Transportation Needs Assessment

Bicycle and Pedestrian Advisory Group

July 16, 2025

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Agenda

- **Project Overview**
  - Needs Assessment Project Overall
  - Public Research:
    - Survey
    - Focus Groups
- **Research Findings**
  - Overall Transportation System
  - Modes & Accessibility
  - System Safety
  - Environment
  - Future Investment & Priorities
- **Draft Policy Recommendations**
- **Questions?**

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Project Overview

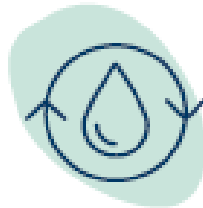# Project Framed Around Long-Range Transportation Plan Goal Areas

Improve
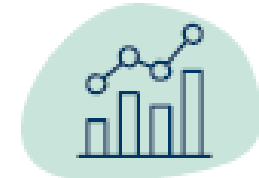Accessibility

Increase
Mobility

Improve
System Safety

Improve & Maintain
Existing Infrastructure

Implement Environmentally
Responsible Transportation
Solutions

Improve
System Security

Promote Prosperity &
Economic Opportunity

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Project Framed Around Long-Range Transportation Plan Goal Areas

- Project will inform:
  - **strategies** associated with each goal – are we accounting for the needs, barriers, and priorities we learned about?
  - **Performance measures** – are we measuring and tracking the right things?
  - **Project scoring criteria** – are we evaluating potential LRTP projects based on the needs, barriers, and priorities we learned about?

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Project Schedule

Review Existing Surveys & Research

January

Analyze Existing Conditions

February

Facilitate Focus Groups & Survey

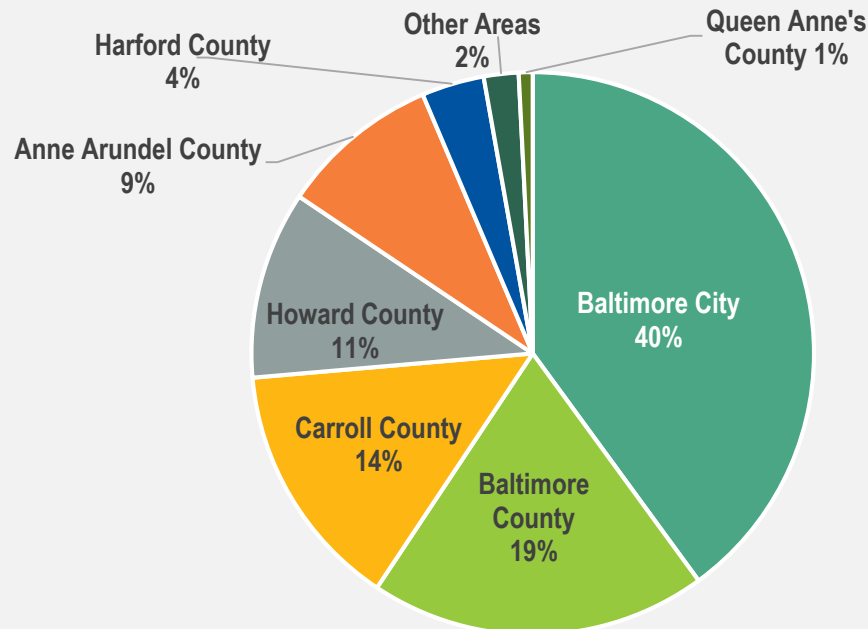March-May

Analyze Results, Metrics, & Policy

June-July

Present Findings

July

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Public Engagement

Public Survey

- Online survey administered March—April with 859 Responses
- Gathered public opinions and experiences about the transportation system from participants from across the region

Pie chart:
- Baltimore City 40%
- Baltimore County 19%
- Carroll County 14%
- Howard County 11%
- Anne Arundel County 9%
- Harford County 4%
- Other Areas 2%
- Queen Anne's County 1%

Focus Groups

- Four virtual focus groups were conducted in May

- Focus groups were designed to gather in-depth feedback on:
  - Transportation system overall
  - Key needs and barriers
  - Future priorities

- 31 participants overall

Key Response Groups

Mode User Groups

- **Drivers** (84%) – All who report **driving themselves** regularly.

- **Transit Riders** (43%) – All who report using **light rail, metro, public bus, commuter rail, or paratransit** regularly.

- **Active Mode Users** (66%) – All who report **walking, rolling, biking, or scooting** regularly.

Lower Opportunity Areas

The BRTB wanted to understand any **key differences in the transportation experience** of respondents from lower opportunity areas (LOAs).

The survey received **250 responses** from individuals living in LOAs.

LOA responses:
- Baltimore City (74%),
- Baltimore County (16%),
- Anne Arundel (6%);
- 2% or less come from Harford and Carroll.

