OPERATIONALIZING EQUITY

Transportation Safety

August 1, 2025

Presented by

Em Hall, Ph.D
Transportation Planning Division

Emily Gallo, AICP, ENV SP
Moderator

Bjorn E. Hansen, AICP CTP
SOTP Co-Editor

Definitions and Future Events

Equity Statement for 2025 State of Transportation Planning Report

Equity in planning starts with a broad perspective of equity as fair and just inclusion in a society where everyone can participate and thrive. Equity in transportation planning is a value-driven approach that recognizes the inequities that past discriminatory practices may have caused. These inequities need to be considered and ideally rectified in current transportation planning activities. The transportation planning community strives to provide transportation improvements through a holistic approach, recognizing that communities have unique needs and challenges. The goal of these efforts is a society where everyone shares in the benefits and burdens of the overall transportation system.

September 22 – Collaborative Stakeholder and Community Engagement

November 20 – Transit and Active Transportation

January 29 - Community and Economic Opportunity

Moderator

Emily Gallo, AICP, ENV SP

With 18 years of industry experience, Emily Gallo, AICP, ENV SP is Vice President and Director of Infrastructure and Mobility Equity at HNTB, where she leads inclusive transportation solutions. She previously served as Chief of Staff at NYC DOT, advancing safety and equity initiatives, and held policy roles at the NYC Taxi and Limousine Commission and Mayor's Office. Emily co-chairs the Urban Land Institute New York Infrastructure Council, serves on boards for the NYU Rudin Center for Transportation and Tri-State Transportation Campaign, and was named one of New York City & State's Responsible 100 of 2024. She has an Masters of City and Regional Planning from UPENN and a B.A. from Yale University.

Let's turn to you:
who's here and what matters

Presenters

Kimberly Burton, P.E., AICP CTP, LEED AP ND, CC-P

Kimberly Burton is the President of Burton Planning Services and an Associate Professor of Practice in City & Regional Planning at the Ohio State University. She is a professional engineer, certified planner with advanced specialty in transportation planning, and LEED accredited professional in neighborhood development. She has over 20 years of experience working in the public and private sectors on a wide variety of planning, engineering, and environmental projects. In addition, Ms. Burton teaches courses in City & Regional Planning at the Ohio State University. In this role, she teaches courses on future cities to help students envision how to plan for cities in the future and prepare for their future careers.

Faith Chojar

Faith Chojar is a Project Manager in the Bus Priority unit in the Transit Development group for the New York City Department of Transportation (NYC DOT). Faith works on street improvement projects across New York City which aim to improve bus and pedestrian safety. Her work is grounded in a holistic approach to transportation planning, using it as a tool to foster more equitable and connected communities. Faith received a BA in Anthropology and Geography from SUNY Geneseo and an MA in Geography and Urban Planning from Binghamton University.

Derek Chisholm, AICP, ENV SP, LEED GA

Derek is an urban planner and designer, and a senior-level project manager, with 30 years of experience. Derek now serves as AECOM's National Business Line Lead for Complete Streets and is the Local Leader of the New Orleans office, which has eight distinct work groups and approximately 200 staff. Derek has managed successful visioning projects, NEPA studies, transportation plans, and downtown/ Main Street projects. Derek has been a Planning Commission Chair, Adjunct Professor, on the Board of Directors for the APA and Washington Trust. Derek is contributing author for the ASCE book *Engineering for Sustainable Communities*, and the book *Bicycle Urbanism*.

Current Trends in Transportation Safety

Nationwide Policies & Programs

Presenter:
Kimberly Burton, PE, AICP CTP, LEED AP ND, CC-P
https://www.linkedin.com/in/kaburton/

August 1, 2025

Outline

What are the issues?

Why do we have these issues?

Who is affected? (How is equity connected?)

How are we addressing these issues?

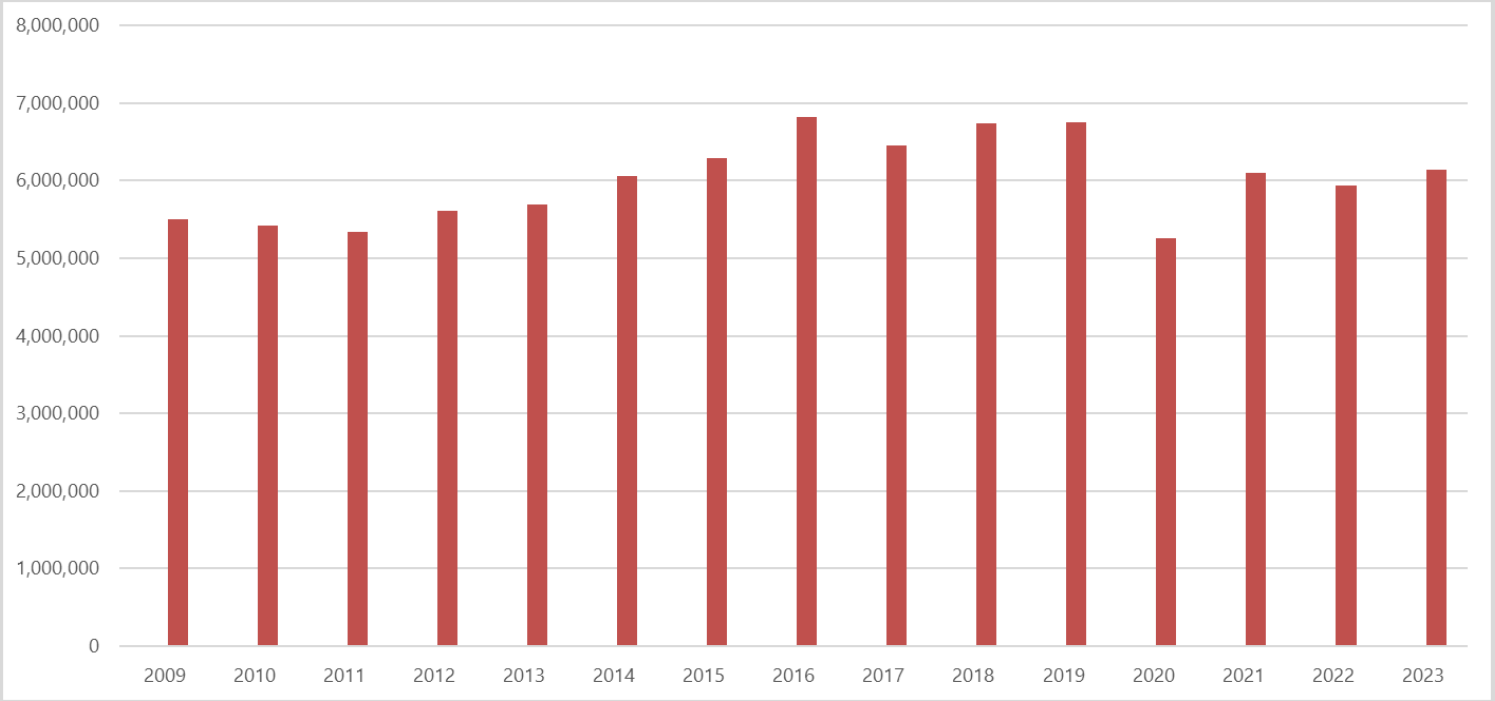
Source: Ohio DOT

What are the issues?

Crash trends & patterns

- All crashes
  - 2011 – started increasing after many years of decreases
  - 2016 – peaked, but methods changed
  - 2020 – COVID
  - 2023/now – slight recent increase

