

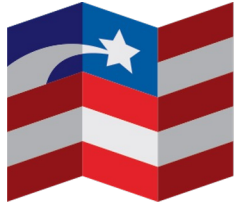


**Urban Land
Institute**

Public Transportation Innovations for a Healthier and More Equitable DC

Friday, March 31st | ULI Health Leaders Network Introductory Forum

Benito O. Pérez, Charles Allen, Heidi Case, Laura Chace, and Raka Choudhury



Transportation
for America

National Transportation Landscape: Where we are now; Where we're going.

March 31, 2023

Speaker



Benito O. Pérez,
Policy Director,
Transportation for America



Smart Growth America

Improving lives by improving communities



**Transportation
for America**



National Complete
Streets Coalition



State
**Smart Transportation
Initiative**

LOCUS
Responsible Real Estate
Developers & Investors

FBCI Form-Based
Codes Institute

“We envision a country where no matter where you live, or who you are, you can enjoy living in a place that is healthy, prosperous, and resilient.”

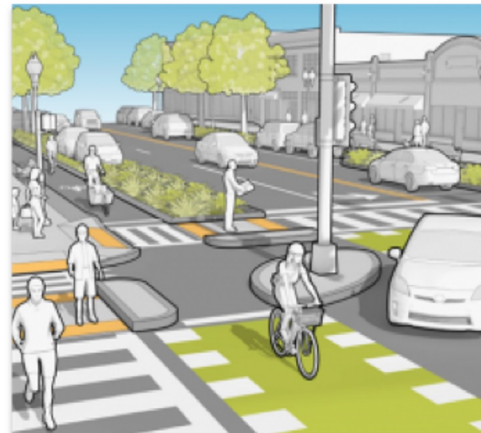
What We Do



Technical
Assistance



Advocacy



Thought
Leadership

SGA Programmatic Priorities



**CLIMATE CHANGE
AND RESILIENCE**



**ADVANCING RACIAL
EQUITY**



**HEALTHY
COMMUNITIES**

Guiding principles for transportation investment

The time has come to elevate the national conversation about transportation beyond the cost—we need a vision for what we expect to accomplish.

America's federal transportation program does not address basic needs, and more money alone poured into this broken federal program will not suffice. Billions of dollars are spent without clear desired outcomes, and there is far too little accountability for accomplishing anything measurable and tangible.

We need to reform the 70-year-old federal program to reflect today's needs and ensure a focus on fixing our existing system first, on improving safety, and on accountability.

Learn more: t4america.org/platform

PRINCIPLE #2

Design for safety over speed

A serious effort to reduce deaths on our roadways requires slower speeds on local and arterial roads. The federal program should require designs and approaches that put safety first.



PRINCIPLE #1

Prioritize maintenance

Cut the road, bridge, and transit maintenance backlog in half by dedicating formula highway funds to maintenance.

Did you know: States are permitted to neglect their basic maintenance needs in order to expand their roadway systems—and then rewarded with more funding.



PRINCIPLE #3

Connect people to jobs and services

Don't focus on speed. Instead, determine how well the transportation system connects people to jobs and services, and prioritize the projects that will improve those connections.