Opportunity Quintiles in the Baltimore Region
- Very High Opportunity
- High Opportunity
- Moderate Opportunity
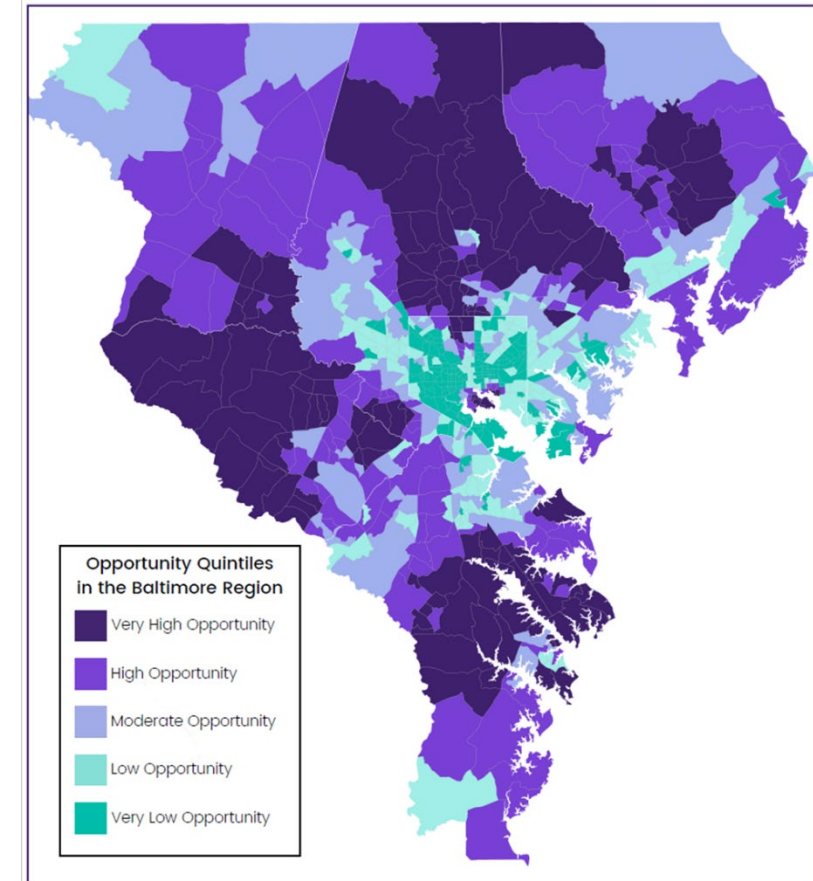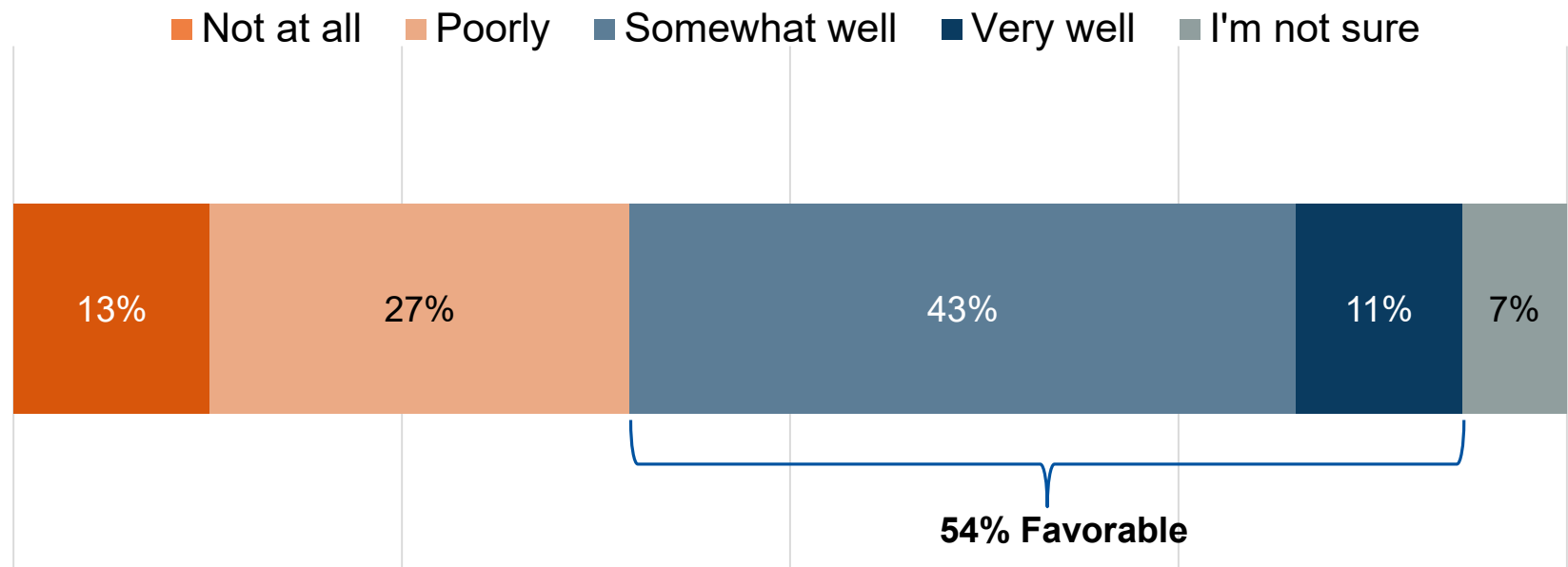- Low Opportunity
- Very Low Opportunity

Figure: Baltimore Regional Housing Partnership Opportunity Area Map. Areas shaded in green are LOAs.

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Overall Transportation System

Overall Transportation System

How well does the transportation system meet your travel needs (n=728)

Legend: ■ Not at all ■ Poorly ■ Somewhat well ■ Very well ■ I'm not sure

| 13% | 27% | 43% | 11% | 7% |

54% Favorable

Favorability (Somewhat well or very well)	
LOAs	**58%**
Anne Arundel	49%
Baltimore City	60%
Baltimore County	52%
Carroll County	47%
Harford County*	33%
Howard County	50%
Other*	78%

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Overall Transportation System

Respondents in **Baltimore City** (60%), **transit riders** (63%) and **active mode users** (59%) are most likely to say the system meets their needs "somewhat well" or "very well."

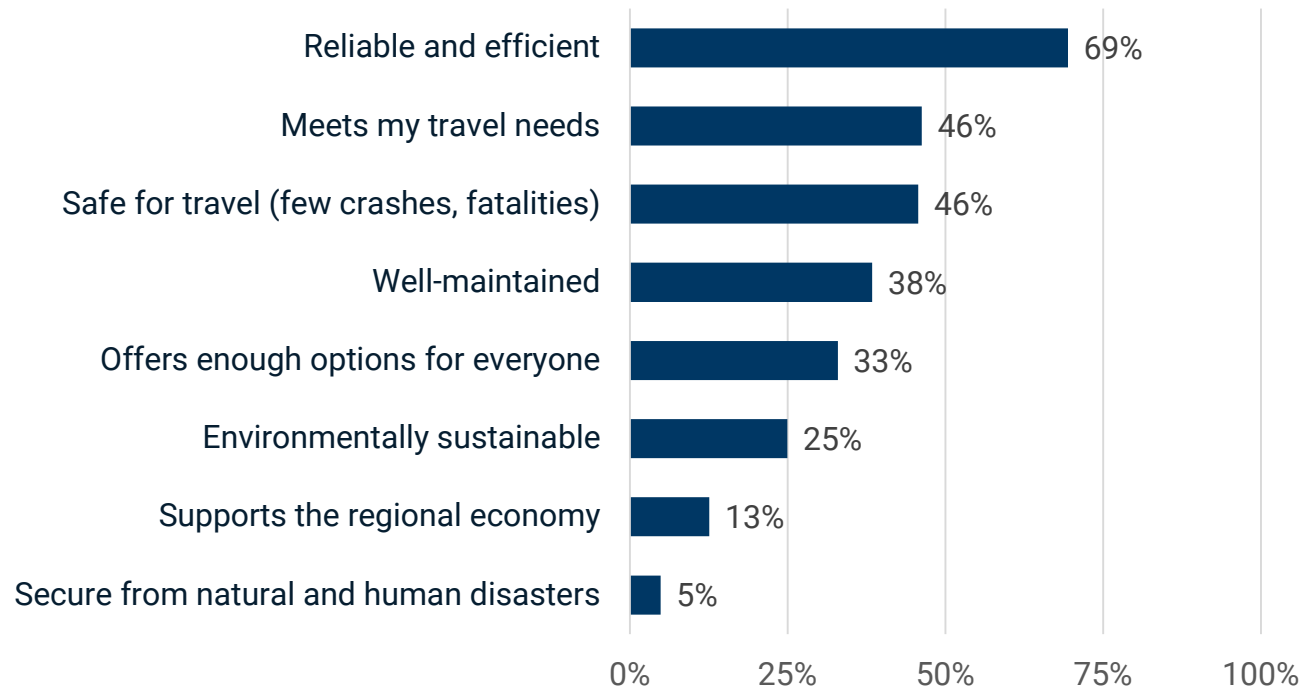Focus group participants suggest that having **options** is key:

"I think it's a tough question for me because [my travel] feels limited, but it's not. **I run, I walk, I bike, I have a car, I take the circulator, I take the harbor connector, I take a bus**. But which one you use depends on where you're going. I couldn't use 1 or 2 of those options exclusively."
(Baltimore City, age 46-55, male)

"I just like a combination of [transportation options]. There are times that you really enjoy having your car and the freedom. …**always relying on one mode seems not the best idea.** …if you do want a little time to get things accomplished without having to pay attention to the road, maybe catch up on work on your way home, to have that option of public transportation would be lovely.
(Carroll County, age 46-55, female)

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Reliability and efficiency were most important for the majority of survey respondents

Thinking about the transportation system, which of the following are most important to you?