Police-Reported Traffic Crashes
National Totals Per Year, 2009-2023



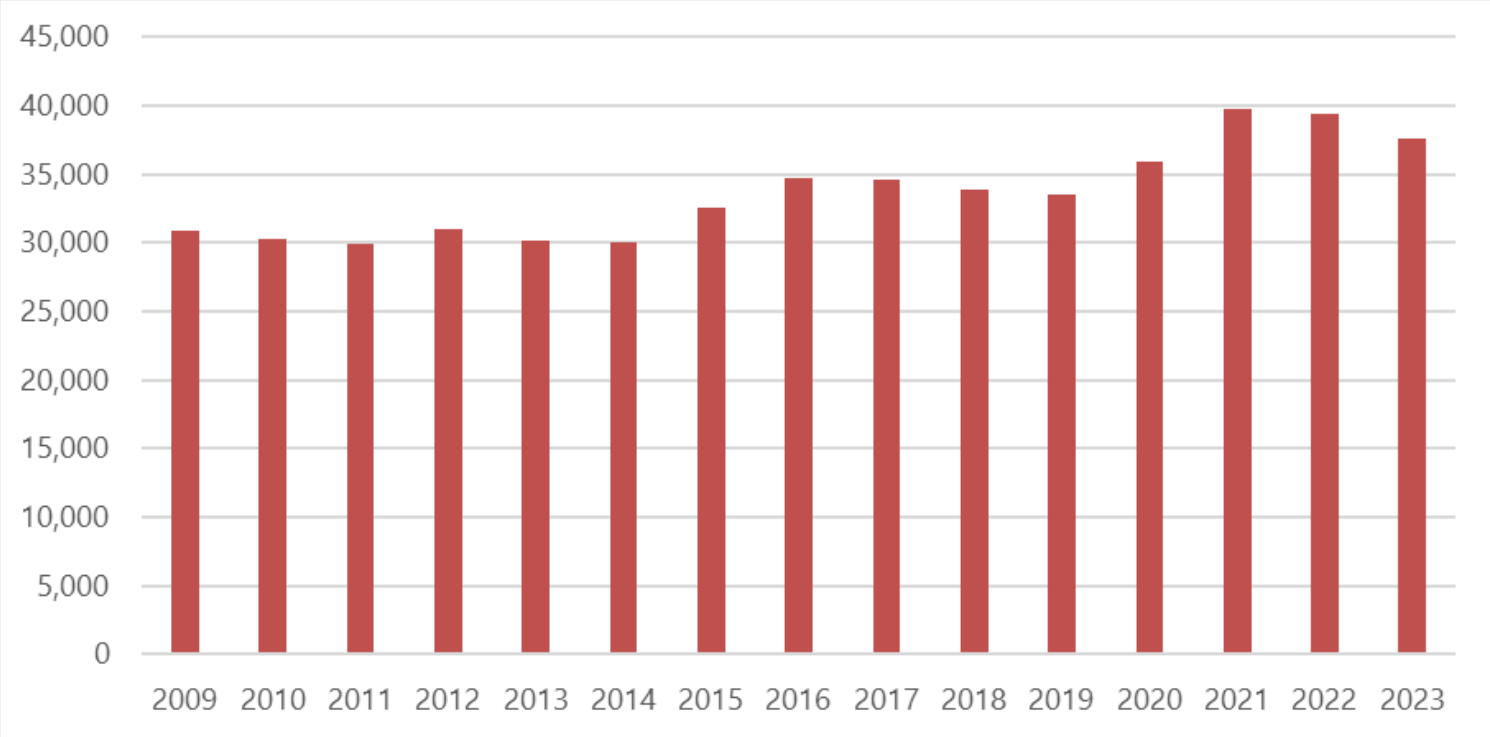
Data source: NHTSA

What are the issues?

Crash trends & patterns

- Fatalities
  - 2021 – peaked
  - 2022-2023 – started decreasing but injuries did increase

Police-Reported Traffic Fatalities
National Totals Per Year, 2009-2023



Data source: NHTSA

Why do we have these issues?

Positive improvements

- Vehicle technology
- Transportation design standards

Causes of safety issues

- People - human behavior
- Roads - design
- Vehicles - design
- Emergency response - access & management

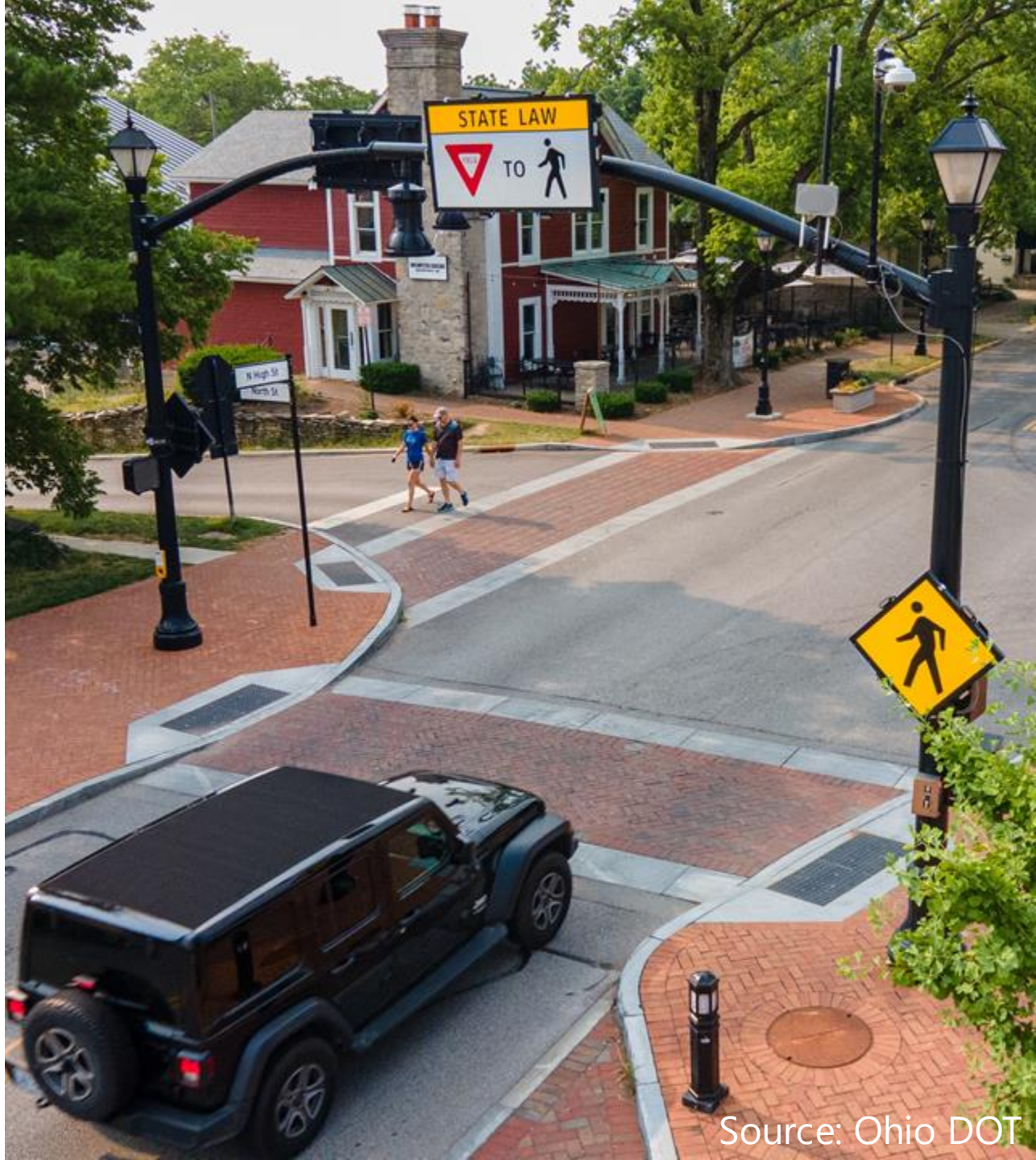
Source: Microsoft Stock Image

Who is affected?

Everyone!

Connections to equity

- Vulnerable users
  - Children, elderly, people with disabilities
  - Pedestrians, cyclists, roadway workers
- Disproportionate effects
  - Women, LGBTQ+ populations
  - Communities of color
  - Low-income households
  - Rural communities

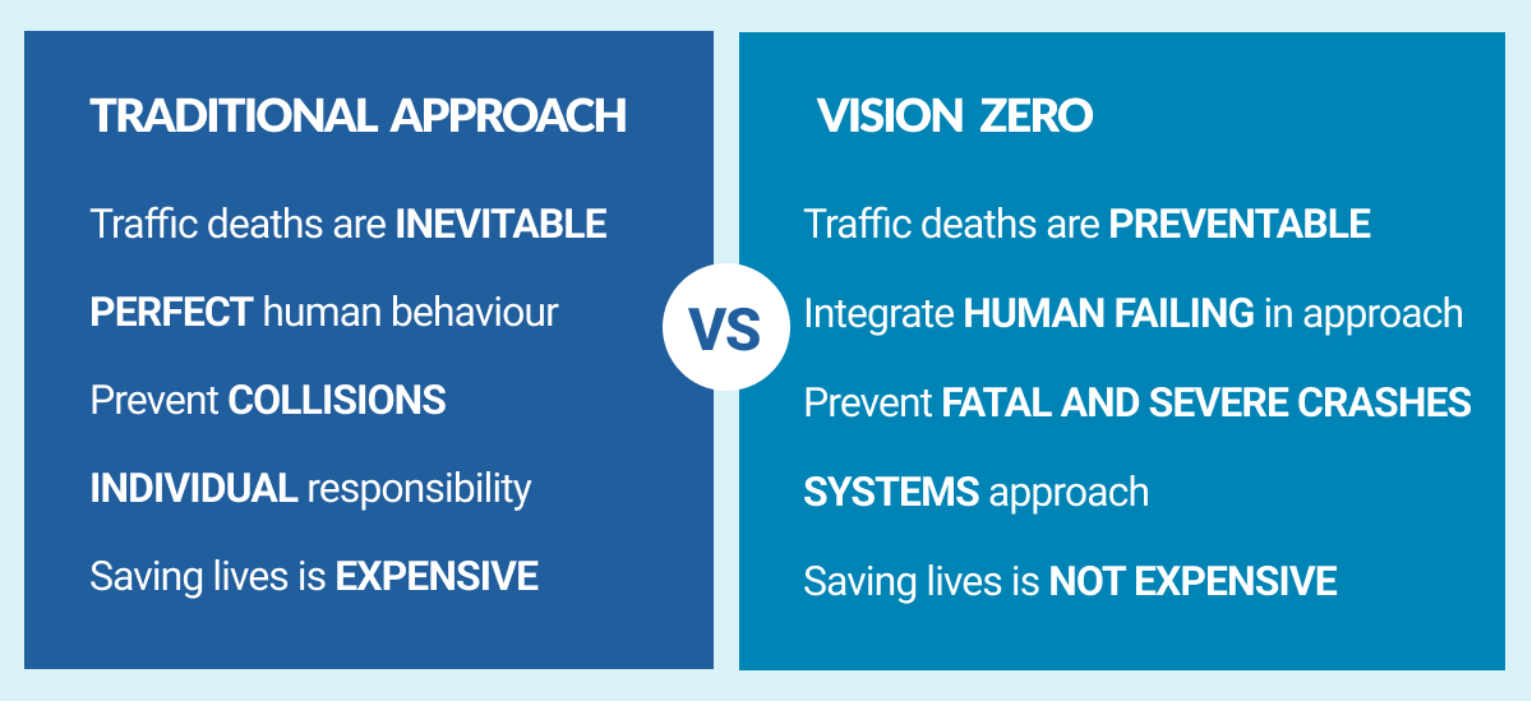


Source: Ohio DOT

How are we addressing these issues?

