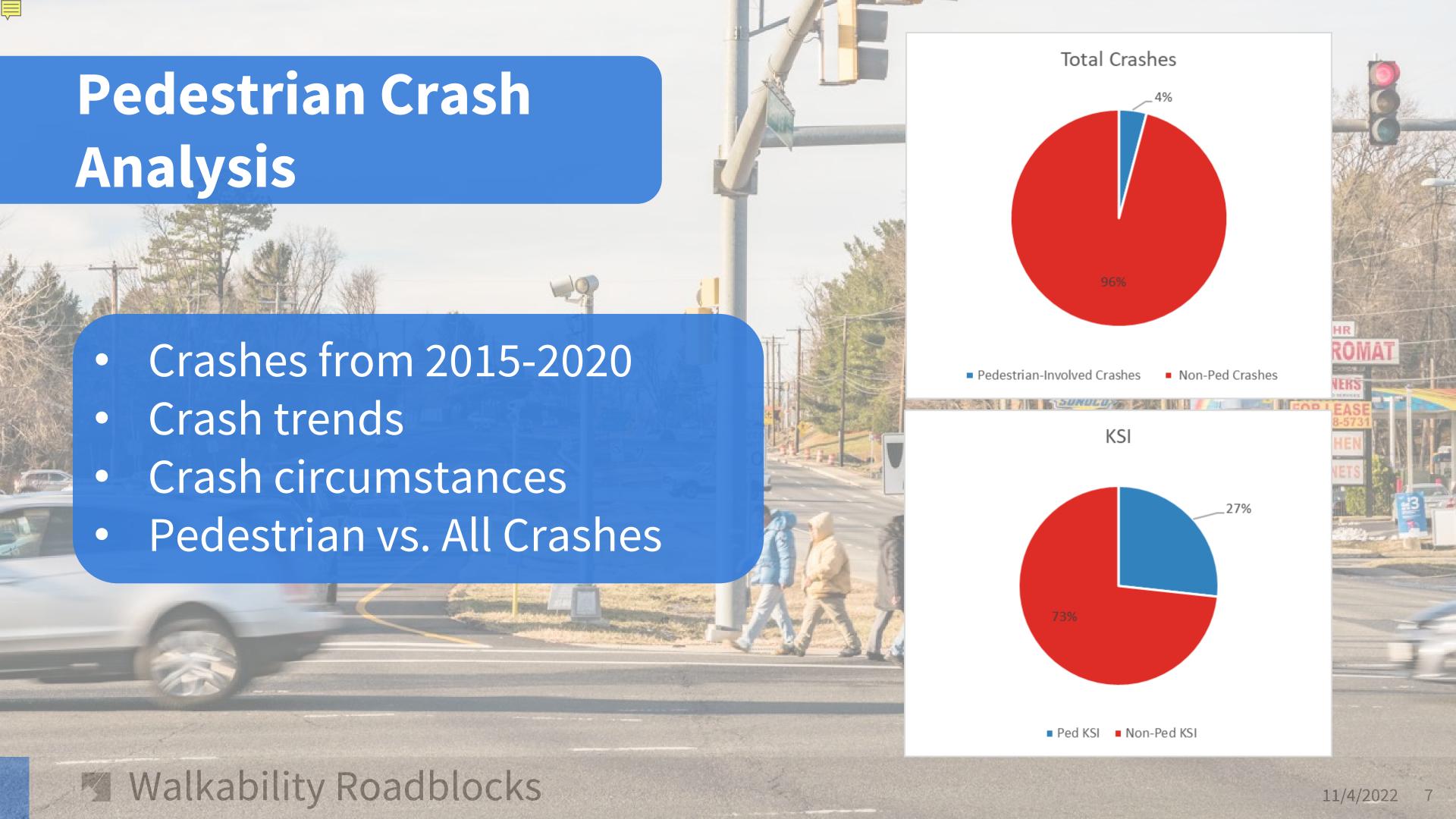


MCPS Student Travel Tally

Late 2019 arrival/departure mode survey



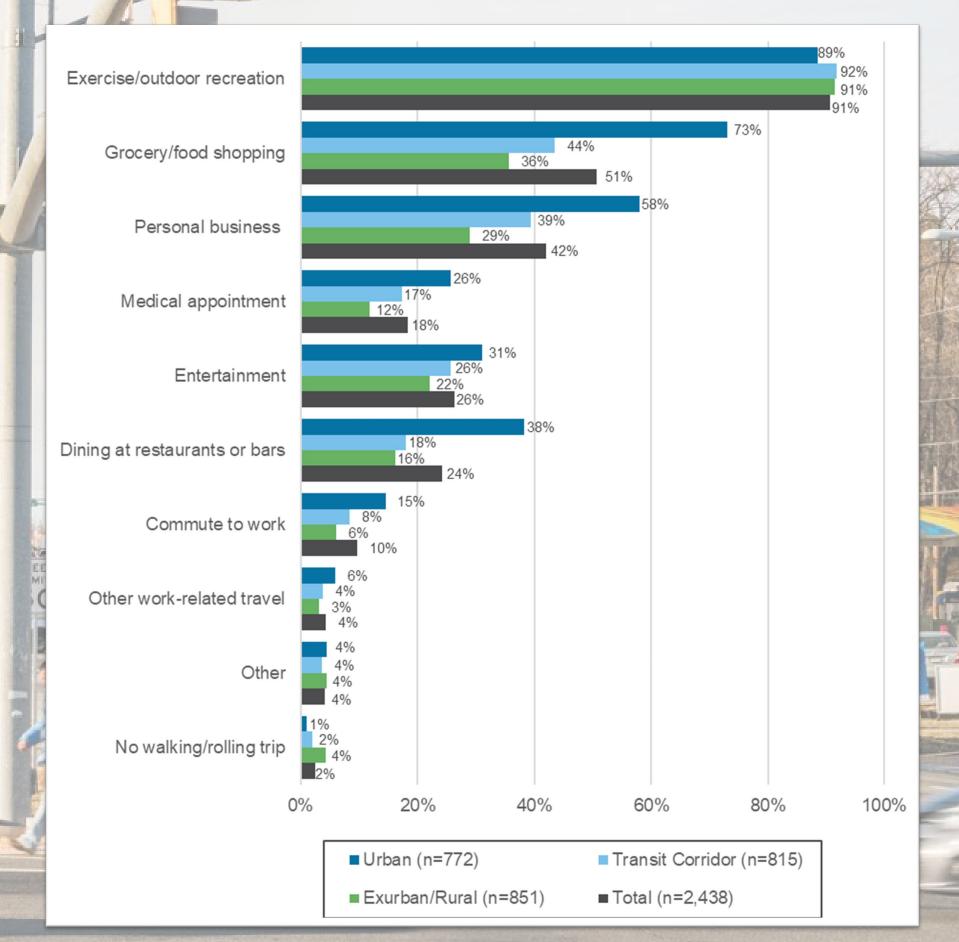




Countywide Pedestrian Survey



- 4.1% response rate
- 2% countywide margin of error