Choose up to three (3). (n = 713)

Category	Percent
Reliable and efficient	69%
Meets my travel needs	46%
Safe for travel (few crashes, fatalities)	46%
Well-maintained	38%
Offers enough options for everyone	33%
Environmentally sustainable	25%
Supports the regional economy	13%
Secure from natural and human disasters	5%

"I never gave [owning a car] a second thought when I moved out here. My children had cars, and my husband had cars, and we just zipped everywhere we wanted to go. **I never thought it would be an issue**, until I got older and realization set in."
(Baltimore County, age 75+, female)

"… connecting areas to **transit options increases the economic value** of those areas. **People want to live where they can easily commute**. I think for Baltimore, it's a long history… [but] Baltimore's mass transit system is not really up to standard compared to other metro systems, and so **people find it unreliable… it's also cultural**. "
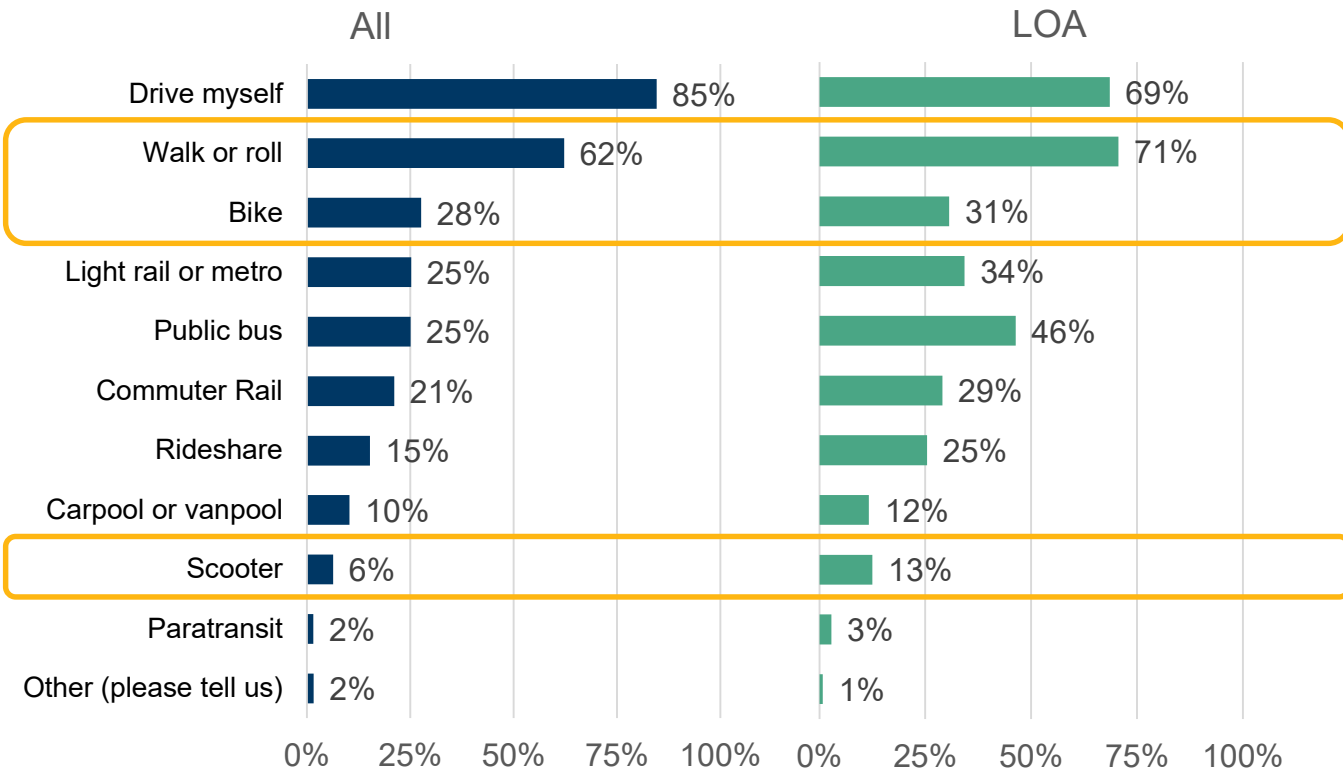*(Howard County, age 26-35, male)*

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Modes & Accessibility

Two in three respondents (66%) say they use active modes - walk or roll, bike, or ride a scooter - for at least some trips

What kinds of transportation **do you use**? (n = 854)

All

Mode	%
Drive myself	85%
Walk or roll	62%
Bike	28%
Light rail or metro	25%
Public bus	25%
Commuter Rail	21%
Rideshare	15%
Carpool or vanpool	10%
Scooter	6%
Paratransit	2%
Other (please tell us)	2%

LOA

Mode	%
Drive myself	69%
Walk or roll	71%
Bike	31%
Light rail or metro	34%
Public bus	46%
Commuter Rail	29%
Rideshare	25%
Carpool or vanpool	12%
Scooter	13%
Paratransit	3%
Other (please tell us)	1%

Across all jurisdictions nearly half or more of all respondents say they walk or roll for at least some trips (47% Carroll − 82% Baltimore City).
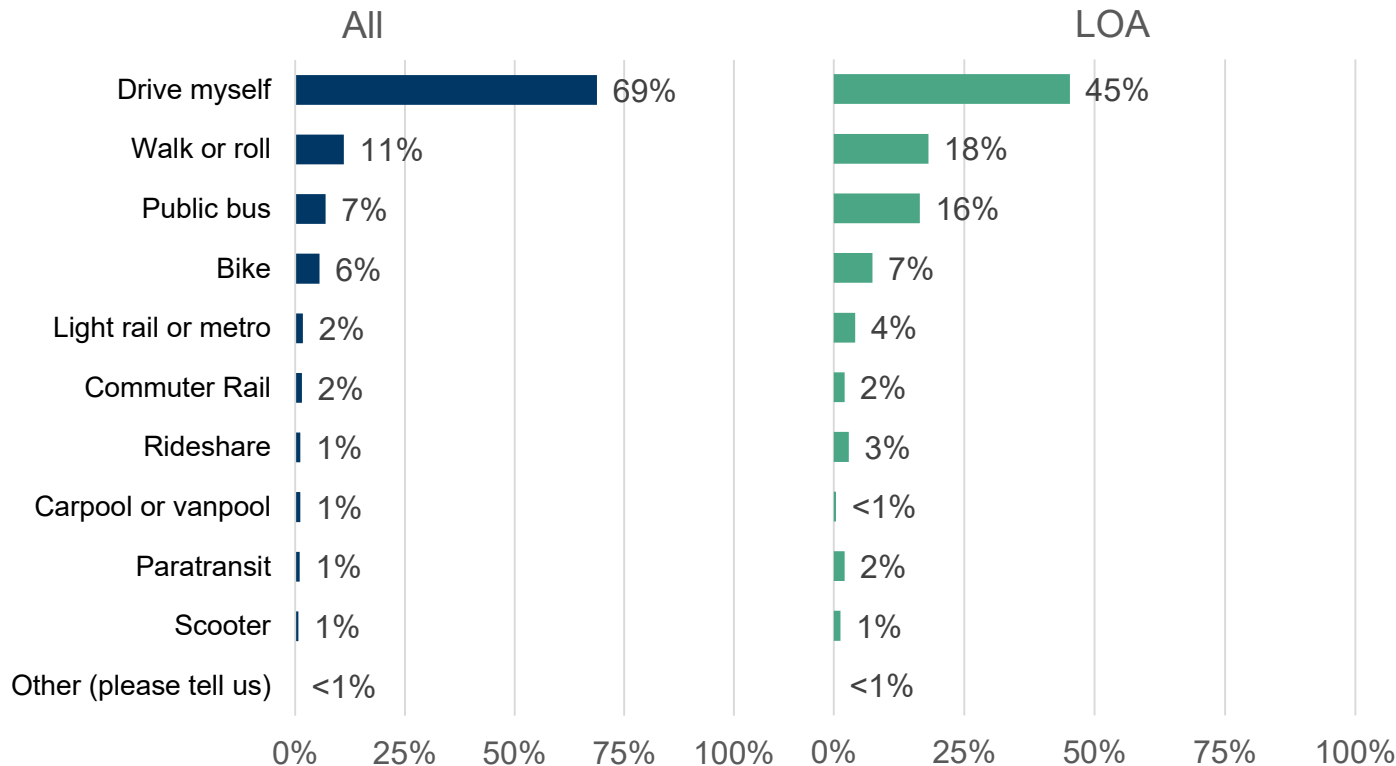
Bike riding varied widely by jurisdiction (7% Carroll County − 44% Baltimore City), but was less varied between homes in LOAs (31%) and those not in LOAs (26%).