Current state of the practice

- Vision Zero, Toward Zero Deaths, Road to Zero
- Key assumptions – (1) Fatalities can be prevented, (2) People make mistakes, (3) Safe mobility is a right for everyone



Source: Vision Zero Network

How are we addressing these issues?

Current state of the practice

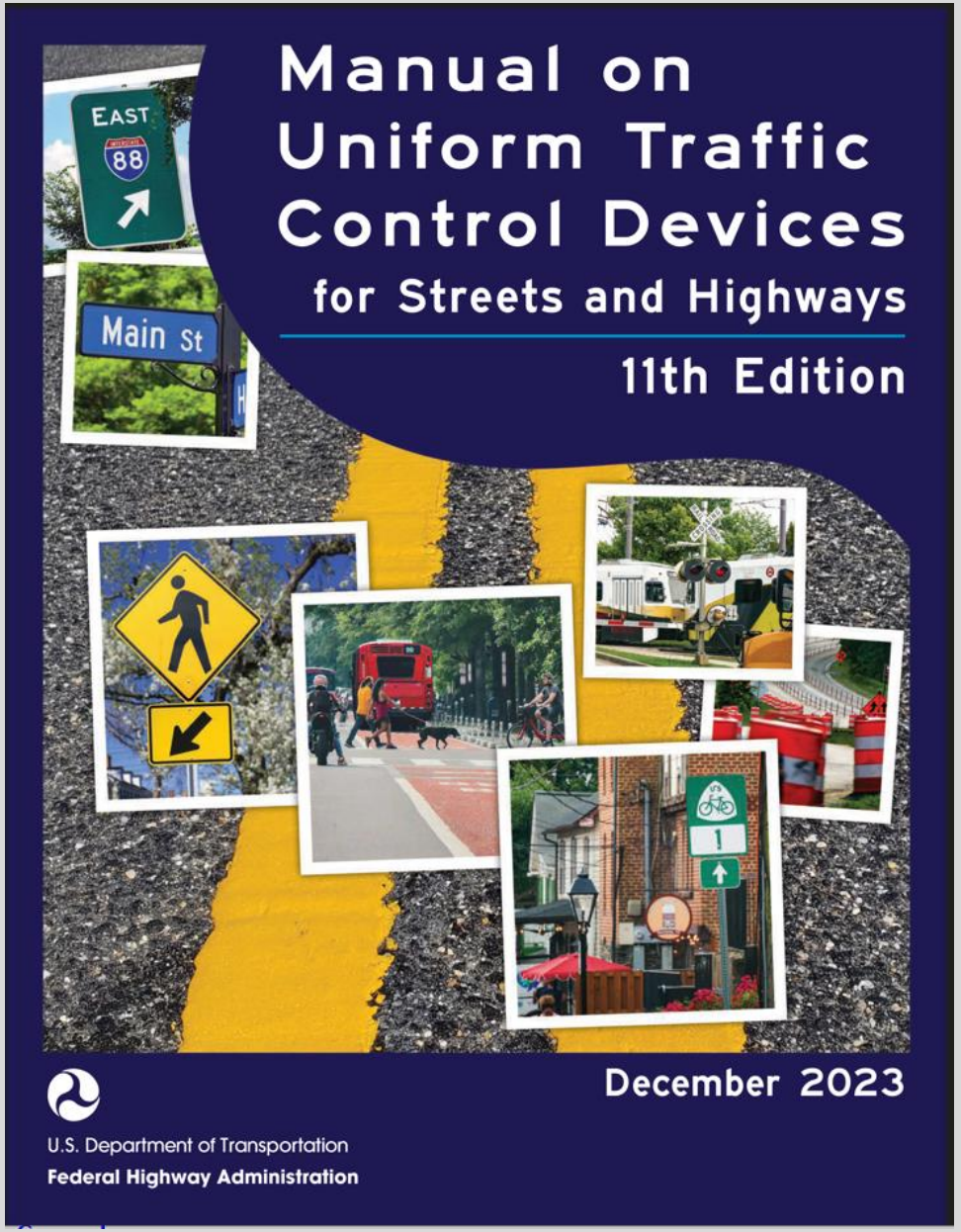
- National Roadway Safety Strategy (NRSS)
- Safe System Approach
  - Safer People – vulnerable users
- Safe Streets and Roads for All (SS4A) Grant Program

Source: U.S. DOT

How are we addressing these issues?

Current & upcoming changes

- MUTCD
  - FHWA update in December 2023
  - States are updating theirs now
- AASHTO
  - Many guides and specs have been updated, including the Guide for the Development of Bicycle Facilities, 5th Edition
  - Highway Safety Manual (HSM)



Source: FHWA

How are we addressing these issues?

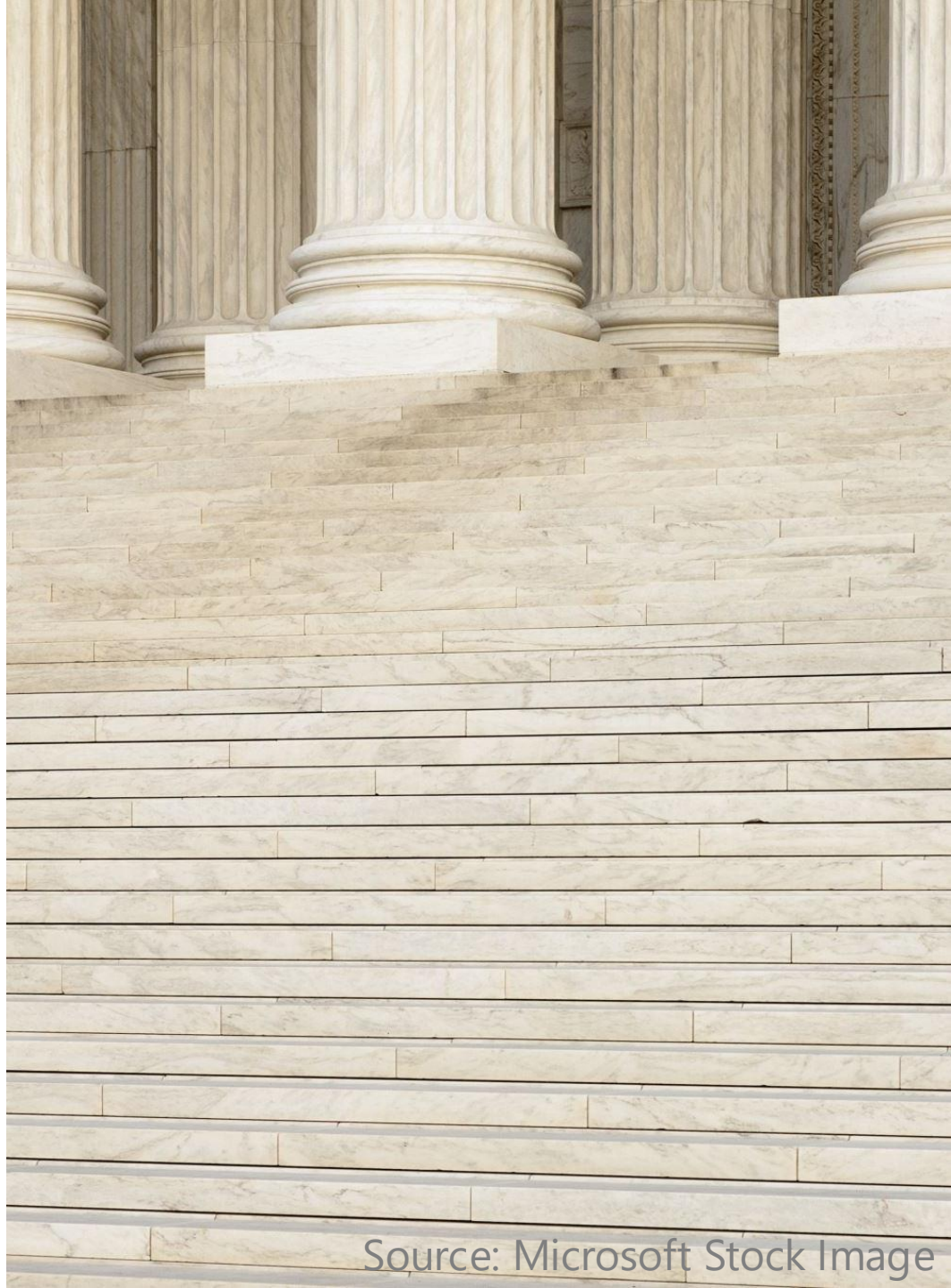
Current & upcoming changes

- New USDOT “SAFE ROADS“ initiative
- Announced July 1, 2025
- No further details yet

How are we addressing these issues?