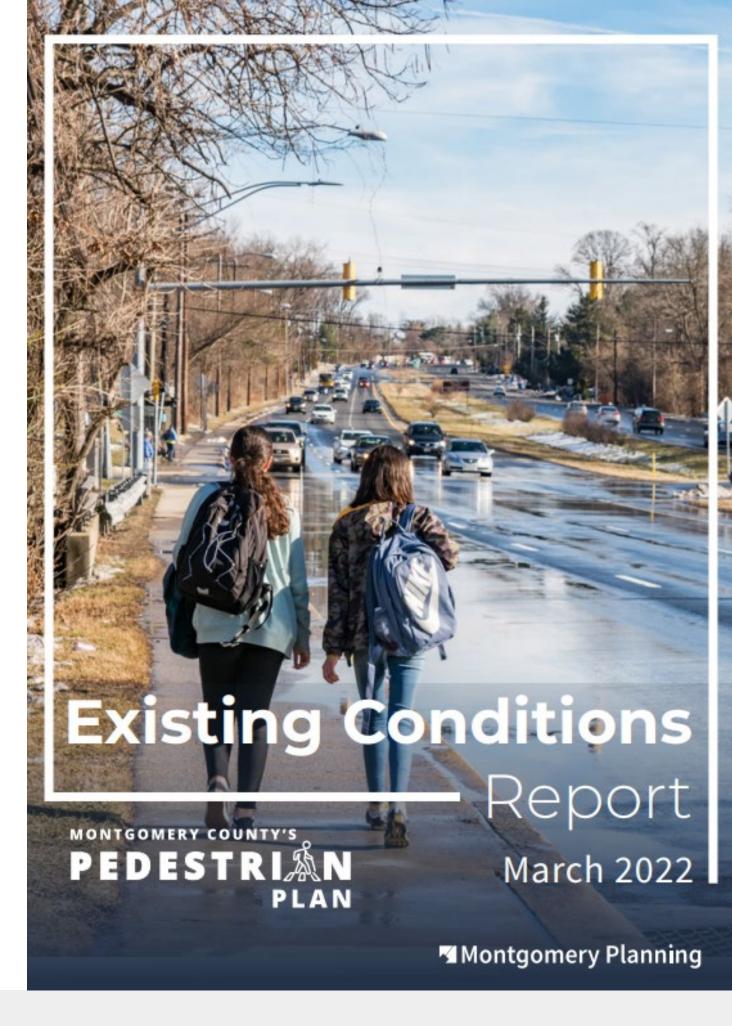
WALK PURPOSE IN PAST MONTH



Walkability Roadblocks

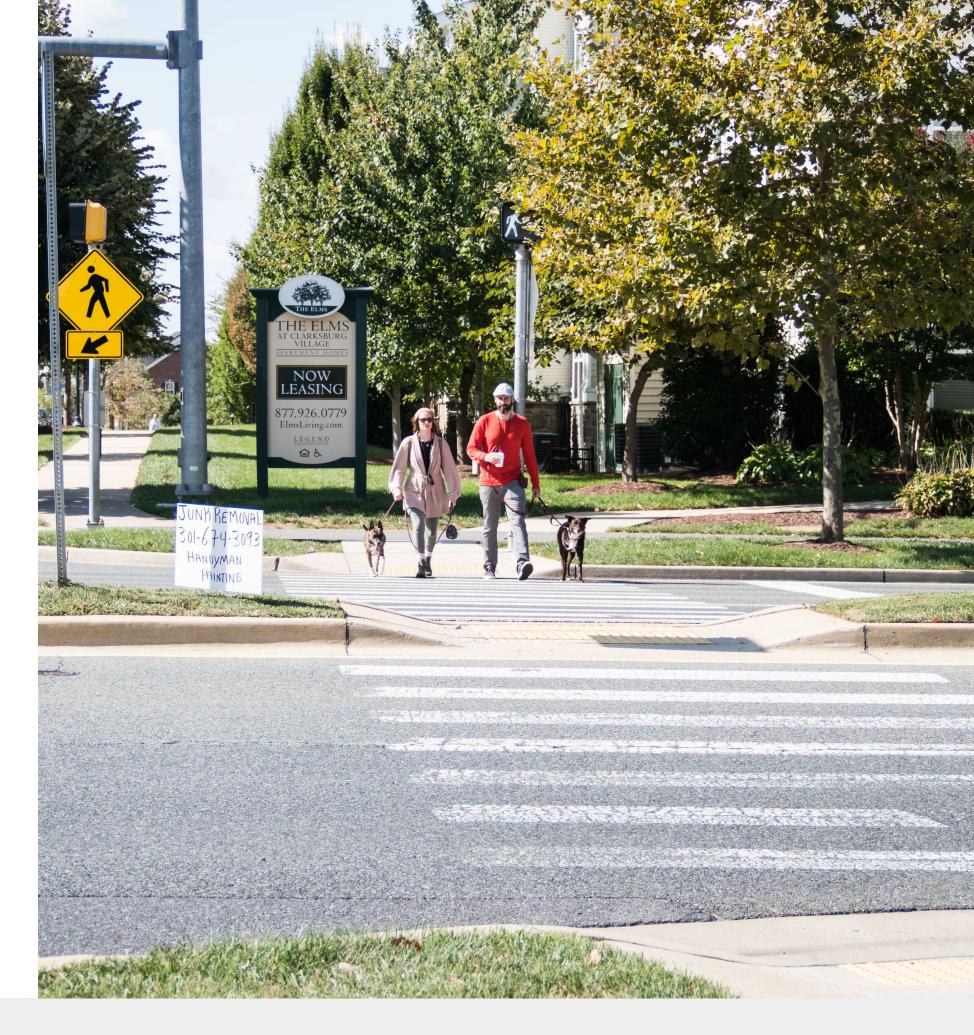
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Why plan for walkability?