Among those who use active modes for a least some trips 95% walk, 42% bike, and 10% ride a scooter.

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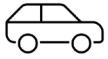
More than two-thirds of respondents say they drive as their primary mode of transportation

Which of these do you **use most often**? (n = 846)

	All	LOA
Drive myself	69%	45%
Walk or roll	11%	18%
Public bus	7%	16%
Bike	6%	7%
Light rail or metro	2%	4%
Commuter Rail	2%	2%
Rideshare	1%	3%
Carpool or vanpool	1%	<1%
Paratransit	1%	2%
Scooter	1%	1%
Other (please tell us)	<1%	<1%

Driving is the mode used most often in all jurisdictions. At least 80% say they most often drive in all jurisdictions, except in Baltimore City where only 37% chose driving as their top mode.

A quarter (25%) of Baltimore city residents say they walk or roll most often; no more than 4% say the same in other jurisdictions.

60% of respondents who use active modes for some trips say they drive most often.

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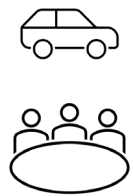
For most participants driving feels like a necessity for many or most trips, regardless of where they lived.

Many said it would be impractical or impossible to get to some places without a vehicle.

Others felt cars were just more practical or convenient.

"...Any trip I take will involve the car at some point...I couldn't live without a car."
*(Carroll County, age 46-55, male, Asian or Asian-American)*

"[I'm] limited with my transportation options, because I don't drive...so when people ask me if I can do stuff, whether it's work or personal things, **I always have to take into account if I'm able to physically get there**, and sometimes I can't."
(Baltimore County, age 26-35, gender unstated, multiracial)

"I can't even go to a grocery store without having to drive somewhere. I understood that when I moved here, but...there's nothing around here that appears to be really walkable. They have trails, but the trails don't take you to a store. You still have to get into the car. You can't go to church without a car. **You can't go anywhere without a car...I feel as though they're designing me to stay here**." (Howard County, age 66-75, female, race unstated)

"Baltimore is a car culture...that's how I grew up, and that's what I need for work, at least as far as I've figured out."
(Baltimore City, age 36-45, sex unstated, race unstated)

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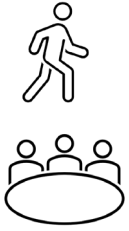
Many are interested in active transportation options

Many see walking, biking, and active modes as appealing for speed, reliability, and convenience.

"One reason I like bicycles is they don't get held up in traffic the same way that cars do. You know, if they – if there is a decent shoulder or bike lane, then you can get past a lot of traffic."
(Howard County, age 26-35, male, white)

"**I dream of being able to walk to work. Wow. That's an amazing concept.**
(Carroll County, age 66-75, female, white)

"I think really [for] my situation in particular, **[I want] more sidewalks and bike lanes** – I would like that probably more than public transportation...in a small town, it would be nice if we could really easily walk or bike around..."
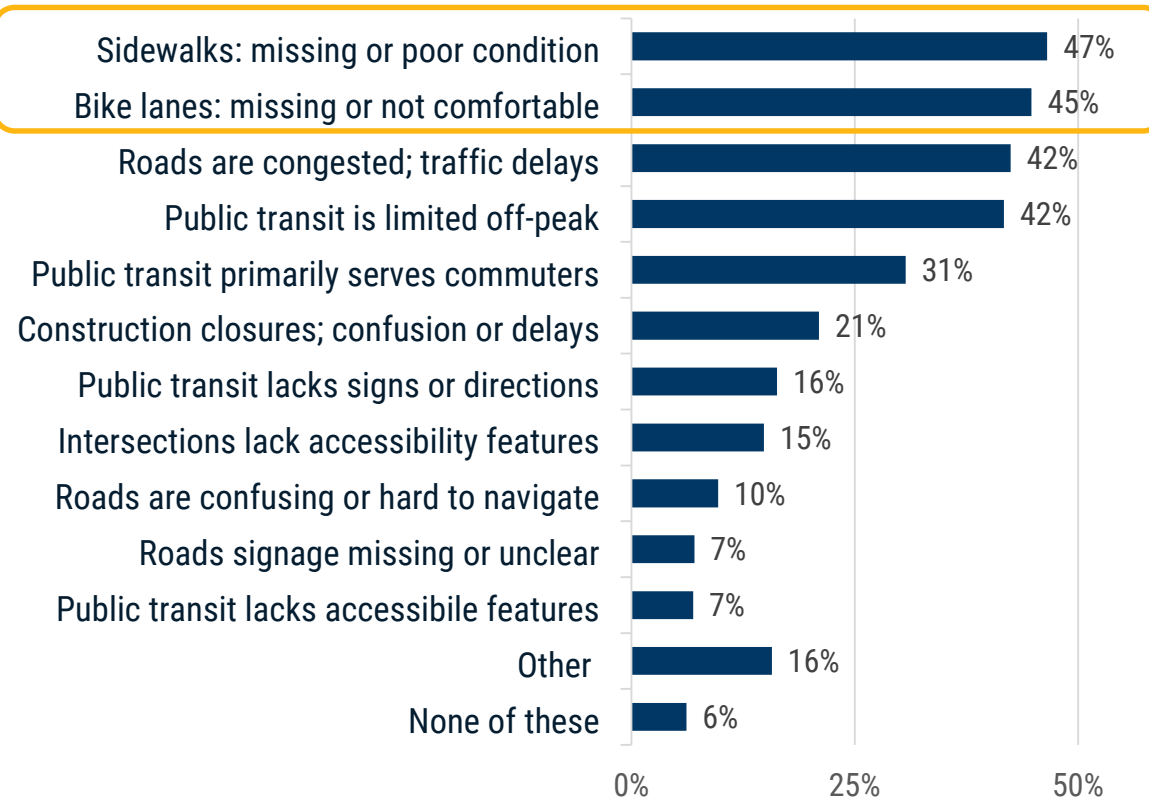*(Carroll County, age 46-55, female, white)*