Current & upcoming changes

- Federal surface transportation program funding
- Infrastructure Investment and Jobs Act expires in September 2026
- July 17, 2025 meeting/event to begin discussions on the reauthorization
- No further details yet



Source: Microsoft Stock Image

References & Resources

Slides 1 & 2: Ohio DOT, https://www.flickr.com/photos/ohiodot/51311787826/

Slides 3 & 4: NHTSA CrashStats, https://crashstats.nhtsa.dot.gov/

Slide 5: U.S. DOT Safe System Approach, https://www.transportation.gov/safe-system-approach

Slide 6: Ohio DOT, https://www.flickr.com/photos/ohiodot/51311987383

Slide 7: Vision Zero Network, https://visionzeronetwork.org/; Toward Zero Deaths, https://www.towardzerodeaths.org/; Road to Zero, https://www.nsc.org/road/resources/road-to-zero/road-to-zero-home

Slide 8: U.S. DOT NRSS, https://www.transportation.gov/NRSS; Safe System Approach, https://www.transportation.gov/safe-system-approach; SS4a, https://www.transportation.gov/grants/SS4A

Slide 9: FHWA MUTCD, https://mutcd.fhwa.dot.gov/; AASHTO, https://transportation.org/; AASHTO HSM, https://www.highwaysafetymanual.org/

Slide 10: FHWA SAFE ROADS initiative, https://highways.dot.gov/safety/safe-roads

Slide 11: AASHTO federal reauthorization article, https://aashtojournal.transportation.org/usdot-hosts-surface-transportation-reauthorization-event/

Source: Ohio DOT

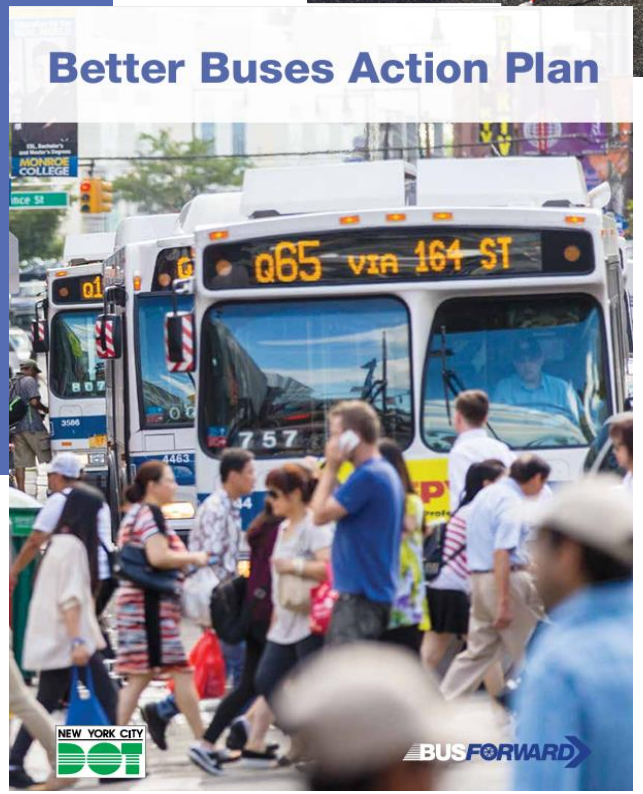
Project Overview: Hillside Av Bus Priority Improvements

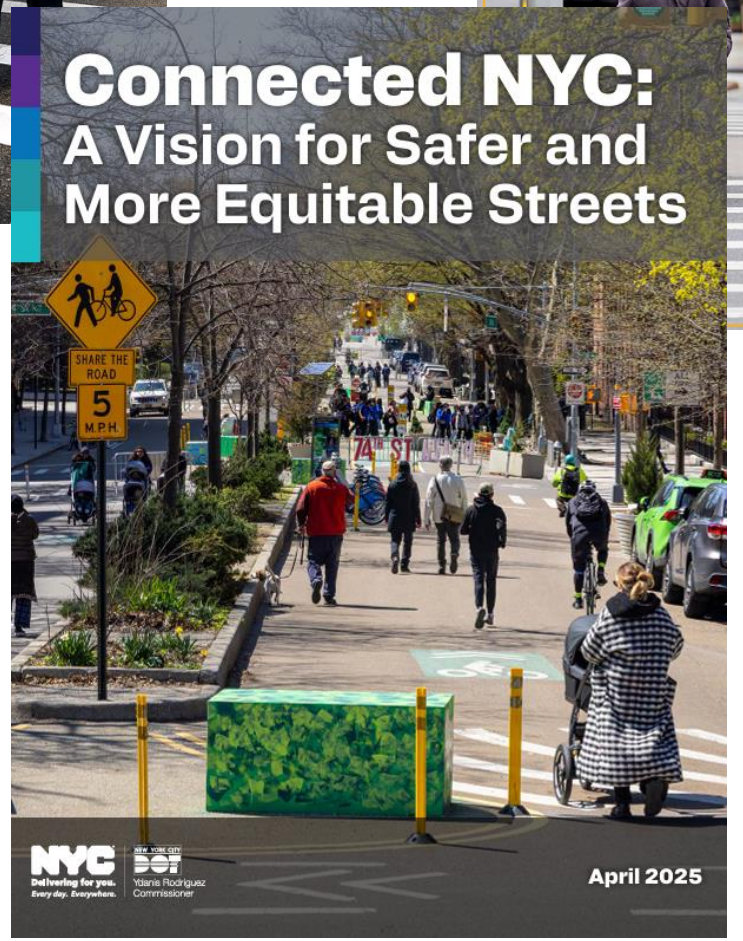
Queens, New York

New York City Department of Transportation

Faith Chojar, Project Manager

NYC DOT In Action





NYC Streets Plan Update (2025)

Transit goals of the Streets Plan:

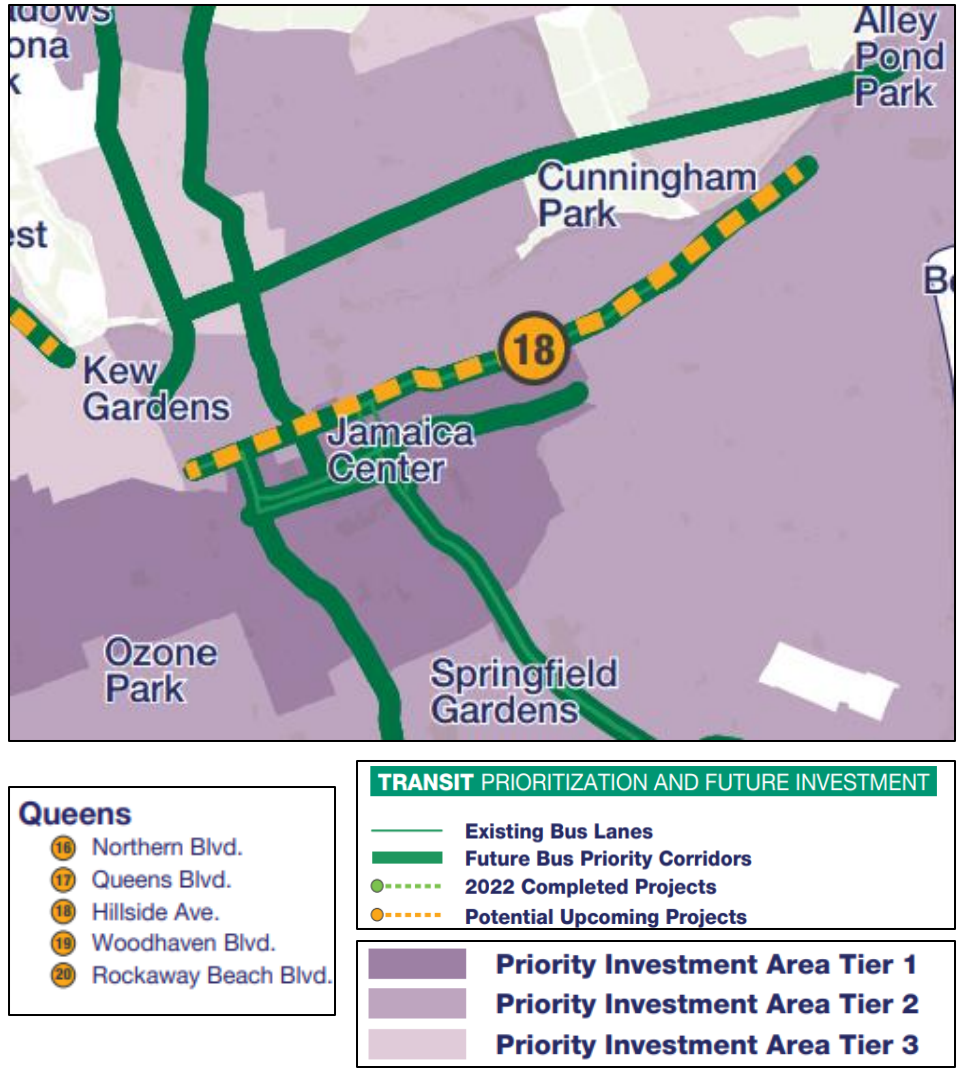
1. **Increase sustainable travel modes** by reconfiguring streets