- Improve pedestrian safety
 - Pedestrian Master Plan called for in the County's first Vision Zero Action Plan in 2017
 - Pedestrians are disproportionately likely to be seriously injured or killed on our roads
- More walking has many benefits
 - Public Health
 - Economic
 - Climate
 - Independence
 - Equity

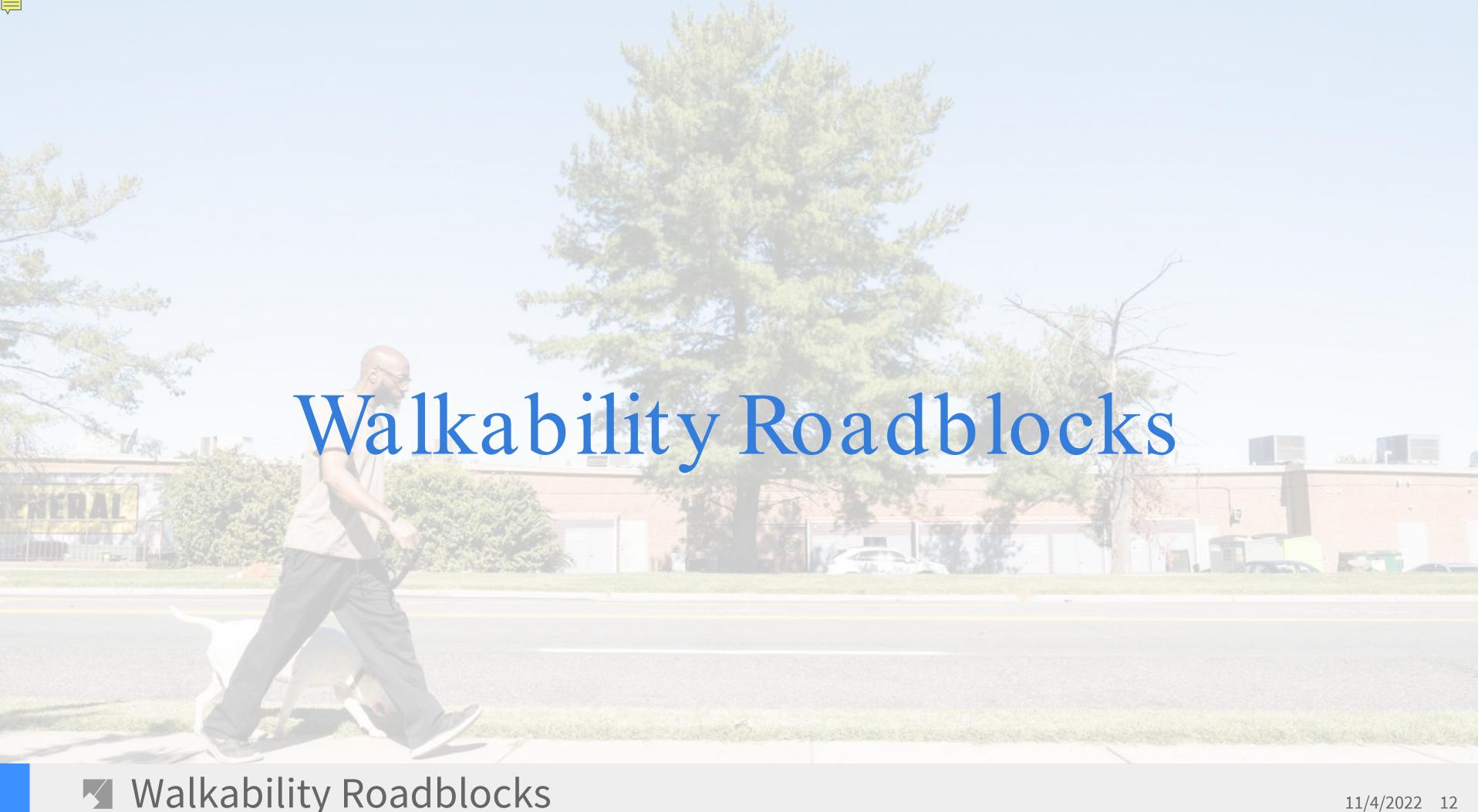


Recommendations Included

- Design, Policy, and Programming
- Prioritizing Locations for Capital Projects
- Pedestrian Shortcut Locations

This plan does not recommend a specific sidewalk network.





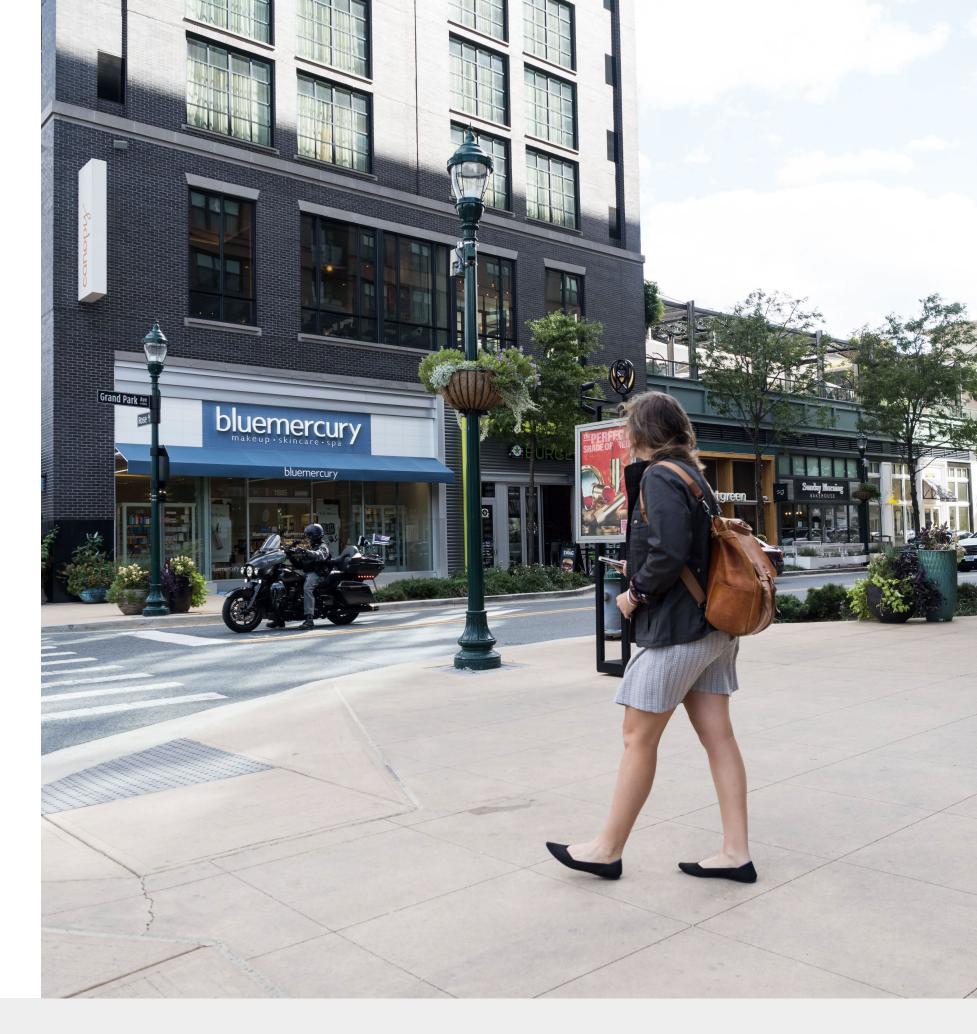


- Without places to walk to, most walking trips will be recreational
 - In Montgomery County, 11.3% of weekday trips in urban areas are on foot compared to 4.6% in more exurban/rural areas.
 - Non-recreational walking is much more common in urban areas of the county
 - Urban residents take more walking trips than those living elsewhere