Toplines

1. Transportation paradigm
2. Climate perspective
3. Equity perspective

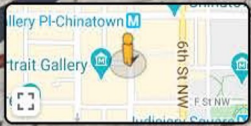
Transportation Paradigm



700 G St NW
Washington, District of Columbia

Google

Street View





608 Jefferson Dr SW
Washington, District of Columbia

Google

Street View



Google



National Mall



Street View



Google

*Who are we designing
for?*



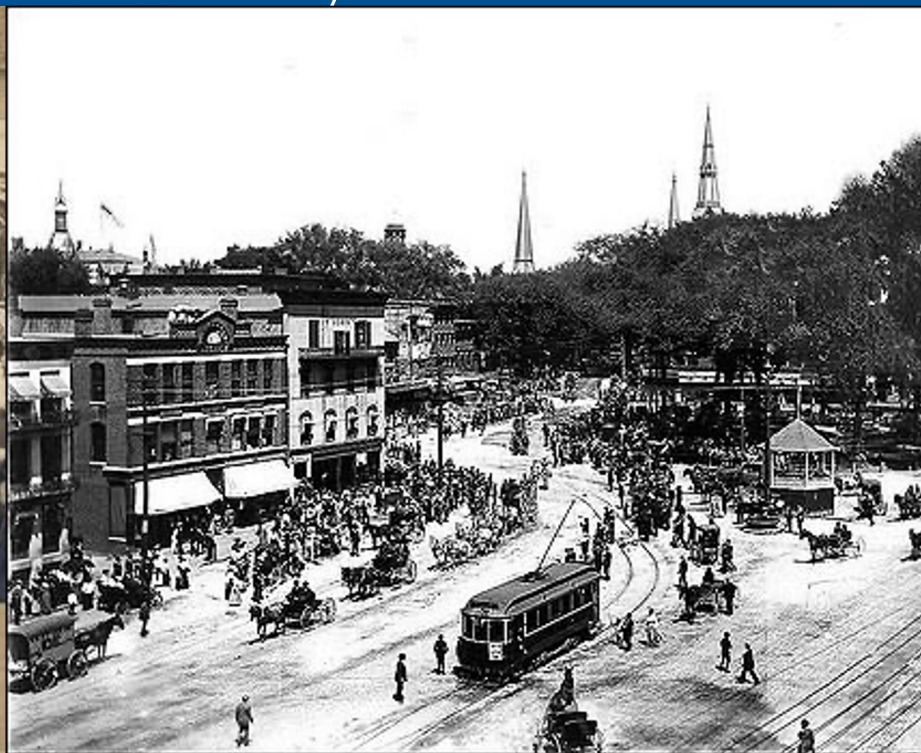


Vehicles, or People?



How did we get here?

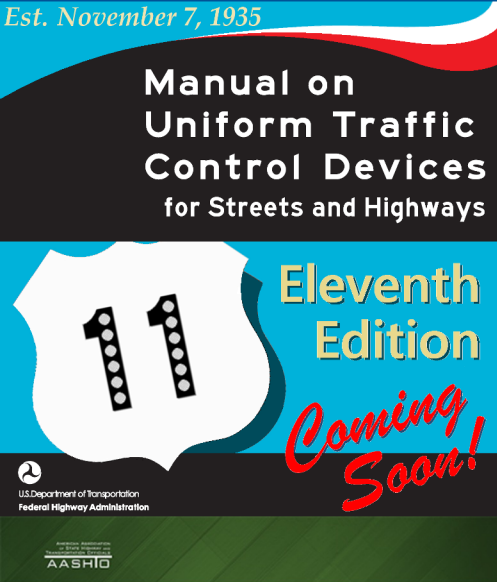
Transportation History



Dallas, TX (early 1900s): Image from [Flickr/Coltera](#)

Keene, NH (early 1900s): Image from [Picryl](#)

Design standards upholding car dominance



- Standards created in the Interstate Era to maximize speed
- Reluctance to focus on whole corridors
- Road design starts with speed in mind