2. **Expand access to job opportunities** through faster and more reliable transportation options

3. Allow all New Yorkers to get around the city in multiple ways **without encountering barriers to travel**

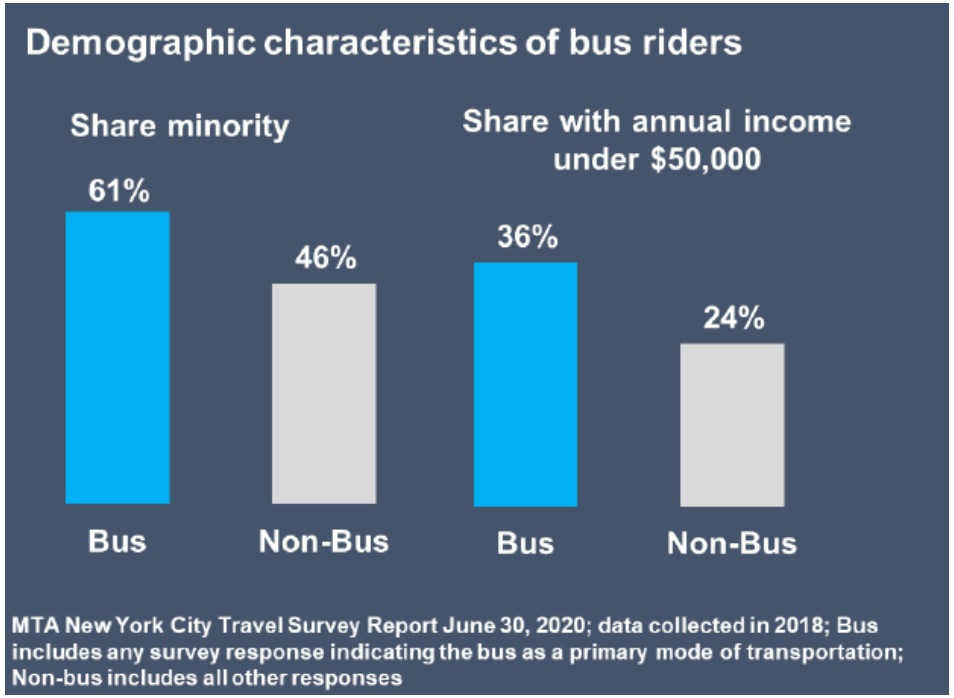
Hillside Avenue was identified in the 2021 Streets Plan, and is within Tier 1 and 2 Priority Investment areas

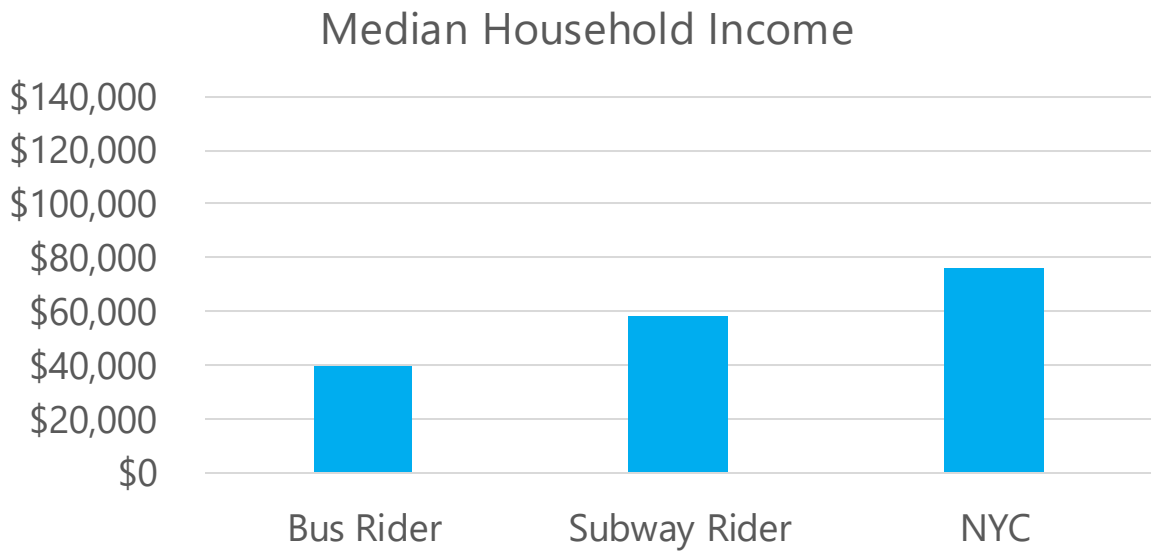
- PIAs are an equity measure of which neighborhood tabulation areas (NTAs) are reviewed based on three inputs: demographics, density, and past NYC DOT investment levels



How Does Bus Priority Help?

- Bus priority projects allow us to take a comprehensive look at each corridor and plan improvements to infrastructure, bus stop amenities, and physical accessibility
- Bus lanes are traffic calming, slowing down general traffic and creating a safer environment for all roadway users
  - A case study analysis of the E149th St Better Buses, Major Deegan Expwy to Prospect Ave offset bus lane project, installed by NYC DOT in 2020, shows a 30% decrease in pedestrian/cyclist injuries, and a 23% decrease in total injuries on the corridor
- Bus riders are disproportionately low income and people of color, and many live far from the subway
  - Bus priority projects are centered around connecting people and communities faster, safer, and more efficiently





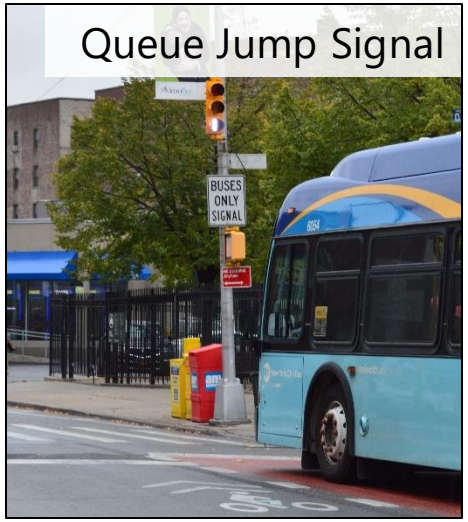
Transit Toolkit

Woodhaven Blvd, QN

161st St, BX

14th St, MN

Hylan Blvd, SI



Broadway, QN

Pedestrian Safety Toolkit

Fordham Rd, BX

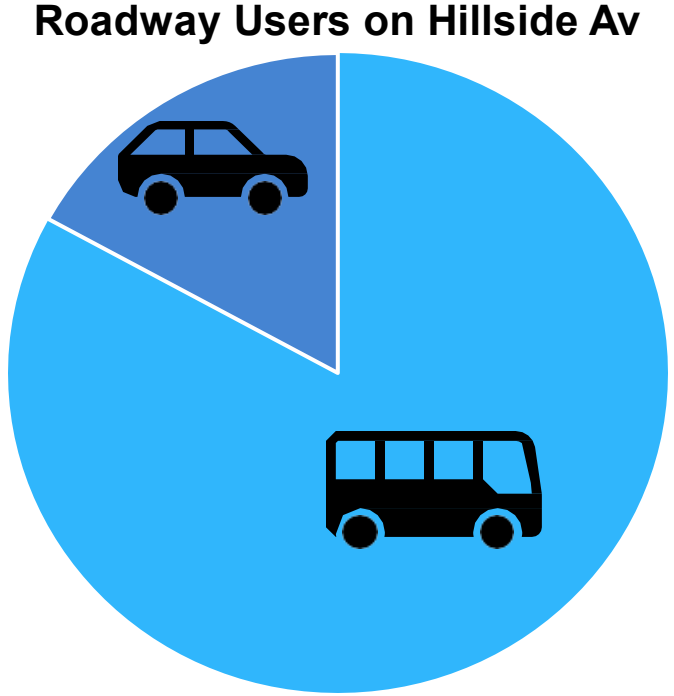
Kings Hwy, BK

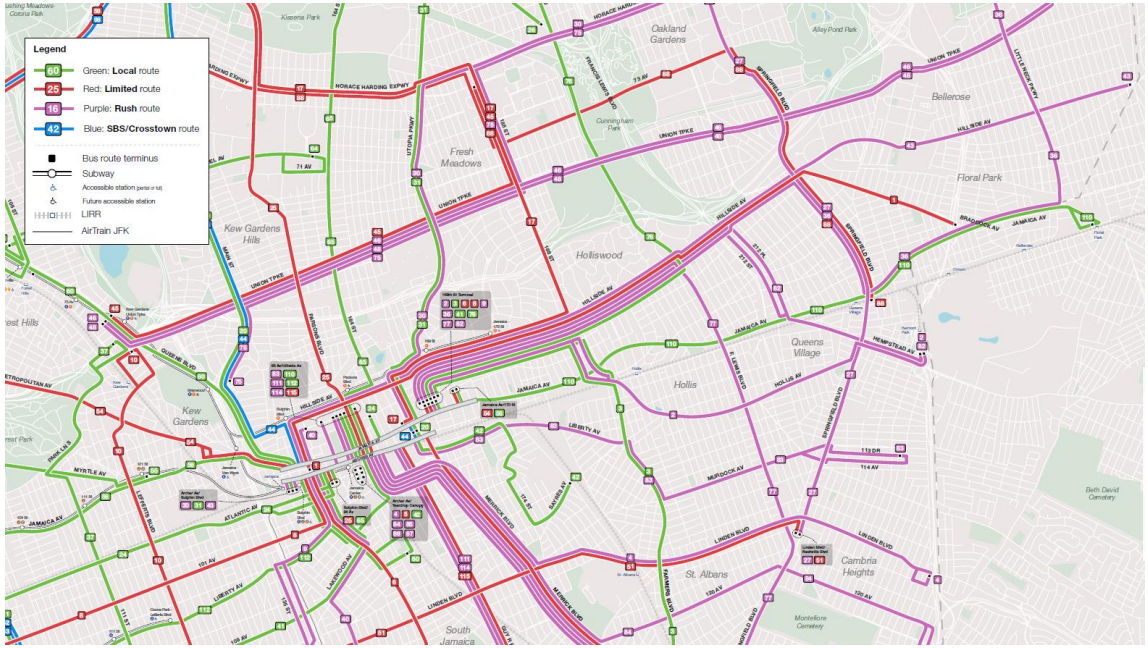
149th St, BX

Southern Blvd, BX

Why Hillside Avenue?