The best transportation plan is a land use plan

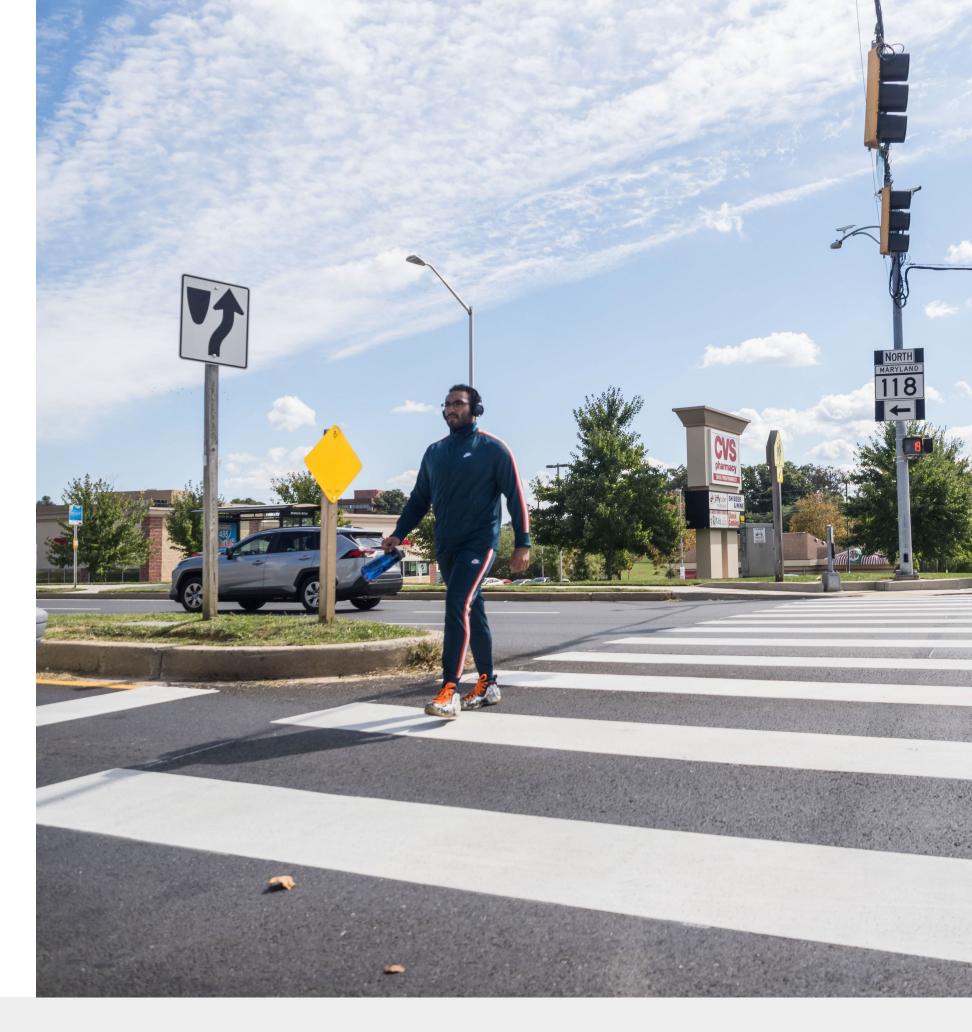
Encourage compact development

- Use master planning processes to focus growth in Downtowns, Town Centers and along Growth Corridors to expand walkable places in the county.
- Co-locate public buildings/park land/commercial areas to create "park-once" opportunities



Require/Incentivize sidewalks through private development

- Update development standards to require or incentivize new developments to connect to nearby sidewalks and trails that exist or may be built in the future.
- Offer monetary support to HOAs, Condo Associations and commercial properties for providing pedestrian connections



Develop design guidance/policy to ensure buildings are directly accessible for pedestrians

- Site schools and other public buildings to prioritize providing safe and direct pedestrian access.
- Require all new public buildings, as well as major renovations, to design and construct bikeways and walkways along their frontage that are recommended in master plans and the Complete Streets Design Guide.



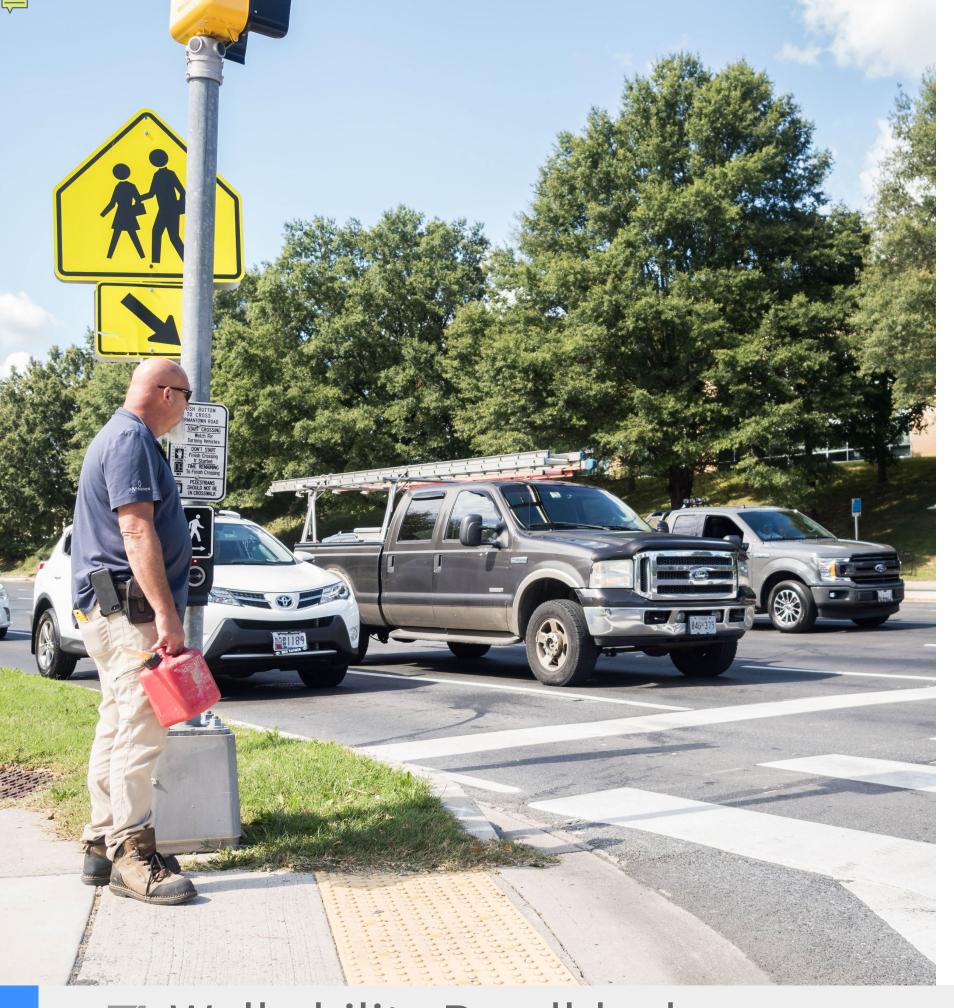






Lead by example

- Ensure county and public agency vehicles are safe for pedestrians.
- County and public agency vehicles should have speed governors installed to ensure their drivers adhere to the speed limit.