Futurama at 1939 NYC World's Fair



Oversized vehicles



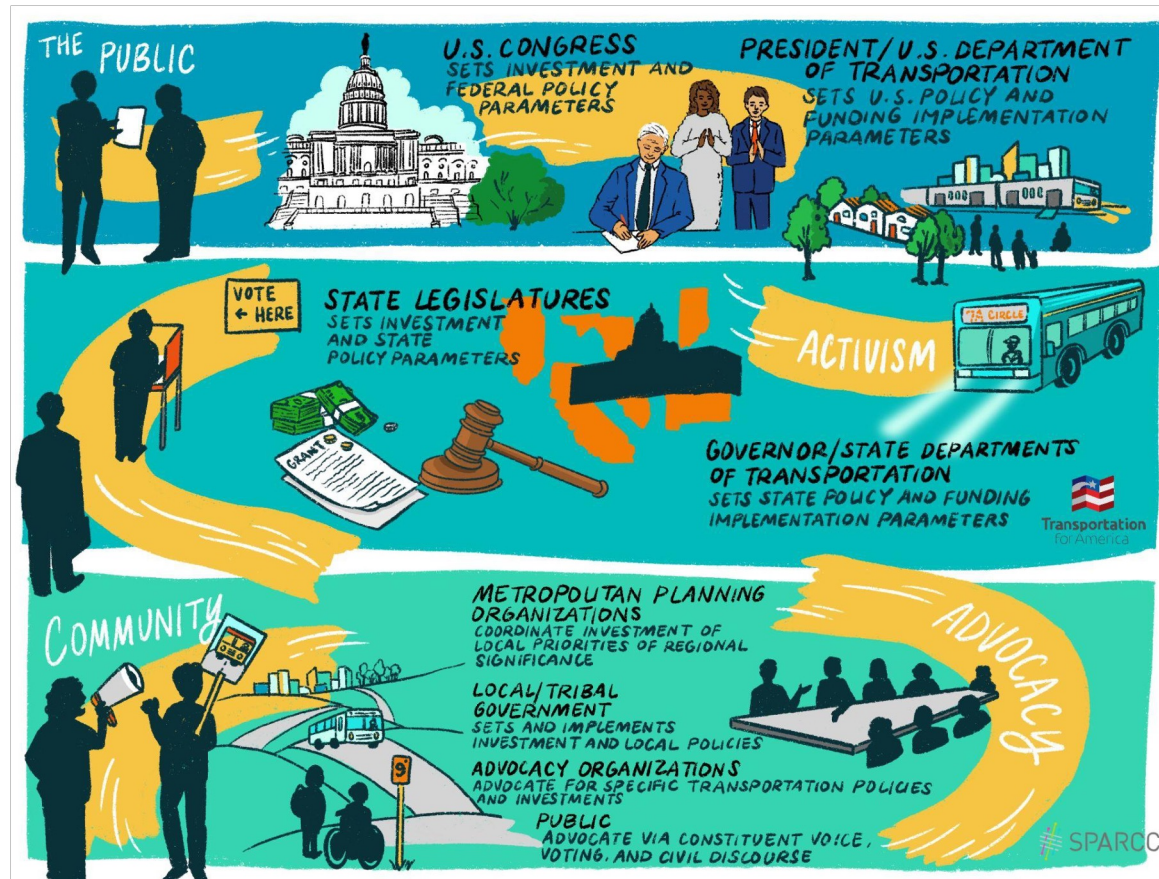


Human Error Justification

Blaming individuals & prioritizing education over design



Transportation Policy Levers



Ongoing Challenges

- Safety
 - Traffic Safety
- Affordability
 - Intersection of housing and transportation costs
 - Intensifying development
- Reliability
 - Increased congestion - impacting bus service
- State of Good Repair
 - Public transportation
 - Roadways, bikeways, and sidewalks
- Accessibility
 - Aging in place
 - Mobility challenged individuals
 - Increasingly complex curb
- Climate Change
 - Flooding
 - Urban Heat Island Effect
- Aging and Challenged Workforce

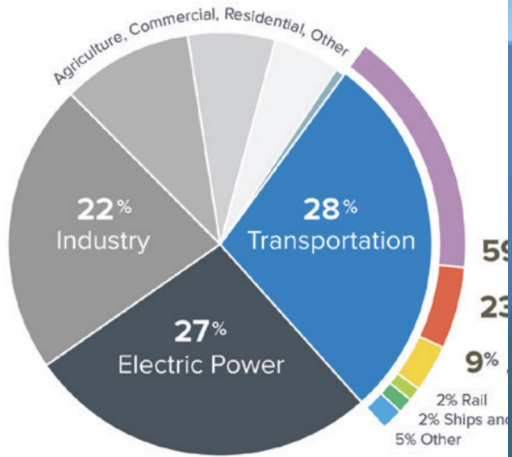


Climate

Climate in Tran

THE HIDDEN ENVIRONMENTAL IMPACTS OF DRIVING

2018 U.S. GHG EMISSIONS BY SECTOR &



VEHICLE EMISSIONS



PAVEMENT & CONCRETE PRODUCTION

URBAN HEAT ISLAND EFFECTS

IMPERVIOUS SURFACE RUNOFF

PARTICULATE MATTER (from tires & brakes)