- Springfield Blvd to Queens Blvd (4.2 miles)
- 194,000 daily bus passengers on 17 MTA bus routes and 21,000 on 5 Nassau County (NICE) bus routes
- Connections to Subway, LIRR, AirTrain, additional bus routes
- Buses as slow as 4 mph
- Bus passengers account for 83% of roadway users, but buses are allocated less than 1/3 of the roadway itself
- Multiple roadway conditions, creating confusion and congestion for pedestrians, bus riders, and drivers
- Underutilized peak hour curbside bus lanes and rush hour regulations in some segments of corridor, but not all
- Complementary timing to MTA's Queens Bus Network Redesign

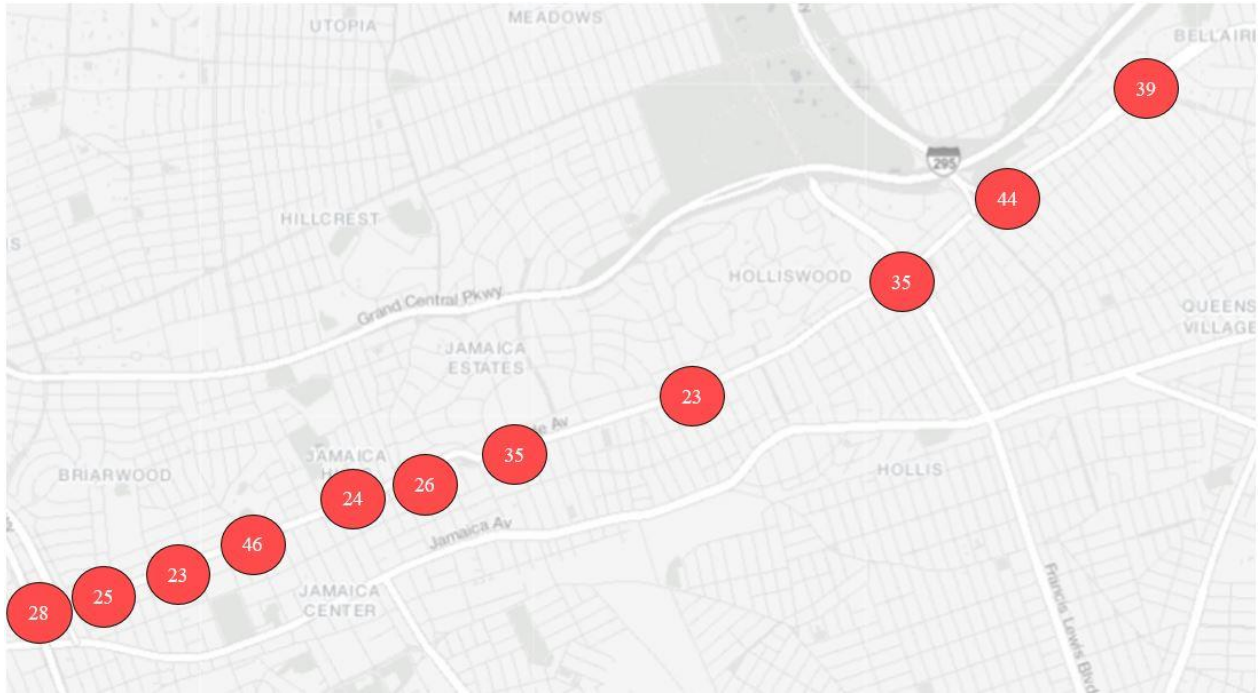




Local bus network on Hillside Av

Safety Statistics

- 992 people were injured in crashes on Hillside Av between 2018-2022
  - Average of nearly four injuries every week
- 58 people were severely injured; two were killed
  - Vision Zero:
    - Priority Corridor
    - Two Priority Intersections (Springfield Blvd, 197th St)
    - Within Priority Area



Number of crashes at major intersections on Hillside Av

Hillside Ave, Springfield Blvd to Queens Blvd Injury Summary, 2018-2022

	Total Injuries	Severe Injuries	Fatalities	*KSI*
Pedestrian	261	31	2	*33*
Bicyclist	47	3	0	*3*
Motor Vehical Occupant	676	23	0	*23*
Other Motorized	8	1	0	*1*
Total	992	58	2	*60*

KSI: Killed or Severely Injured. Data Source: NYC DOT

Outreach Overview

"I think it is genius because we would speed the bus with an exclusive bus lane, and I would waste less time getting to work; the buses will be faster..."

Between April 2024 and July 2025, NYC DOT conducted:

17	Dedicated outreach briefings
295	Total In-Person Surveys
158	Surveys Completed in Bangla, Spanish, and Haitian Creole
145	Digital Self-Administered QR Code Surveys
420	Businesses Visited
30	Testimonials Collected

Final Design

21st St, QNS – up to 17% increase in bus speeds

Webster Av, BX – up to 23% increase in bus speeds

- Offset bus lanes for most of the corridor
- Offset bus lanes are located one lane away from the curb, next to the parking lane
  - In response to traffic analysis
    - Three locations where the bus lane moves to curbside
    - Two locations where the bus lane drops altogether
- Extended bus lane hours to 24/7
  - 15,000+ bus passengers overnight (10pm- 5am)
  - 80,000+ bus passengers on weekends
- Bus and truck only left turns at three intersections
- Offset bus lanes serve as right turn, driveway, and parking access lanes, keeping traffic moving
- Project includes painted curb extensions, turn calming, and centerline hardening
- Adjust curb regulations and remove rush hour No Standing, adding ~650 peak hour parking/loading spaces

Making Sure it Works: Post-Implementation Monitoring Plan

- We will be evaluating bus and traffic speeds, traffic volumes and patterns, and congestion closely after launch:
  - In-person observations
  - StreetLight and INRIX (GPS)
  - Traffic counts
  - Bus speed & ridership data
  - Safety Data
- Adjustments can be made to alleviate congestion and improve bus performance as needed, including:
  - Signal retiming at intersections on and around Hillside Av
  - Curb regulations
  - Roadway markings
  - Signage

What's Next?

- Project is currently being implemented
  - Phase 1: 175th St to Springfield Blvd:
    - Markings removals, roadway washing, and markings installation is underway
  - Phase 2: Queens Blvd to 175th St:
    - Roadway has been milled, resurfacing scheduled in August
    - To be followed by markings installation
  - Entire corridor:
    - Signage changes, signal timing changes
- Anticipated completion Summer 2025
- Post implementation monitoring to begin in Fall 2025 and beyond

State of Transportation Planning

TRANSPORTATION SAFETY POST-ASSESSMENT

Maintenance of Active Transportation Facilities and the Implications for Equity

Presenter: Derek Chisholm, AICP, ENV SP, LEED GA

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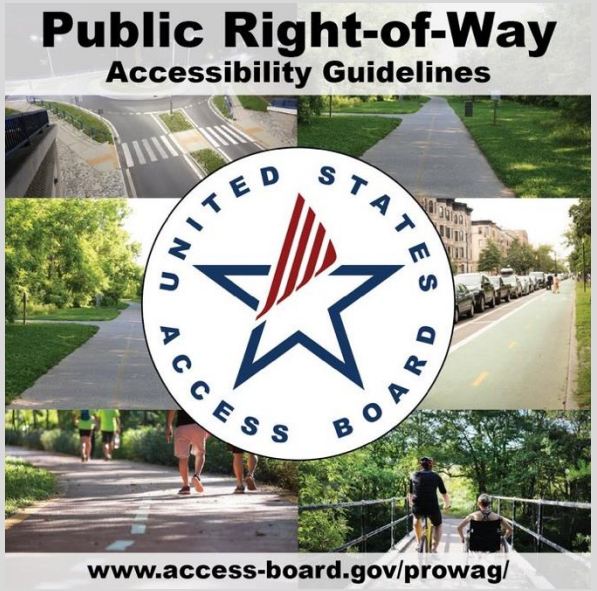