Educate to help mitigate

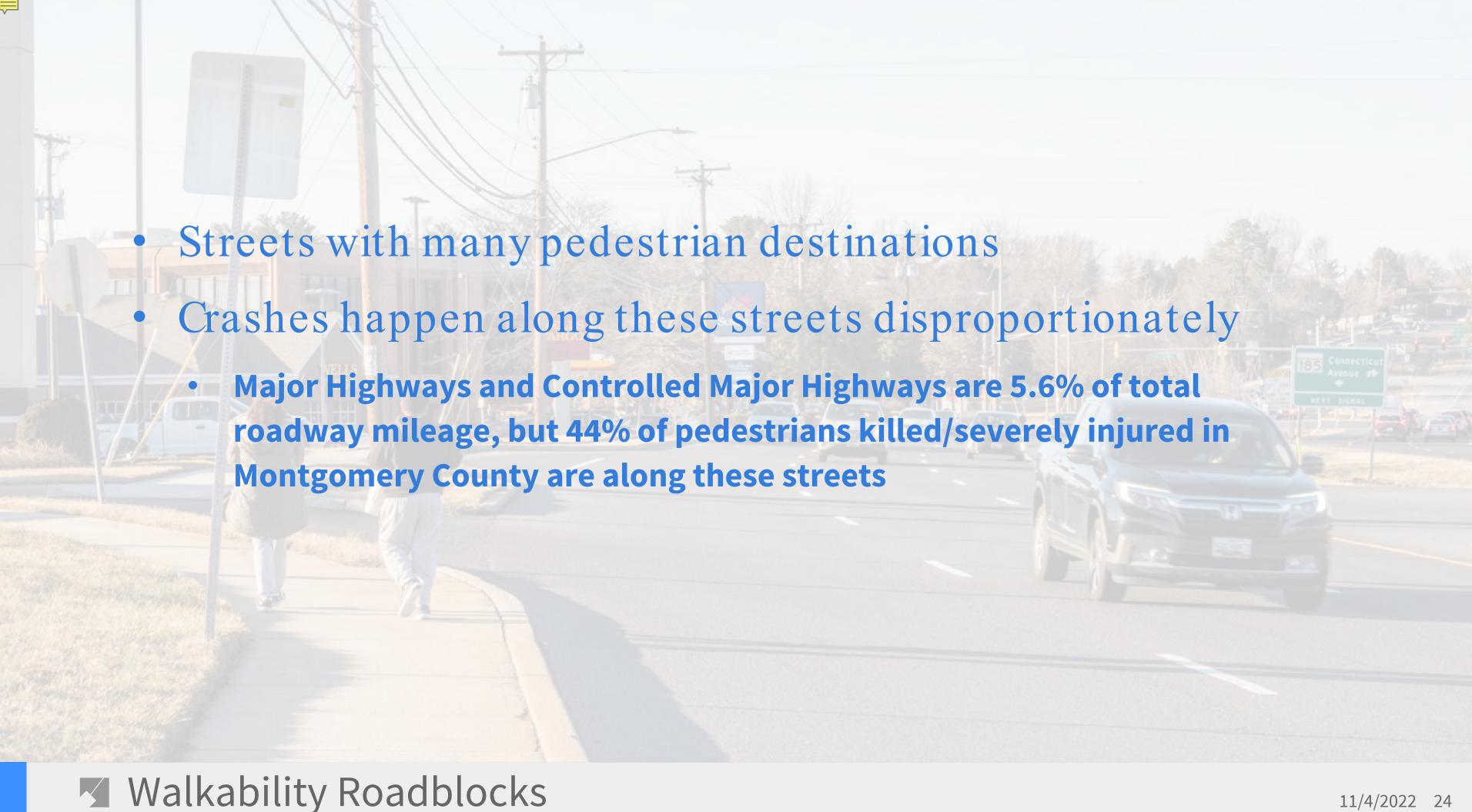
- Develop legislation to create a new class of commercial driver's license required to operate vehicles with identified pedestrian safety and visibility issues.
- Develop legislation to improve the driver's license renewal process by adding a brief educational component



Increase traffic enforcement activities

Increase the number of automated traffic enforcement locations and the violations addressed in an automated way.







Reimagine these roadways as complete streets

- Continue to embrace the Complete Streets Design Guide and ensure its standards are being followed through public and private development.
- Work with State Highway Administration to apply the Context-Driven Guidebook to improve the pedestrian experience.
- Develop a plan to assume control of state roadways in Downtowns, Town Centers and along Bus Rapid Transit Corridors.



- Pedestrians have to walk well out of their way to cross at a signalized location • Pedestrians do not have enough time to cross the street safely
- Traffic signal cycles are so long that pedestrians are delayed and may cross against the light
- Pedestrian push buttons are inaccessible



Provide more opportunities to cross the street

- Develop a methodology for identifying and prioritizing implementation of new protected crossings.
- Establish standards for the
 distance between bus stops and
 the nearest protected crossing to
 encourage pedestrians to cross the
 street at safe locations.