VEHICLE MANUFACTURING

LOSS OF NATURAL LAND DUE TO SPRAWL

PARKING CONSTRUCTION AND MAINTENANCE

EFFICIENCY 3%

EMISSIONS 22%



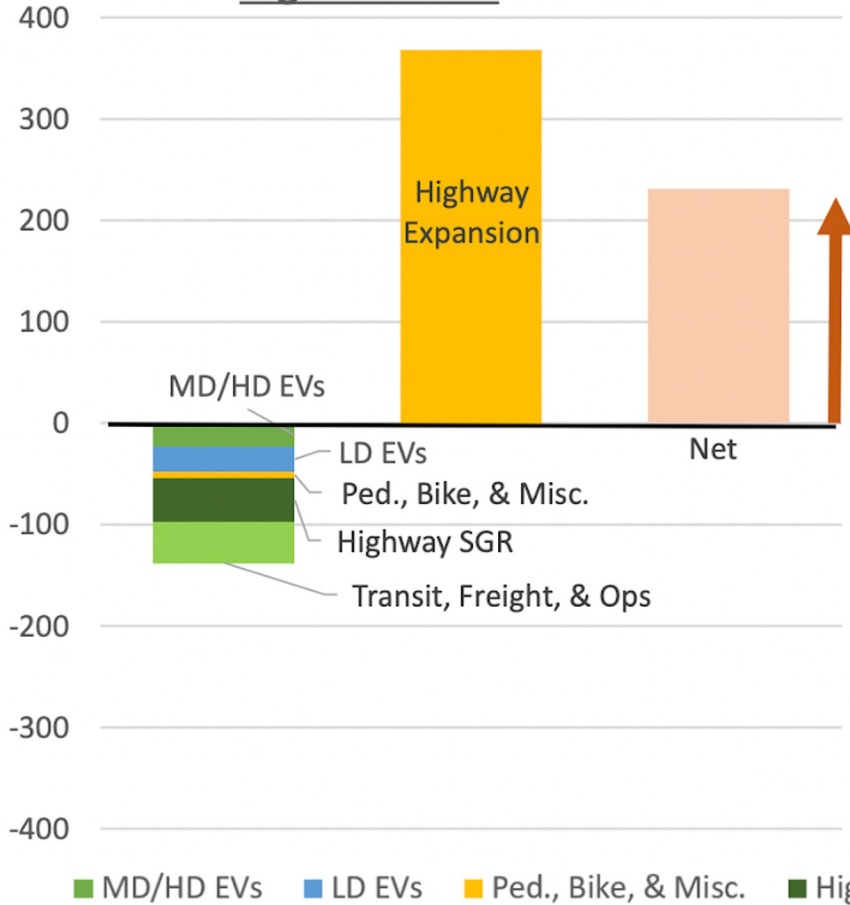
1990-2017

Even as our vehicles have gotten far **more efficient**, **emissions have risen.**

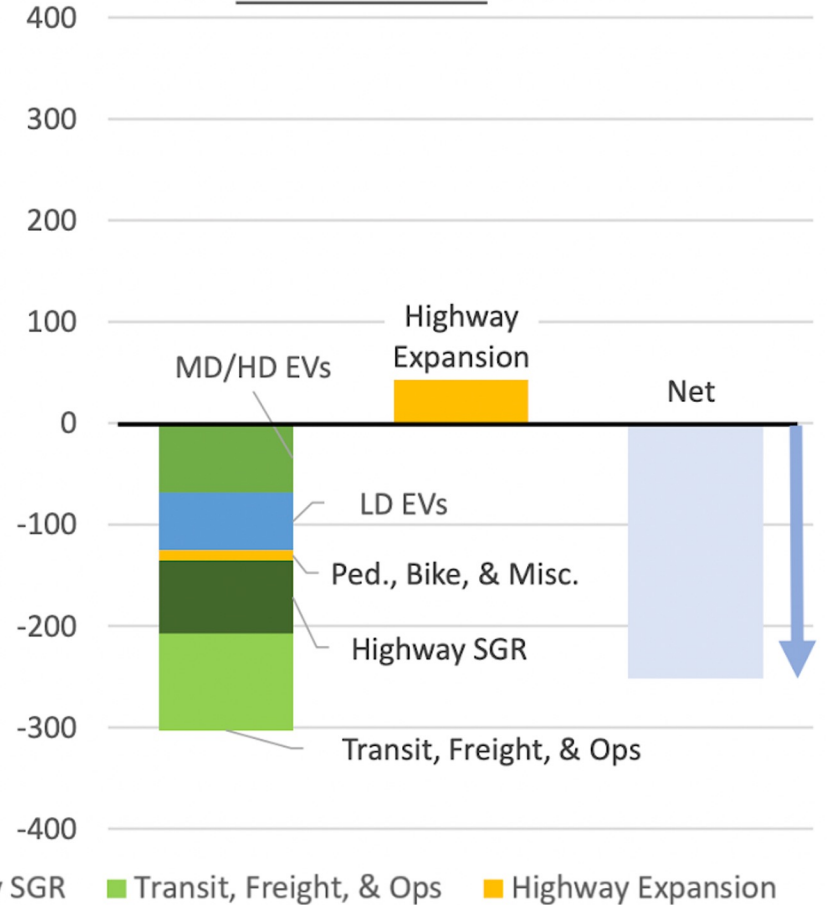
Why? A **50% increase in driving** overwhelmed all of those improvements in fuel efficiency.