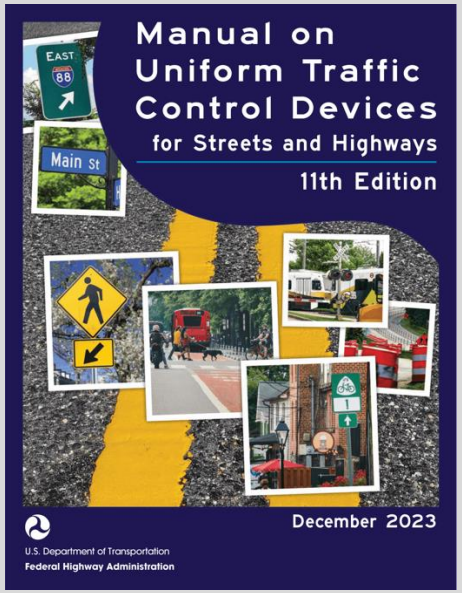

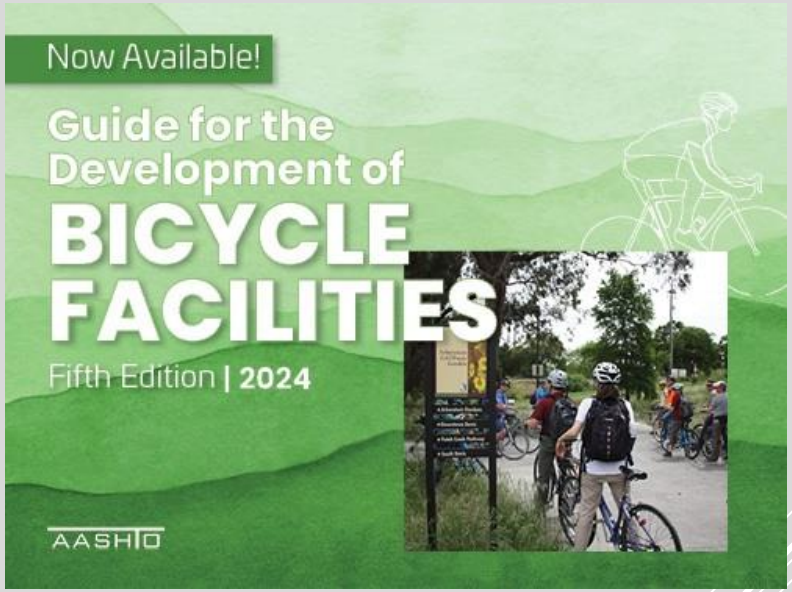

POLICY UPDATE

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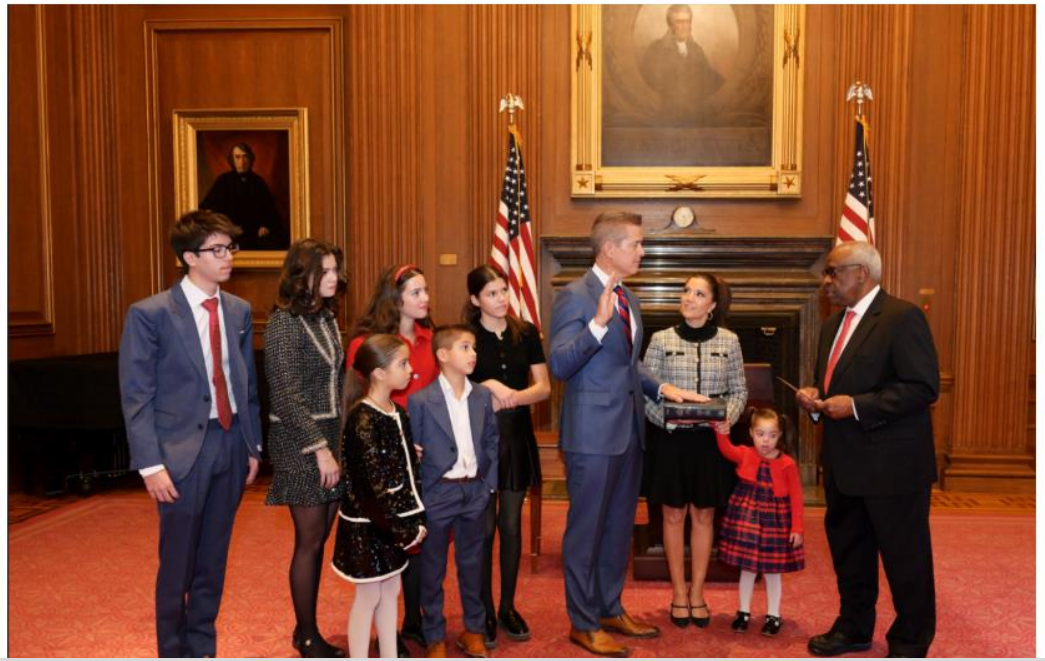
Sean Duffy Sworn In as Secretary of U.S. Department of Transportation and Takes Immediate Action to Make Cars More Affordable

Wednesday, January 29, 2025

Contact: FHWA.pressoffice@dot.gov



POLICY UPDATE

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NATIONAL COOPRATIVE HIGHWAY RESEARCH PROGRAM
SYNTHESIS OF HIGHWAY PRACTICE

Key Findings include:

Complete Streets Policies Adoption and Key Elements:

- 70% (30 DOTs) have adopted a Complete Streets policy.
- 28% (12 DOTs) do not have a policy, and 2% are unsure (e.g., Alaska's Policy was in development).
- Policies typically require pedestrian or bicycle accommodations when projects intersect with planned or existing routes.
- 53% of DOTs address the long-term maintenance of facilities,

  but 37% report gaps in doing so.

- Specialized Equipment for Maintenance:
  - 33% of DOTs use pavement painting stencils, and 30% use replacement bollards.
  - 12% use specialized street sweepers, though bollard placement often limits their use in constrained areas.

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This synthesis study has identified how state DOTs manage the maintenance and funding of Complete Streets projects, with a focus on:

- Maintenance policies and operations for active transportation facilities.
- Cost-sharing strategies and funding models with local governments and stakeholders.
- The role of local governments in maintenance agreements.
- Training, staffing, and equipment procurement for Complete Streets maintenance.

The research process included:

- Literature Review: Establishing the current state of practice.
- Survey of State DOTs: A questionnaire distributed to DOTs in all 50 states and the District of Columbia to gather information on funding strategies, maintenance practices, and policies.
- Case Studies: In-depth interviews with five DOTs—California, Minnesota, Maryland, Nevada, and Washington—to highlight diverse maintenance approaches and insights.

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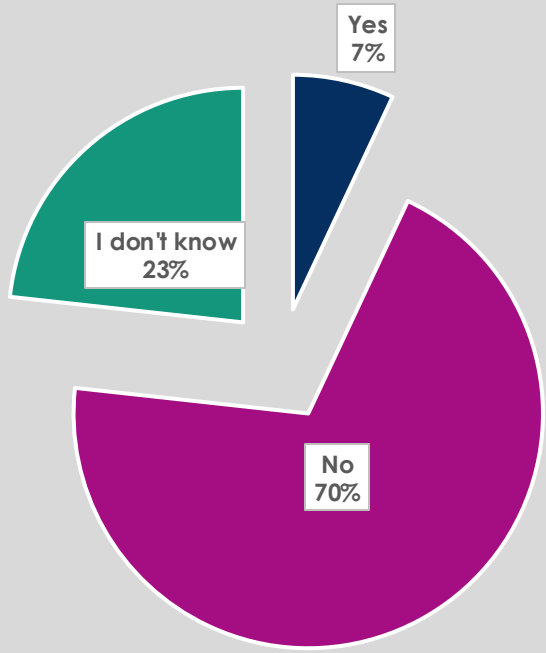
Providing standards through the use of trainings is one way DOTs can help prepare those responsible for maintaining Complete Streets projects.

Of the responding DOTs, 30 (70%) indicated they did not provide training.

Five DOTs (12%) use specialized street sweepers for cycle tracks and other constrained areas, and three (7%) use pervious pavement cleaning equipment.



Montana DOT on Maintenance:

Generally, MDT recommends a crack seal every four years, a fog seal every eight years and a pavement overlay every 25 years (MDT. 2015, page 25)

….The total cost for general maintenance is $263.30 per path mile. The total cost for snow removal is $3,600.00 per path mile. The total cost to perform general maintenance on 180 miles of shared use path (excluding 8 miles of striped bike lanes) is approximately $670,000 of which $624,000 is the cost of snow removal efforts on all paths.

Path Evaluation - $2.30 per path mile.
Mowing (5’ either side) - $40.00 per path mile.
Cleaning Drainage Structures - $51.00 per path mile.
Sweeping and cleaning - $85 per path mile occurring 2 times per year.
Snow Removal - $180.00 per path mile occurring 20 times per year (the number of snow removal times was based on an average of snow removal on paths/trails over the past 5 years, and 1/10 the number of times MDT plowed highways over a three-year average).