"I do want to want to add though, that the like the electric scooters…I found I found those to be really great as a like, student… You know, I think the **scooters definitely help mitigate some of the issues you get with, like, not having other reliable modes**."
(Anne Arundel County, age 18-25, female, Black or African-American)

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Respondents said active transportation infrastructure, traffic congestion, and limited public transit are their top access concerns

What are your top use and access concerns about the transportation system?
Select up to five (5). (n = 681)

Concern	Percentage
Sidewalks: missing or poor condition	47%
Bike lanes: missing or not comfortable	45%
Roads are congested; traffic delays	42%
Public transit is limited off-peak	42%
Public transit primarily serves commuters	31%
Construction closures; confusion or delays	21%
Public transit lacks signs or directions	16%
Intersections lack accessibility features	15%
Roads are confusing or hard to navigate	10%
Roads signage missing or unclear	7%
Public transit lacks accessibile features	7%
Other	16%
None of these	6%

"I live less than a **half mile from the nearest grocery store** and little shopping center. But **I can't walk or ride a ride a bike there**, because we have no bike lane and no shoulder.
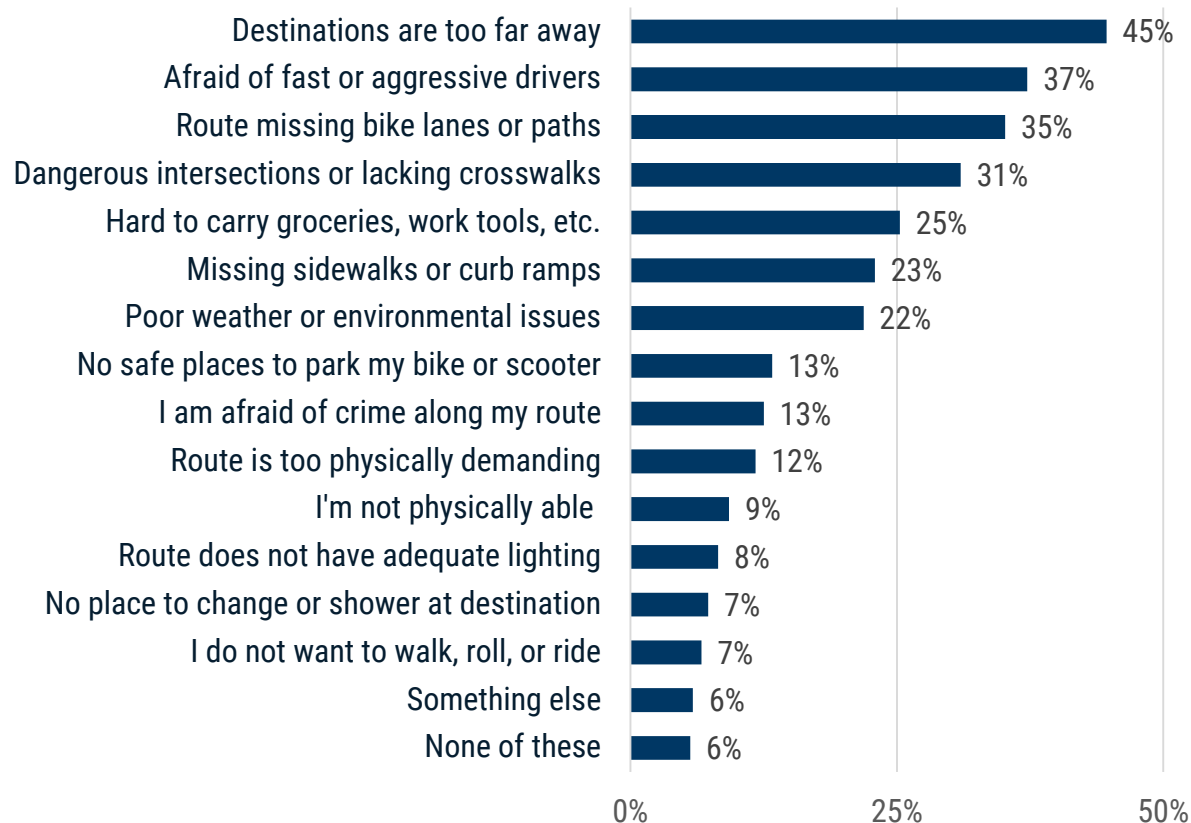*(Anne Arundel County, age 46-66, female, Multiracial)*

"695 is starting to look like a California freeway. I mean, it literally will come to a halt... places that used to take you 10 to 15 minutes... **you have to plan on, like 30 minutes**. [So] **the most frustrating thing for me is traffic.** It's the bane of my existence."
(Baltimore County, age 56-65, female, Black or African-American)

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Respondents say that distance, safety, and infrastructure keep them from choosing active modes more often

What stops you from using active modes (walking, using a wheelchair, or riding a bike or scooter) more often?
Select up to five (5). (n = 768)

Category	%
Destinations are too far away	45%
Afraid of fast or aggressive drivers	37%
Route missing bike lanes or paths	35%
Dangerous intersections or lacking crosswalks	31%
Hard to carry groceries, work tools, etc.	25%
Missing sidewalks or curb ramps	23%
Poor weather or environmental issues	22%
No safe places to park my bike or scooter	13%
I am afraid of crime along my route	13%
Route is too physically demanding	12%
I'm not physically able	9%
Route does not have adequate lighting	8%
No place to change or shower at destination	7%
I do not want to walk, roll, or ride	7%
Something else	6%
None of these	6%

Sixty-eight percent of respondents say they are **likely (30%) or very likely (38%) to use active modes more often** if these challenges were reduced or improved.

"**[I want] more sidewalks and bike lanes** – I would like that probably more than public transportation…**in a small town, it would be nice if we could really easily walk or bike around…**"
(Carroll County, age 46-55, female, white)

"Lights are run consistently…I don't understand…I never feared crossing a street. But [here] **I wait for a motorist to run the light because I know it's going to happen.**"
(Baltimore City, age 56-65, female, Black or African-American)

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Several said that their communities are not set up for using active modes, especially in suburban areas

For many outside of Baltimore City, the distance to places they want to go, or lack of walkable or bikeable routes is a barrier to active trips.