50%
VEHICLE MILES TRAVELED

IIJA High-Emission Scenario



IIJA Low-Emission Scenario



Equity

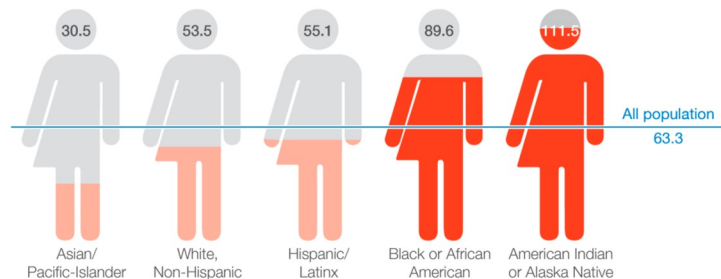
Equity in Transportation

Key Issues:

- Legacy of “urban renewal”
- Development and Displacement
- Congestion as a performance measure
 - Value of Time
- Disinvestment in transit and active transportation
- Commuter-centrism for highways and transit (spokes vs. connected grid)
- Disproportionate deadly burden

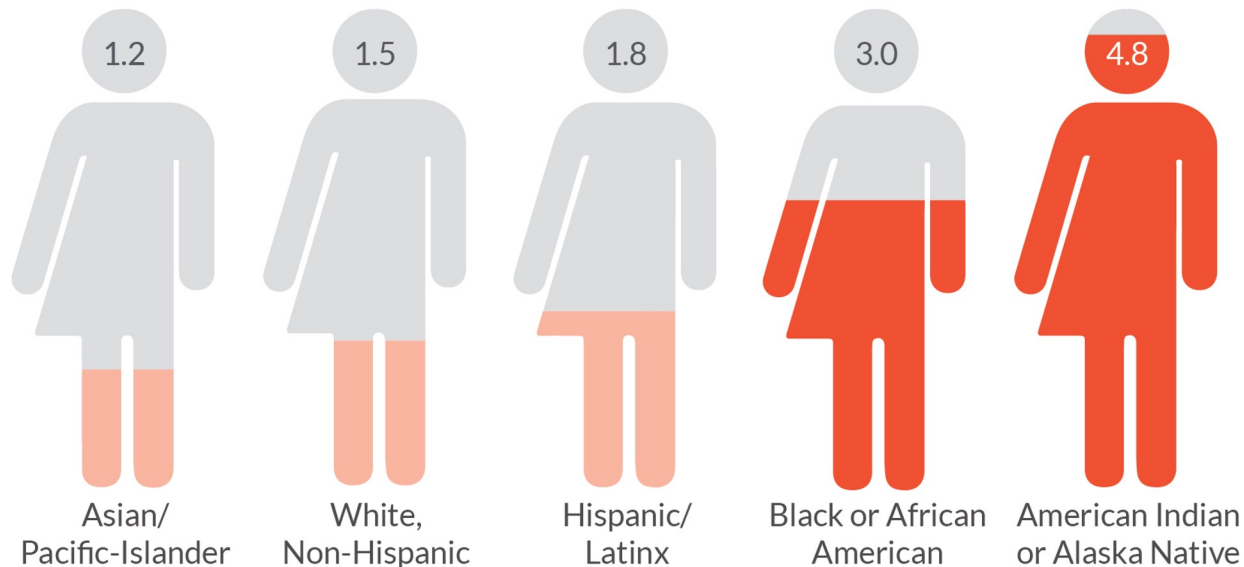
The burden is not shared equally

Relative pedestrian danger by race and ethnicity
(2010-2019)