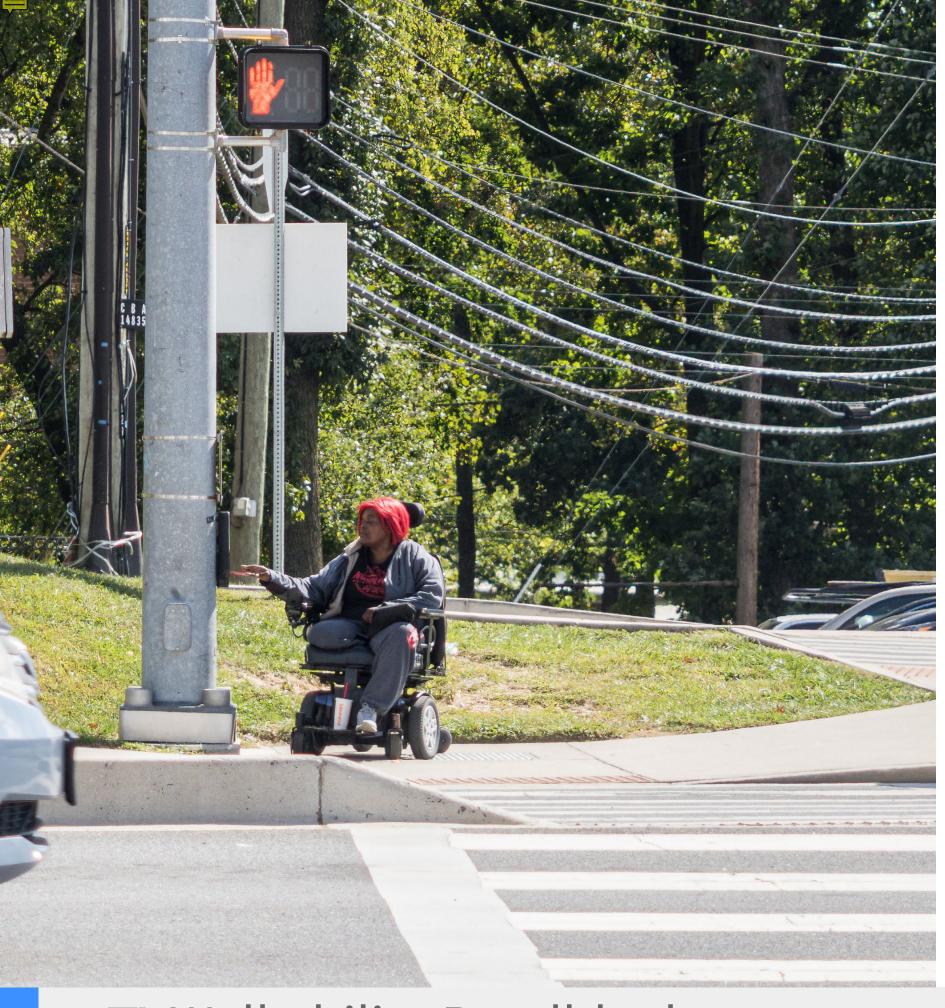
Provide enough time for pedestrians of all abilities to cross

- Lower the pedestrian walking speed standard at signalized intersections frequented by older pedestrians, younger pedestrians, and those with disabilities.
- Prioritize pedestrian crossings using Leading Pedestrian Intervals in Downtowns and Town Centers. Everywhere else, implement LPIs within a certain distance of schools, parks, and community centers along those roadways.



Reduce pedestrian delay

- Make pedestrian recall the default configuration for signalized intersections in Downtowns and Town Centers and adjacent to rail and bus rapid transit stations, schools, parks, and community centers.
- Reduce pedestrian wait times by developing a policy on target and maximum traffic signal cycle lengths by street type.



Improve crossing accessibility

- Identify and modify Accessible
 Pedestrian Signals/Pedestrian
 Push Buttons in the county that are incorrectly installed or are inaccessible to wheelchair users.
- Provide marked crosswalks and Accessible Pedestrian Signals (APS) at all legs of an intersection where there are connecting sidewalks.



- Building sidewalks where they're requested rather than where they're needed most
- Fixing sidewalks by request, instead of proactively
- Not having pedestrian priorities (or a plan), sidewalk standards, etc.



Plan ahead to be effective and equitable

- Pivot the Annual Sidewalk Program from a reactive, request-driven process to an equitable, datadriven process.
- Develop a prioritization approach to guide where future pedestrian capital projects are built



Be proactive in maintenance

- Create a plan for proactively inspecting and repairing Montgomery County sidewalks equitably across the county and track implementation.
- Audit major county and state roadways seasonally for vegetation overgrowth and erosion that reduces sidewalk accessibility and limits visibility. Any identified issues should be immediately addressed and monitored so they do not reoccur.







If walkability is a priority, jurisdictions must invest

- Price parking spaces in county-operated facilities at market rates and use net proceeds to fund pedestrian, bicycle, and safety projects in the surrounding community.
- Implement a countywide tax to fund pedestrian and safety improvements.
- Develop a plan to increase Automated Traffic Enforcement ticket fines to match those in neighboring jurisdictions and use the revenue to fund safety improvements.
- Develop legislation to tie vehicle registration fees to safe vehicle design.



BUILD

B-1: Build more sidewalks faster

B-2: Pedestrians should not have to press a button to cross the street

B-3: Create direct and accessible street crossings

B-4: Build more walkable places

B-5: Light pathways and crossings

B-6: Shade pedestrian pathways

B-7: Create more pedestrian connections and formalize pedestrian shortcuts

B-8: Reduce natural barriers to walking and rolling

B-9: Make traffic calming easier to implement

B-10: Assume county control of state highways

B-11: Make more restrooms available to all

B-12: Address curbside management

MAINTAIN

MA-1: Fix sidewalks proactively

MA-2: Keep sidewalks and curb ramps clear

MA-3: Incorporate roadway maintenance into utility projects

PROTECT

P-1: Disincentivize dangerous vehicles

P-2: Improve and expand protected crossings

P-3: Design pedestrian-safe parking lots

P-4: Prioritize data-driven roadway safety projects

P-5: Educate and encourage pedestrians of all ages to walk safely

P-6: Make the walk to school safer and more direct

P-7: Address access management

EXPAND ACCESS

EA-1: Reduce tripping hazards

EA-2: Remove sidewalk obstructions

EA-3: Provide pedestrians more time to cross the street

EA-4: Make pedestrian signals more accessible

EA-5: Improve guidance for pedestrians with low or no vision

EA-6: Provide more opportunities for accessible park experiences

EA-7: Exceed existing accessibility requirements

EA-8: Regulate shared spaces

EA-9: Make work zones more accessible

MONITOR

MO-1: Track implementation of the Pedestrian Master Plan

MO-2: Conduct a pedestrian 311 equity review

FUND

F-1: Identify new revenue sources to fund pedestrian <u>improvements</u>

Index of Recommendations

Equity Focus

- Design, Policy and Programming recommendations are holistic, systemic and countywide.
 - Some (like prioritizing locations for increased shade and a data-driven approach to installing new sidewalks) have a specific equity element.
- A separate data-driven prioritization approach in this plan will guide where pedestrian capital projects are targeted
 - Anticipate a strong emphasis on Equity Focus Areas for implementation

B-1: Build more sidewalks faster

Key Actions

B-1a: Pivot the Annual Sidewalk Program from a reactive, request-driven process to an equitable, data-driven process.

B-1b: Reimagine public engagement for sidewalk construction to ensure that valuable local perspectives can be shared while pedestrian safety and connectivity improvements are not delayed.

B-1c: Require all new public buildings, as well as major renovations, to design and construct bikeways and walkways along their frontage that are recommended in master plans and the Complete Streets Design Guide, as well as dedicate right-of-way where required.

B-1d: Require that new and reconstructed sidewalks achieve at least a "somewhat comfortable" rating using the Pedestrian Level of Comfort tool.

B-1e: Explore use of temporary materials to create dedicated pedestrian spaces where sidewalks are not feasible.

B-1f: Amend Montgomery County's Residential Permit Parking Guidelines to allow MCDOT to remove residential permit parking areas in support of another transportation purpose.

B-2: Pedestrians should not have to press a button to cross the street

Key Actions

B-2a: Make **pedestrian recall the default configuration** for signalized intersections in Downtowns and Town Centers and adjacent to rail and bus rapid transit stations, schools, parks, and community centers.