I guess when you choose to live in the suburbs, you're kind of choosing that far farther away from things balance. But I still feel like…it'd be nice if there were places to just go get some groceries or…like, the closest restaurant to get to is still like a 20-minute walk.
(Howard County, age 26-35, male, White)

"I know that the walkability score or the walk score for where I live is, like, five out of 100. Um, it's really what, um, Jill was saying. There's. There is no option but to drive. It is not safe. I live in a in a truly suburban neighborhood. There are no you can't get from here to there, except in a part that that's the only option that we have.
(Carroll County, age 66-75, female, White)

"I live less than a half mile from the nearest grocery store and little shopping center. But I can't walk or ride a ride a bike there. Um, because we have no bike lane and no shoulder.
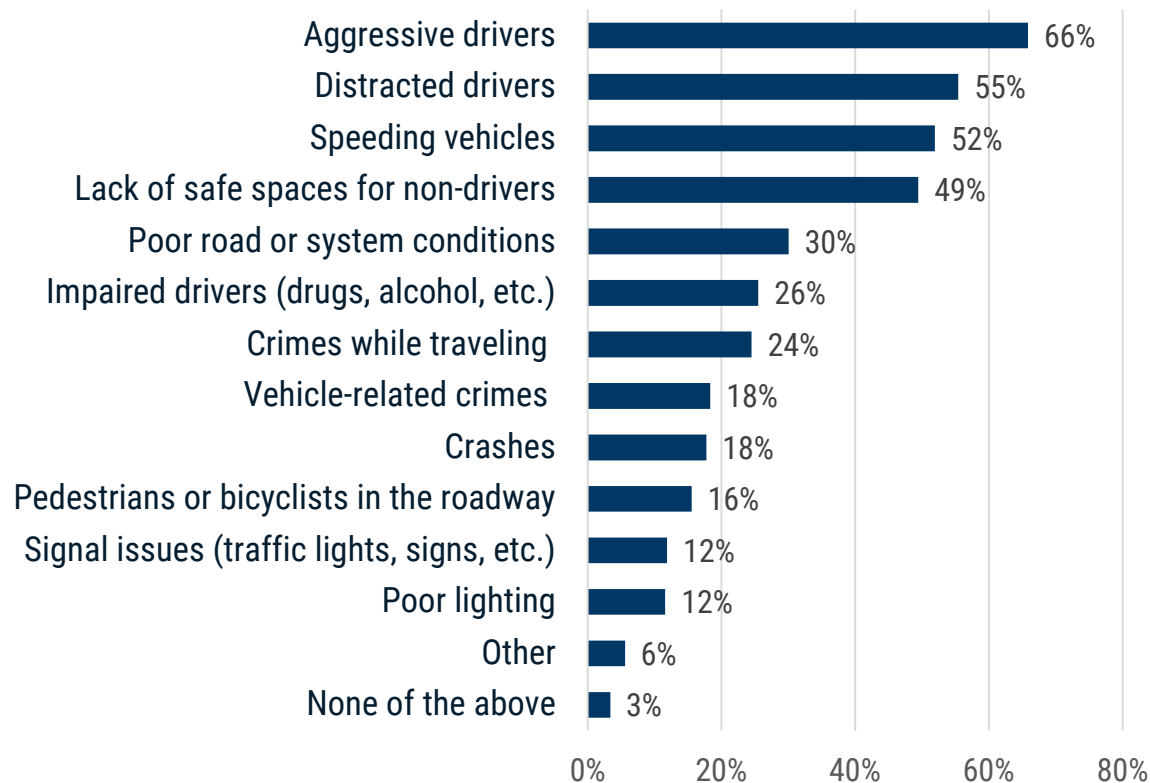*(Anne Arundel County, age 46-66, female, Multiracial)*

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System Safety

Driver behaviors, vehicle speeds, and safe spaces are respondents' top safety concerns on the transportation system

What are your top safety concerns with the transportation system?

Select up to five (5). (n = 682)

Concern	Percentage
Aggressive drivers	66%
Distracted drivers	55%
Speeding vehicles	52%
Lack of safe spaces for non-drivers	49%
Poor road or system conditions	30%
Impaired drivers (drugs, alcohol, etc.)	26%
Crimes while traveling	24%
Vehicle-related crimes	18%
Crashes	18%
Pedestrians or bicyclists in the roadway	16%
Signal issues (traffic lights, signs, etc.)	12%
Poor lighting	12%
Other	6%
None of the above	3%

"Sometimes you hop on the highway, and there's very **aggressive-driving folks, speeding past you**... there is also an epidemic in this city of texting and driving. I feel **like it's hard to go a single day without seeing somebody that's texting on their phone**."
(Baltimore City, age 18-25, gender unstated, multiracial)

"...Even just this morning, crossing Greenspring, this guy was [doing] **a 'Baltimore stop' -- a rolling stop**. And I was going through the intersection, and **[if] we'd have been just a half-second off, it would have been a collision**.
(Baltimore City, age 56-65, female, White)

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Participants would like to see more infrastructure and greater traffic enforcement to improve walking and biking safety

Participants consistently said that they would like to have more sidewalks, crosswalks, and bike lanes; and for drivers to follow traffic laws.

Many see cars and drivers as the root cause of safety issues, but say the impacts are felt across modes:

"I'm used to walking everywhere...[but] **I see drivers ignoring walking signals**...I wish there were no-turn-on-red signs here. I wish there were more **visible crosswalks**."
(Baltimore City, age 26-35, female, Hispanic or Latinx)

"My biggest [desire] would be having some protected bike lanes – either cut off completely from car traffic, or a totally separate path that runs parallel. **Just something that feels safe to bike on, for people who aren't experienced cyclists...there's painted bike lanes at some parts, but it's very patchwork**...**I'd like to see a complete network**, where you can actually get around places on a bicycle."
(Howard County, age 26-35, male, white)

"If we had sidewalks, [I would] 100% do that more than drive, because I don't think it's necessary to drive. I like to walk a lot, and I like to be outside. But if you don't feel safe...even with a shoulder, **when the cars are going 50 miles an hour past you as you're walking with your groceries, you feel like 'this is really such a bad idea, let alone on a bike**"
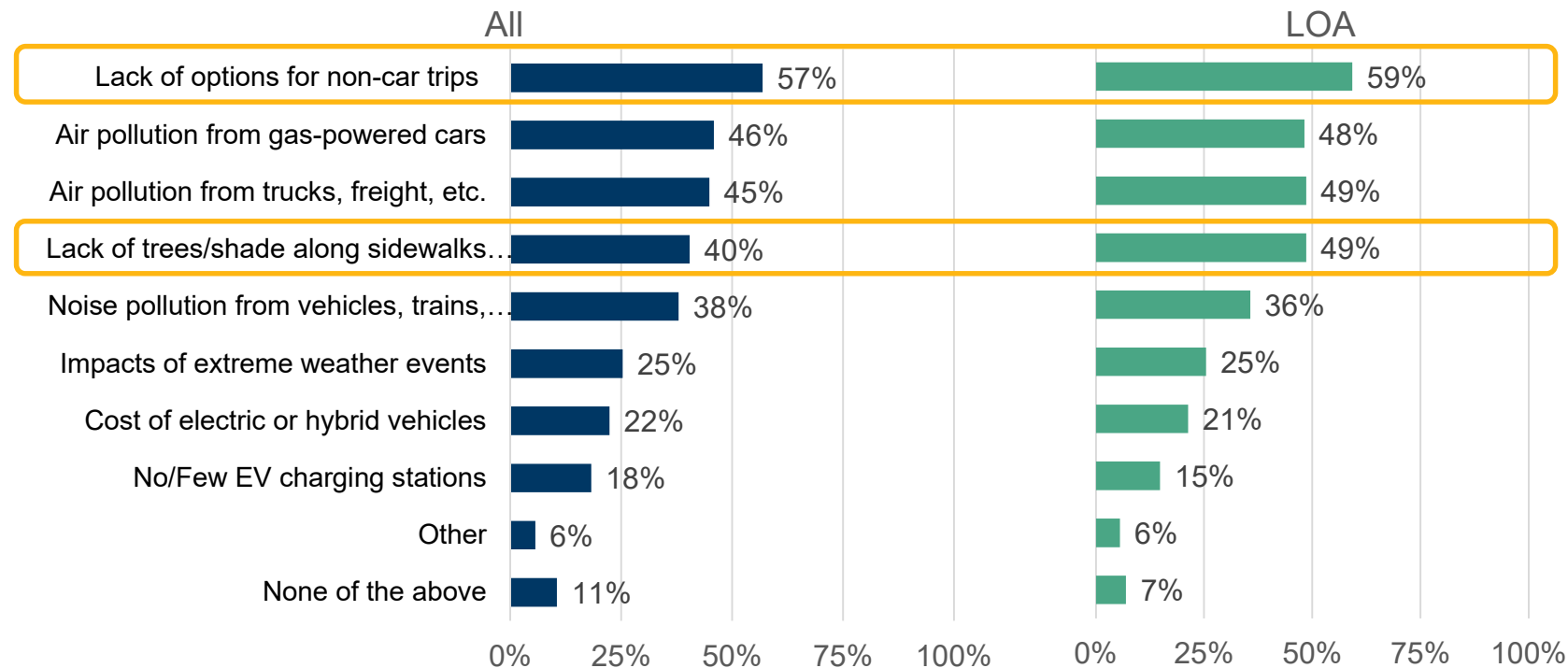*(Carroll County, age 46-55, female, white)*