People of color are more likely to die when walking

Pedestrian deaths per 100,000 by race & ethnicity (2016-2020)



DC Demographics
(2020)

4.0%

36.7%

11.1%

44.5%

0.2%

DC Pedestrian
Fatalities (2016-2020)

16%

Equity in Transportation



[Historic Aerials](#) (SW DC in 1951 vs 1963 vs 2023)

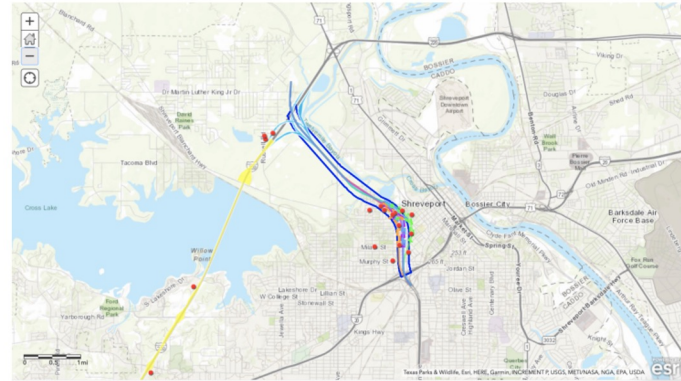
Equity in Transportation

I-49 'Connector' Planned for Historic Black Neighborhood in Louisiana

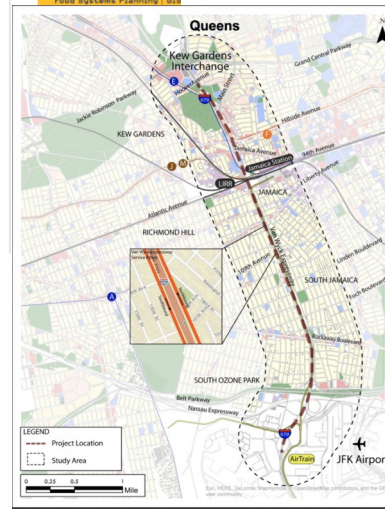
A record of decision is expected soon for a plan to build a freeway connector through the neighborhood of Allendale in Shreveport, Louisiana.

March 12, 2021, 6:00 AM PST

By James Brasuell [@CasualBrasuell](#)



Northwest Louisiana Council of Governments / I-49 Inner-City Connector Project



A composite image showing two cyclists on the left and a bus stop with a person waiting on the right. The cyclists are wearing helmets and casual clothing. The bus is yellow and green, with the number 683 visible on its side.

Understanding the 2021 infrastructure law

What's in it and how to use it

<https://t4america.org/iija/>



Transforming Communities: Access to Health Care

Laura Chace

ITS  AMERICA



ITS America Vision

A better future transformed
by transportation technology &
innovation.

Safer. Greener. Smarter. For all.



ITS America Mission

Advocating for scaled deployment
of innovative transportation technology

-
- Policy
 - Thought leadership
 - Developing a diverse workforce



Transportation is the nexus

It connects us to everything – economic opportunity, access to healthcare and education, our environments, our communities, & more.

PRINCIPLES FOR INCLUSIVE FUTURE MOBILITY



Focus on the user



Reimagine how we think about safety



Cultivate sustainability and resiliency



Champion equity, diversity, and inclusion in transportation and the workforce

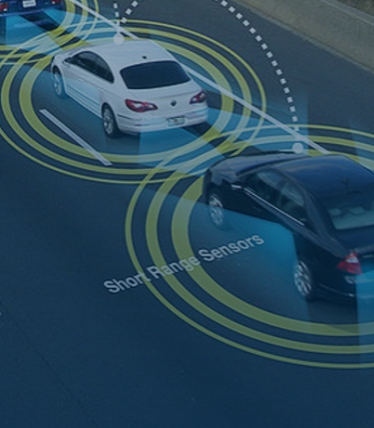


Promote access and opportunity



Educate, engage, and convene stakeholders to listen and build consensus

ITS  AMERICA



USDOT V2X Strategy

Increase nationwide deployment of life-saving V2X technology

Digital Infrastructure

Facilitate use of more data, in real-time, faster than ever before

IIJA Investments

Investing IIJA funds into deployable tech

National AV Framework

Leverage Congressional Autonomous Vehicles Caucus, 2023 strategy

Automated Aerial Mobility

Identify legislative and regulatory barriers and opportunities to advance the sector