B-2b: Implement **passive detection** (such as sensors) to eliminate the need for pedestrians to press a button to safely cross the street in areas where pedestrian recall is not desirable.



B-3: Create direct and accessible street crossings

Key Actions

B-3a: Update state and county design standards to reflect a preference for perpendicular curb ramps aligned with the crosswalk.

B-3b: Update the Complete Streets Design Guide to establish ladder-style, high-visibility crosswalks as the default crosswalk design in Montgomery County.

B-3c: Construct raised crossings across all driveways and at intersections between residential street types (Neighborhood Streets and Neighborhood Yield Streets) and higher classification streets through capital projects and as a requirement for private development.

B-3d: Provide marked crosswalks and Accessible Pedestrian Signals (APS) at all legs of an intersection where there are connecting sidewalks or comfortable streets.



A raised crossing at sidewalk-level across a low-speed, low-volume street. Photo: Vladimir Zlokazov

B-4: Build more walkable places

Key Actions

B-4a: Use master planning processes to focus growth in Downtowns, Town Centers and along Growth Corridors to expand walkable places in the county.

B-4b: Site schools and other public buildings to prioritize providing safe and direct pedestrian access.

B-4c: Revise minimum acreage requirements for school sites to facilitate smaller school footprints better integrated into adjacent communities.

B-4d: Update the Complete Streets Design Guide to include a transit corridor overlay to provide additional context-based guidance on crossings and target speeds.

B-4e: Create a grid of streets and alleys along transit corridors with block sizes based on the protected crossing spacing standards in the Complete Streets Design Guide.

B-4f: Develop and implement a comprehensive pedestrian wayfinding system for the county.

B-4g: Develop and implement a comprehensive pedestrian wayfinding system for the county.

B-4h: Provide public seating in Downtowns, Town Centers, and along Boulevards.

B-5: Light pathways and crossings

Key Actions

B-5a: Develop lighting standards for each street type and trails.

B-5b: Update the site lighting section of the Zoning Code to encourage pedestrian-scale lighting in context-appropriate areas of the county.

B-6: Shade pedestrian pathways

Key Actions

B-6a: Develop and implement a plan to improve shading along sidewalks with a focus on adding shade in Equity Focus Areas.

B-6b: Create a new Capital Improvement Program (CIP) project to plant and maintain new street trees, especially in areas with poor canopy coverage.

B-7: Create more pedestrian connections and formalize pedestrian shortcuts

Key Actions

B-7a: Increase funding for the Annual Sidewalk Program and other related capital improvement program efforts to address missing, broken, or substandard sidewalks and other infrastructure.

B-7b: Create a new Capital Improvement Program (CIP) project to build, reconstruct and resurface masterplanned pedestrian shortcuts, Neighborhood Connectors and other pedestrian connections.

B-7c: Create a new Capital Improvement Program (CIP) project to build pedestrian and bicycle connections to park land.

B-7d: Preserve paper streets and other rights-of-way if they could potentially provide future pedestrian connectivity benefits, like pedestrian shortcuts.

B-7e: Update development standards to require or incentivize new developments to connect to nearby sidewalks and trails that exist or may be built in the future.

B-7f: Fund pedestrian and bicycle access improvement to transit stations concurrently or as part of transit projects.

B-8: Reduce natural barriers to walking

Key Actions

B-8a: Develop a park access master plan to identify new pedestrian connections to and through parkland.

B-8b: Use environmentally sensitive trail materials and construction approaches to provide pedestrian connections through parkland.

B-8c: Write Forest Conservation Plans to allow accessible pedestrian pathways to make important connections and rewrite existing Forest Conservation Plans to allow pathways where it would be beneficial for pedestrian connectivity.

B-8d: Require development projects in areas with impervious surface caps or other similar limitations to prioritize construction of all required sidewalks and bikeways to standard dimensions.

B-8e: Study adjusting impervious surface caps in relevant Special Protection Areas (and other areas with impervious surface restrictions) to take into account the perviousness of planned pedestrian pathways and bikeways.

B-9: Make traffic calming easier to implement

Key Actions

B-9a: Study adjusting impervious surface caps in relevant Special Protection Areas (and other areas with impervious surface restrictions) to take into account the perviousness of planned pedestrian pathways and bikeways.

B-9b: Deemphasize pedestrian volumes as a determining factor in deciding where pedestrian or connectively improvements are installed.

B-10: Assume county control of state highways

Key Actions

B-10a: Develop a plan to assume control of state roadways in Downtowns, Town Centers, and along master-planned BRT corridors in Montgomery County.

B-11: Make more restrooms available to all

Key Actions

B-11a: Develop and implement a plan to provide public restrooms throughout the county in areas with high pedestrian activity.

B-12: Address curbside management

Key Actions

B-12a: Develop a curbside management plan and pilot innovative approaches to curbside management.

MAINTAIN

MA-1: Fix sidewalks proactively

Key Actions

MA-1a: Create a plan for proactively inspecting and repairing Montgomery County sidewalks equitably across the county and track implementation.

MA-2: Keep sidewalks and curb ramps clear

Key Actions

MA-2a: Amend Montgomery County's snow clearance requirement to specify that property owners are required to **clear a path at least 4 feet wide** on pathways in the public right-of-way adjacent to their property.

MA-2b: Conduct outreach to property owners regarding their **responsibility to keep sidewalks clear** of parked cars, trash receptacles, overhanging vegetation, snow, and other obstructions.

MA-2c: **Snow clearance should be the county's responsibility** on sidewalks along all Downtown Boulevards, Town Center Boulevards, Downtown Streets, Town Center Streets, and Bus Rapid Transit Corridors.

MA-3: Incorporate roadway maintenance into utility projects

Key Actions

MA-3a: Use repaving after utility work as a mechanism for upgrading crosswalks to a high-visibility design and the maintenance of other pavement markings as needed.

PROTECT

P-1: Disincentivize dangerous vehicles

Key Actions

P-1a: Ensure county and public agency vehicles are safe for pedestrians.

P-1b: County and public agency vehicles should have speed governors installed to ensure their drivers adhere to the speed limit.

P-1c: Develop a strategy to purchase emergency vehicles that can navigate narrower streets and tighter curb radii while maintaining appropriate performance standards.

P-1d: Develop legislation to create a new class of commercial driver's license required to operate vehicles with identified pedestrian safety and visibility issues.

P-1e: Develop legislation to improve the driver's license renewal process by implementing a knowledge test requirement.

P-2: Improve and expand protected crossings

Key Actions

P-2a: Develop a methodology **for identifying and prioritizing implementation of new protected crossings** at mid-block or uncontrolled locations based on roadway characteristics and other relevant criteria.

P-2b: **Establish standards for the distance between bus stops and the nearest protected crossing** to encourage pedestrians to cross the street at safe locations.

P-2c: Make No Turn on Red (NTOR) the default in Downtowns and Town Centers and evaluated elsewhere on a case-by-case basis. Enforce NTOR using automated enforcement approaches.