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Environment

Availability of non-car transportation options, air and noise pollution, and lack of trees and shade were respondents' top environmental concerns

What are your top environmental concerns about the transportation system?
Select up to five (5). (n = 675)

|	All	LOA
Lack of options for non-car trips	57%	59%
Air pollution from gas-powered cars	46%	48%
Air pollution from trucks, freight, etc.	45%	49%
Lack of trees/shade along sidewalks…	40%	49%
Noise pollution from vehicles, trains,…	38%	36%
Impacts of extreme weather events	25%	25%
Cost of electric or hybrid vehicles	22%	21%
No/Few EV charging stations	18%	15%
Other	6%	6%
None of the above	11%	7%

A lack of options for non-car trips was the top environmental concern for respondents across all modes and jurisdictions, with 56% of drivers, 65% of active mode users, and 68% of transit riders citing it as a top concern.

A lack of trees and shade had the greatest variation in responses, ranging as a concern for 20% in Carroll County to 56% in Baltimore City.

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Investment & Priorities
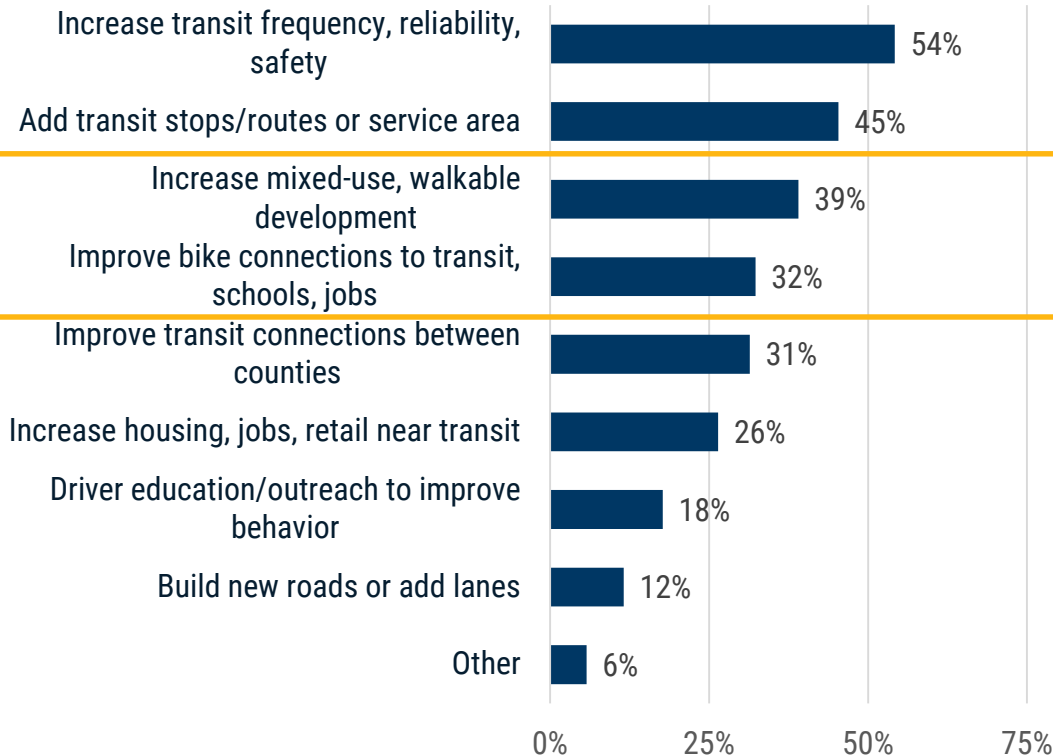
Future Investment & Priorities

Please tell us whether you agree or disagree with the following statement:
I would be willing to pay more (taxes, tolls, fares, or vehicle fees), for a better transportation system.
(n = 678)

■ Strongly disagree ■ Disagree ■ Agree ■ Strongly agree

| 12% | 21% | 44% | 24% |

68%
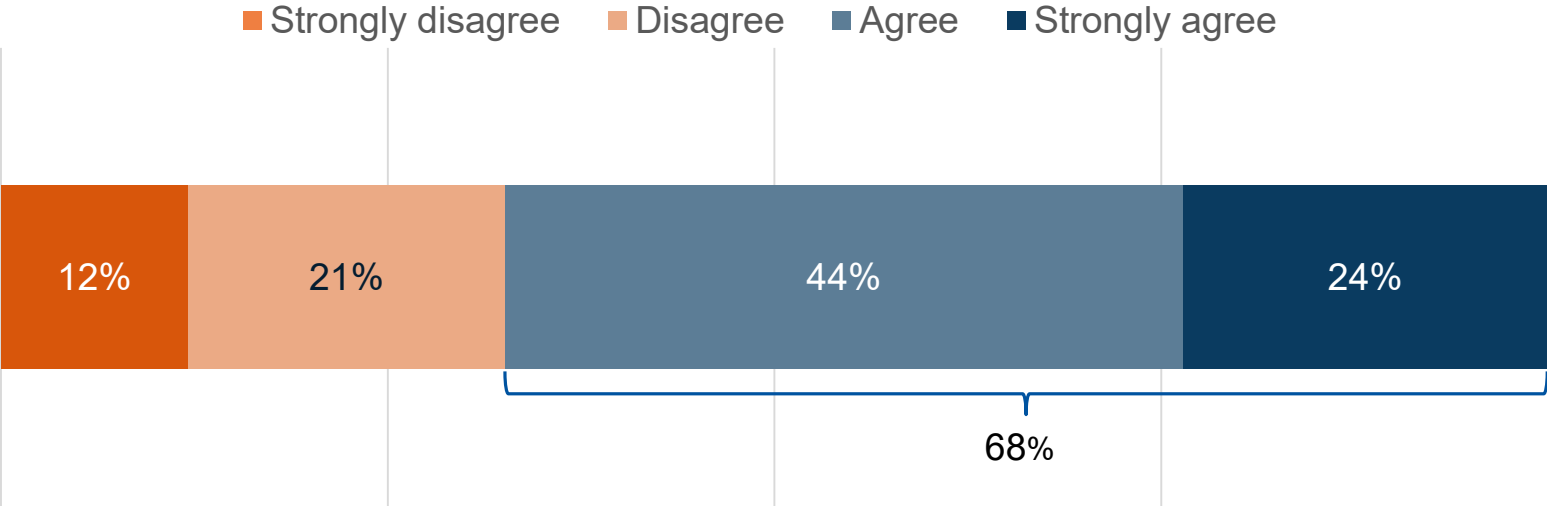
Willing to Pay More (Agree or Strongly Agree)	
LOAs	**68%**
Anne Arundel	59%
Baltimore City	80%
Baltimore County	56%
Carroll County	51%
Harford County*	54%
Howard County	71%
Other *	83%