ITS America Goals 2023

OUTCOMES



EQUITY
ACCESSIBILITY
MOBILITY



JOBS
WORKFORCE
DEVELOPMENT



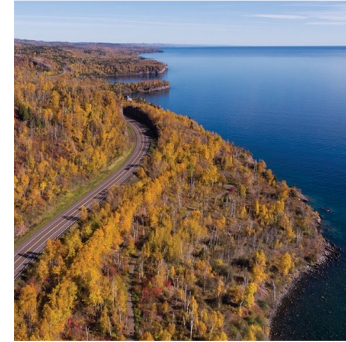
SAFETY
EFFICIENCY
RELIABILITY



ECONOMIC
EQUALITY



MULTI-MODAL
ACTIVE TRANSPORT



PUBLIC HEALTH
AIR QUALITY
RESILIENCY
ADAPTABILITY

Gender and Race in Transportation



Workforce inequity
15% of transportation jobs are held by women



Time costs
Women spend 2x time taking transportation as men



Broken rung

- 3% transportation executives are women
- 1 in 5 hold board seats



“Pink Tax”
Women pay 2x to take transportation as men



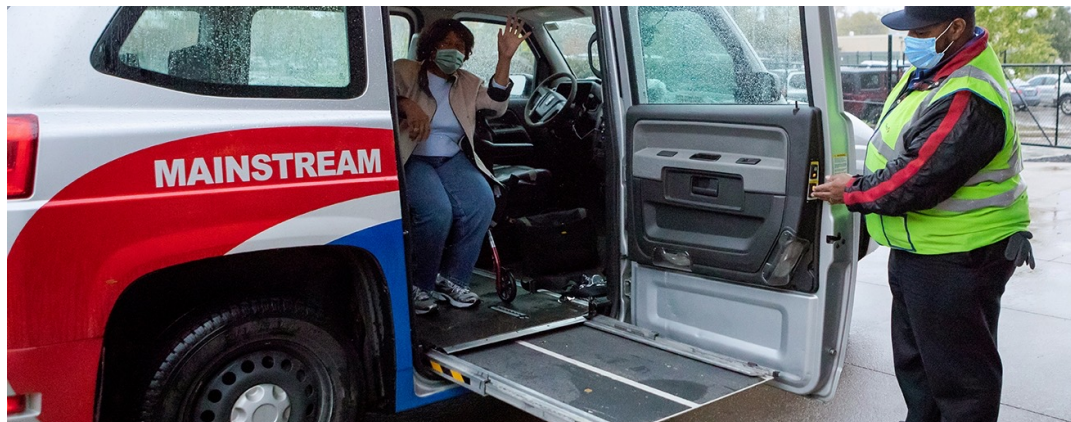
Increased fatalities
Women are 17% more likely to die in a car crash



Street harassment

- 3 in 4 women are street harassed
- 50-90% fear their safety

The Impact of Lack of Access to Transportation



- 5.8 million persons in the United States delayed medical care because they did not have transportation
- 950,000 children missed or delayed medical care because of transportation issues

The Benefits of Easy Transportation Access to Healthcare



- It is estimated that nearly 1/3rd of patients nationally miss medical appointments due to lack of transportation access – harming their health, the ability of the doctors to assist more patients, and delaying access for many other Americans
- The cost of missed appointments in the healthcare industry totals over \$150 billion each year. This is the combined cost of patients' declined health and quality of life, as well as the cost for wasted time and effort by healthcare providers.