P-2d: **Prioritize pedestrian crossings using Leading Pedestrian Intervals** along Downtown Boulevards, Downtown Streets, Town Center Boulevards, and Town Center Streets. Everywhere else, implement LPIs within a certain distance of schools, parks, and community centers along those roadways.

P-2e: Reduce pedestrian wait times by **developing a policy on target and maximum traffic signal cycle lengths** by street type.

P-2f: Update the Complete Streets Design Guide and Executive Regulations to **make pedestrian median refuges a high priority for intersections with six or more lanes**, including through lanes, turning lanes, and auxiliary lanes.

P-3: Design pedestrian-safe parking lots

Key Actions

P-3a: Develop parking lot design standards that improve safety and reduce conflicts between pedestrians and motor vehicles.

P-4: Prioritize data-driven roadway safety projects

Key Actions

P-4a: Use Montgomery Planning's Predictive Safety Analysis as the main tool for prioritizing safety improvements.

P-5: Educate and encourage pedestrians of all ages to walk safely

Key Actions

P-5a: Conduct pedestrian and bicycle safety educational programs in partnership with agencies such as Montgomery County Public Libraries, Montgomery County Public Schools, and Montgomery County Recreation.

P-5b: Shift the programming and education elements of the county's Safe Routes to School (SRTS) Program to Montgomery County Public Schools and create SRTS initiatives, including pedestrian/bicycle education, in individual schools.

P-6: Make the walk to school safer and more direct

Key Actions

P-6a: Prioritize locations for additional school crossing guards and advocate for additional funding.

P-6b: Fund Walking School Buses to reduce the need for motorized school buses.

P-6c: Develop and implement School Streets — partial roadway closures immediately adjacent to schools during arrival and dismissal — at several schools as a pilot.

P-6d: Develop and implement a countywide transportation demand management plan for schools addressing all school-related travel, including travel by students, parents, and staff members.

P-7: Address access management

Key Actions

P-7a: Implement recommendations in the Access Management Study

EXPAND ACCESS

EA-1: Reduce tripping hazards

Key Actions

EA-1a: Prioritize the repair of brick sidewalks that have identified accessibility challenges. Require new or rehabilitated brick sidewalks to be constructed using non-slip materials and with patterns, spacing and installation methods designed to minimize disturbance for wheeled vehicles.

EA-1b: Saw cut sidewalk joints to minimize vibrations for pedestrians using mobility devices or pushing strollers.

EA-1c: Strengthen existing regulations and the permitting process to ensure that utility cuts in sidewalks and legal crossings are quickly and appropriately repaired.

EA-2: Remove sidewalk obstructions

Key Actions

EA-2a: Identify and relocate permanent vertical obstructions (like utility poles) that result in pedestrian clear zone widths that are not ADA-compliant.

EA-2b: Move existing utility boxes and traffic signal control cabinets out of the sidewalk into the street buffer or underground. Ensure that new utility boxes and traffic signal control cabinets are not installed in the sidewalk.

EA-2c: **Develop regulations for autonomous robots** and other similar devices using pedestrian space.

EA-2d: Expand on-street parking corrals for dockless vehicles in high-use areas and coordinate with operators to provide incentives to encourage their use.

EA-3: Provide pedestrians more time to cross the street

Key Actions

EA-3a: Lower the pedestrian walking speed standard at signalized intersections frequented by older pedestrians, younger pedestrians, and those with disabilities.

EA-3b: Exclude the pedestrian crossing signal buffer interval when calculating pedestrian clearance times so pedestrians have more time to safely cross the street.

EA-4: Make pedestrian signals more accessible

Key Actions

EA-4a: Identify and modify Accessible Pedestrian Signals/Pedestrian Push Buttons in the county that are incorrectly installed or are inaccessible to wheelchair users.

EA-4b: Ensure every pedestrian push button has a light that informs pedestrians when the pedestrian phase has been triggered.

EA-4c: For Accessible Pedestrian Signal (APS) locations where every signal cycle has a pedestrian phase, provide signage that pressing the button is not required to cross the street.

EA-5: Improve guidance for pedestrians with low or no vision

Key Actions

EA-5a: Develop standards on the use of tactile walking surface indicators in the pedestrian and transit networks.

EA-5b: Provide subsidized orientation and mobility specialist travel training sessions for those who may not be able to afford them.

EA-6: Provide more opportunities for accessible park experiences

Key Actions

EA-6a: Create a framework for natural surface trail accessibility to ensure that as many natural surface trails as possible are accessible to people with disabilities.

EA-6b: Develop Accessible Sensory Trails in parks across Montgomery County.

EA-7: Exceed existing accessibility requirements

Key Actions

EA-7a: Modify the County Code and associated regulations to include additional accessibility requirements that address barriers to traveling to and through all commercial, residential, and institutional buildings for people with vision, hearing, cognitive and other types of disabilities.

EA-8: Regulate shared spaces

Key Actions

EA-8a: Pursue a modification to the Maryland Code clarifying that drivers, bicyclists, and scooter riders are required to yield the right of way to pedestrians on shared streets and that drivers are also required to yield to bicyclists and scooter riders.

EA-8b: Pursue a modification to the Maryland Code clarifying that drivers, bicyclists, and scooter riders are required to yield the right of way to pedestrians on shared streets and that drivers are also required to yield to bicyclists and scooter riders.

EA-9: Make work zones more accessible

Key Actions

EA-9a: Require anyone who works in the public right-of-way to take ADA training and maintain ADA certification. Implement penalties for observed ADA noncompliance during construction or maintenance that deviates from what was approved on right-of-way permits. Approved right-of-way permits should be easily accessible so members of the public can understand what has been approved.

MONITOR

MO-1: Track implementation of the Pedestrian Master Plan

Key Actions

MO-1a: Develop a Pedestrian Master Plan Biennial Monitoring Report.

MO-1b: Conduct a Biennial Pedestrian and Bicycle Survey.

MO-1c: Conduct a student travel tally annually.

MO-1d: Develop a public-facing dashboard that shows sidewalk coverage and other pedestrian metrics.

MO-2: Conduct a pedestrian 311 equity review

Key Actions

MO-2a: Conduct a study to determine how 311 reporting of pedestrian safety and accessibility concerns is distributed across the county and whether reliance on 311 leads to inequitable outcomes.

FUND

F-1: Identify new revenue sources to fund pedestrian improvements

Key Actions

F-1a: Price parking spaces in county-operated facilities at market rates and use net proceeds to fund pedestrian, bicycle, and safety projects in the surrounding community.

F-1b: Implement a non-regressive tax to fund pedestrian and safety improvements.

F-1c: Develop a plan to increase Automated Traffic Enforcement ticket fines to match those in neighboring jurisdictions and use the revenue to fund safety improvements.

F-1d: Develop legislation to tie vehicle registration fees to safe vehicle design.