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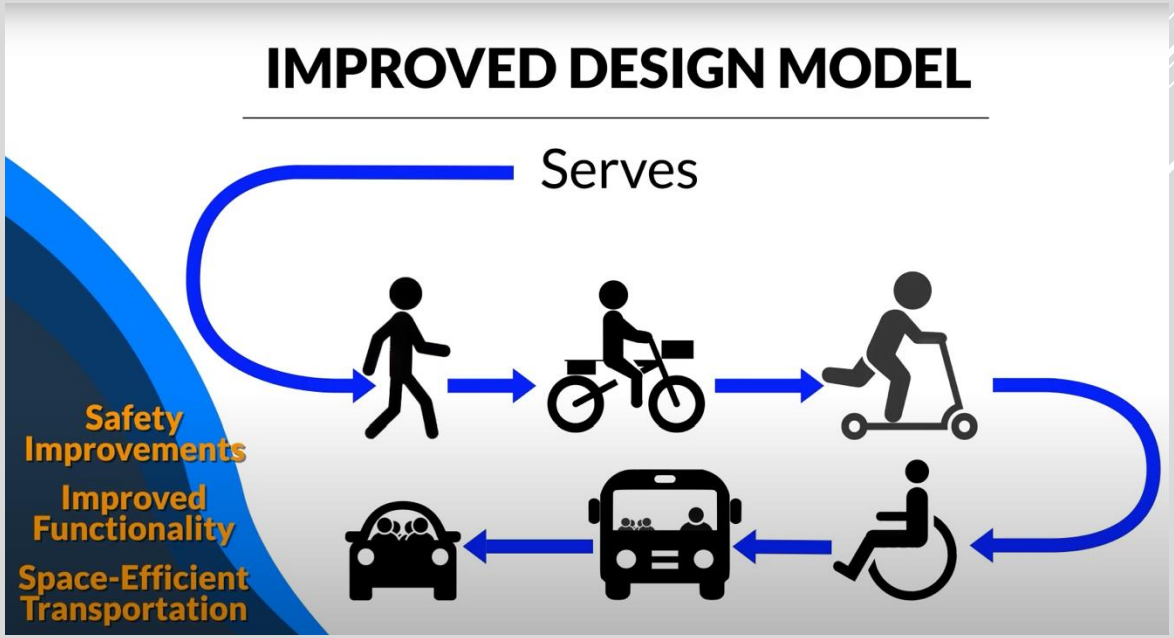
Washington State

WsDOT has initiated a study as part of their comprehensive investment in Complete Streets policy implementation. The University of Washington, Sustainable Transportation Lab has been tasked with studying the following Complete Streets maintenance best practices:

- Design strategies to ensure durability and low maintenance costs
- Snow clearing
- Removal of sand, leaves, and other debris
- Resurfacing and striping
- Vegetation & drainage
- Vertical elements including lighting
- Equipment used
- Use of dedicated teams
- Planning and budgeting metrics
- Coordination among jurisdictions

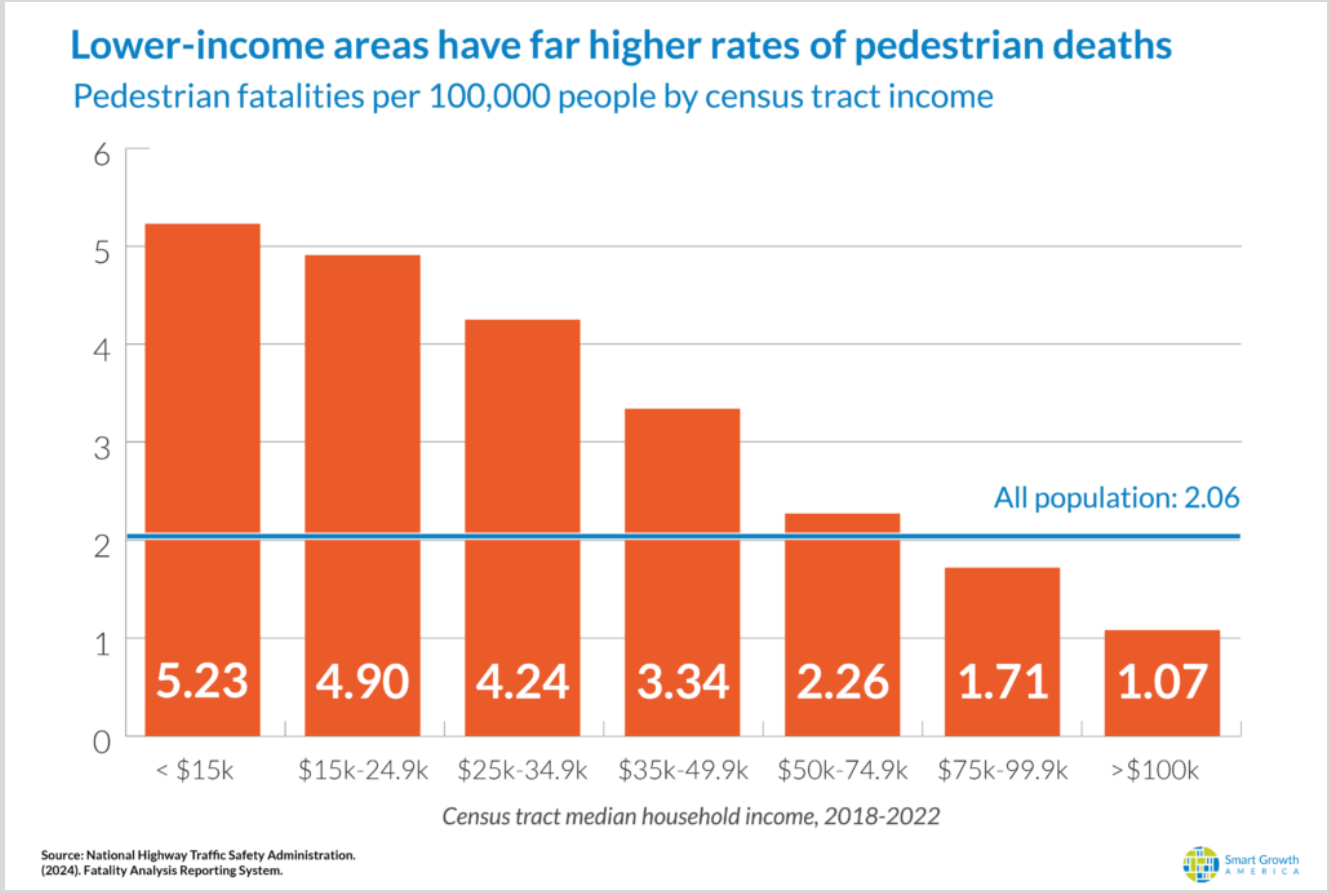


State of Transportation Planning

Notable Examples:

Complete Streets is mandated under the Maryland Annotated Code.
In 2012, a Complete Streets Policy that applied to Maryland Aviation Administration (MAA), Maryland Transit Administration (MTA), and State Highway Administration (SHA) was adopted. In 2023, The Secretary's Office (TSO) began to update the policy and added all MDOT modal agencies. The new Policy was published in June of 2024, with the references to maintenance shown below.

"V. The best approach to reducing the cost of maintaining bicycle and pedestrian facilities is to plan for future maintenance in the project design phase, selecting sustainable and resilient materials and effectively locating street trees. Maintenance activities can also provide opportunities to comply with ADA and should be used to make facilities as accessible as possible. Every effort must be made by the leading agency to address surface conditions, debris, encroaching vegetation, signage, and markings for the life of the project or the project agreement. Where a lead agency is unable to participate in maintenance or cost share opportunities, the State shall perform its due diligence to investigate innovative alternatives or technical assistance to deliver and maintain the project."



LITERATURE REVIEW

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Key Finding

For funding of Complete Streets projects the survey showed that 85% of DOTs will fund the design and construction of highway lanes and shoulders, sidewalks, multi-use paths, or bike lanes. Some State DOTs still expect local governments to support the construction costs of multi-use paths and bikeways.

However, while 85% of DOTs reported they would fund maintenance of highway lanes and shoulders, only 57% of DOTs would fund maintenance of bike lanes, 45% would fund maintenance of sidewalks, and 33% would fund maintenance of multi-use paths.

To maintain active transportation facilities DOTs primarily partner with:
Local Public Works/Traffic Department (38 DOTs)
Local Parks and Recreation Department (18 DOTs)
Local Municipal Planning Organization (15 DOTs)
Local Stormwater/Green Infrastructure Department (8 DOTs)

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State of Transportation Planning

TRANSPORTATION SAFETY - CLOSING AND DISCUSSION

Questions to Support Operationalizing Equity in Transportation Safety

Assessment & Analysis

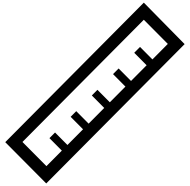
- Whose safety are we prioritizing, and who might we be overlooking?
- Who is missing from our crash data and safety analyses?
- What unintended safety consequences might our plans or projects create for different communities?

Community Engagement

- How can we meaningfully engage communities most affected by safety issues?
- What barriers prevent certain communities from participating in safety planning processes?
- How do we balance expert analysis with lived community experience?

Design & Implementation

- What equity tradeoffs should we consider when designing safety treatments? (e.g., roundabouts vs. signals)
- How can we ensure safety improvements don't place burdens on communities?
- Do any design standards create unintentional barriers to safety?



Measurement & Accountability

- How do our safety interventions perform differently across various communities?
- What success metrics matter most to the communities we're trying to serve?
- How often should we reassess whether our approaches are working equitably?