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Future Investment & Priorities

What investments would you prioritize to improve transportation across the region?
Select up to three (3). (n = 666)

Category	Percentage
Increase transit frequency, reliability, safety	54%
Add transit stops/routes or service area	45%
Increase mixed-use, walkable development	39%
Improve bike connections to transit, schools, jobs	32%
Improve transit connections between counties	31%
Increase housing, jobs, retail near transit	26%
Driver education/outreach to improve behavior	18%
Build new roads or add lanes	12%
Other	6%

What investments would you prioritize to improve transportation in your local community?
Select up to three (3). (n = 673)

Category	Percentage
Increase public transit service	56%
Enforce traffic laws for unsafe driving	43%
Improve public transit infrastructure	41%
Add or improve bike lanes	36%
Add or improve sidewalks	33%
Add or improve multi-use trails	26%
Expand or improve local road and intersections	19%
Other	6%

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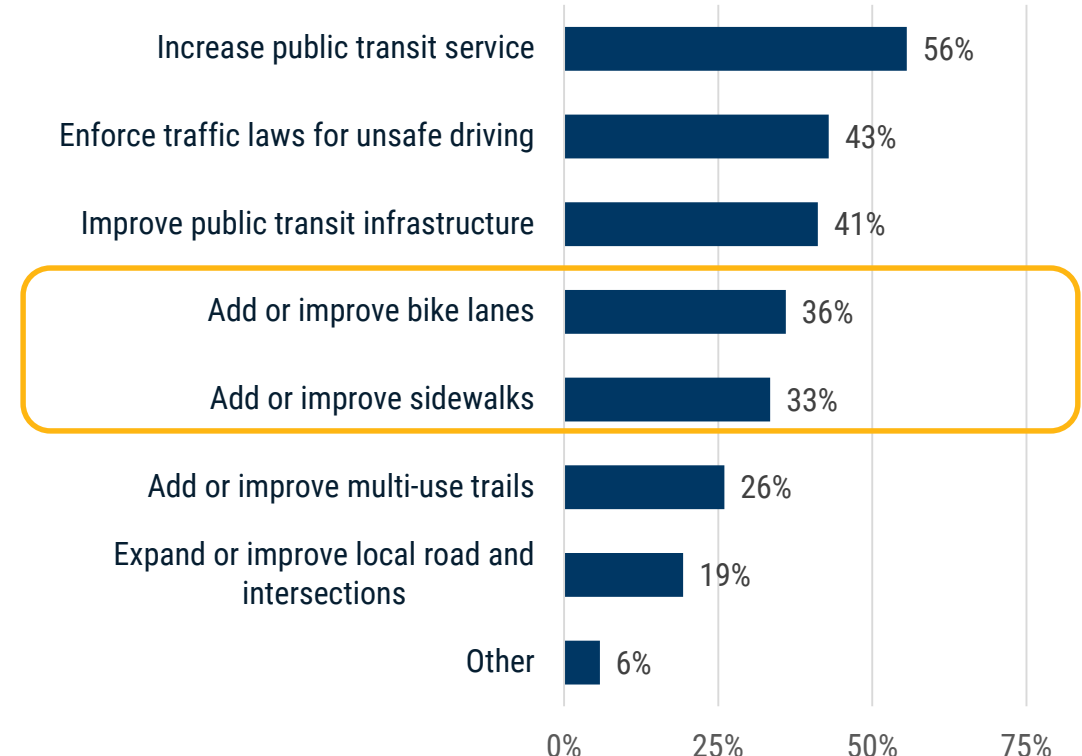
Preliminary Recommendations
Strategies & Scoring Criteria

Improve Accessibility

Current Strategies

A.	Increase transportation options and equity for all segments of the population, including minority and low income communities and disabled, elderly and carless individuals.
B.	Continue to improve conditions for pedestrians and transit riders to meet or exceed Americans with Disabilities Act requirements.
C.	Leverage transportation funds in coordination with other funds to provide affordable options for accessing necessities or amenities (such as jobs, health care, childcare, education).
D.	Continue to invest in high quality, safe, sustainable and comfortable bicycle and pedestrian facilities, with an emphasis on facilities that are separate from vehicular traffic and link to activity centers and public transit.
E.	Integrate strategies identified through the Coordinated Public Transit – Human Services Transportation Plan into regional planning and decision-making.
F.	Improve system connectivity and continuity among all modes and across geographic boundaries, including institutional and private systems, and greater coordination of investments, service and fare integration across the region's public transit system.
G.	Encourage the private sector to provide appropriate access on commercial properties for bicyclists, pedestrians, transit users and shared mobility users.
H.	Support operating policies that enable year-round, obstacle-free access to pedestrian, bicycle and transit facilities
I.	Improve frequency, reliability and operating hours of existing transit services.

Revise **Strategy I** to consider transit speed (in terms of overall trip duration) to better capture the extent to which transit is competitive with driving (i.e., mode competitiveness).

Draft Policy Recommendations Related to Active Transportation

Draft Recommendations
• **General:** Add a set of scoring criteria focused on active transportation (this recommendation is in process via UPWP project), expanding beyond the current roadway and transit scoring criteria
• **Accessibility**: Add a new project scoring criterion for **access to non-employment destinations** like healthcare, groceries, green space, etc. (existing strategy)
• **Environment**: Consider degree to which the project increases tree canopy coverage (e.g., USDA National Land Cover Database) as a new strategy and scoring criterion
• **Environment**: Consider degree to which the project reduces noise pollution (e.g., BTS National Transportation Noise Map) as a new strategy and scoring criterion
• **Economic Prosperity**: Add scoring criterion for shortening distance and trip times between essential origins and destinations (e.g., jobs-housing balance)
• **Safety**: Add a strategy and associated scoring criteria to address **unsafe driving behaviors** through infrastructural as well as educational countermeasures

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Next Steps

Next Steps

- Expand and further detail policy recommendations

- Final report synthesizing literature review, analysis of existing conditions, survey and focus group findings, and policy recommendations

- Video showcasing follow-up interviews with focus group participants

- Presentation to BRTB (July 22)

Project Contacts

Zach Kaufman, BMC

zkaufman@baltometro.org

Walker Freer, ICF

Walker.Freer@icf.com

Mike Morris, PRR

mmorris@prrbiz.com

@BaltoMetroCo   @Baltimore-Metropolitan-Council