the MID

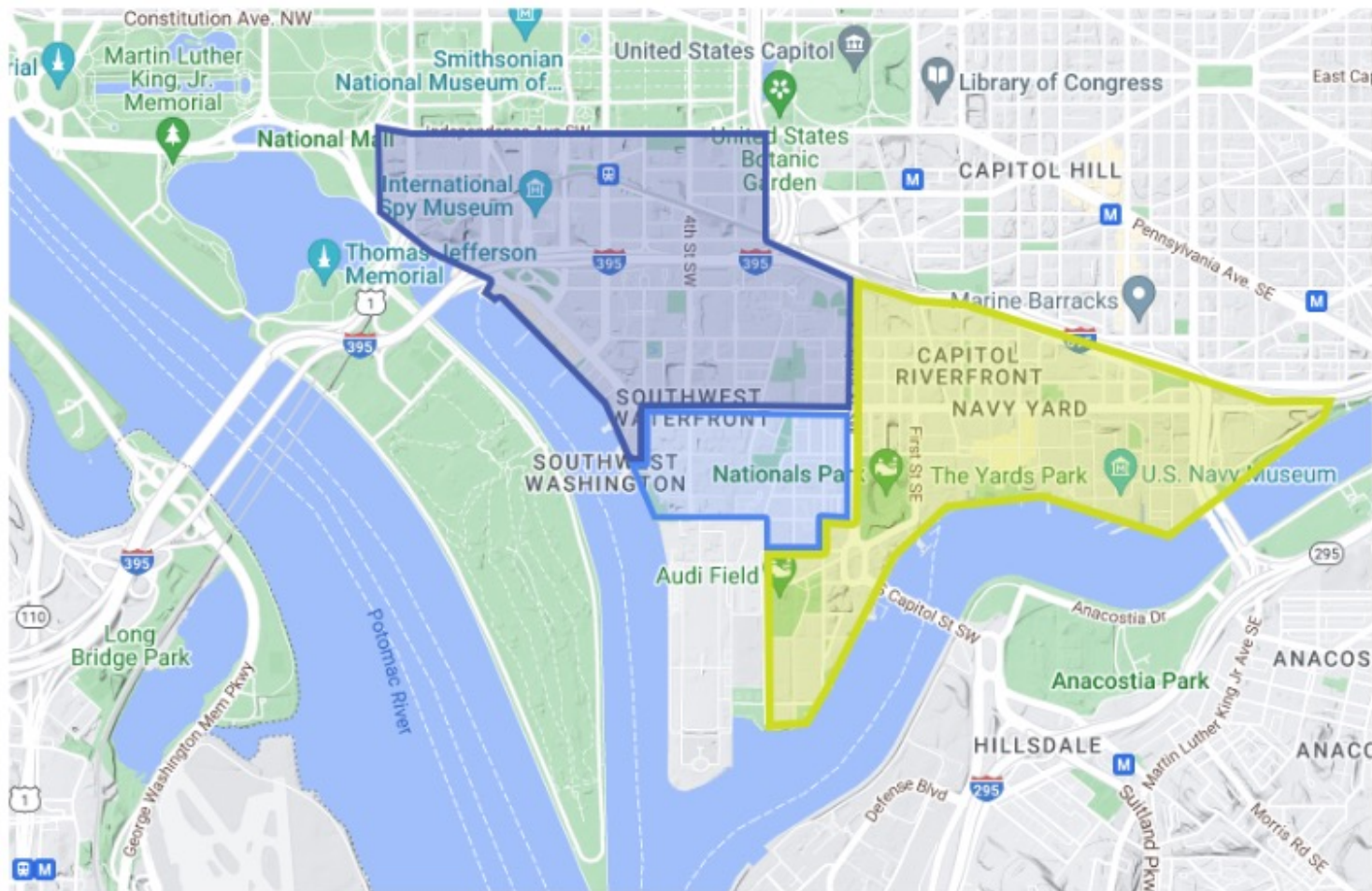
The Mobility Innovation District

WHAT IS THE MID



Headquartered in Southwest D.C., the MID (Mobility Innovation District) plants the seed for future-forward mobility solutions that position safe mobility options as an answer to systemic urban issues and that improve quality of life and access for all.

The public-private partnership uses on-the-ground testing and mobilizes global technology partners to drive local first solutions that then serve as a template for fixing disadvantages in cities nationwide.



PILOT PROJECTS

- Demand responsive/diverted-fixed route shuttles + AV Related tech (Announced)
- Mobility Wallet / Universal Basic Mobility (Under Review)
- Electrification hubs (Under Review)
- E-Cargo Bikes (Spring 2023)
- Curbside Tech (TBD)
- Pedestrian Safety (TBD)





THANK YOU

ITS  AMERICA

Email - Ichace@itsa.org

Bus Priority at WMATA

ULI Health Leaders

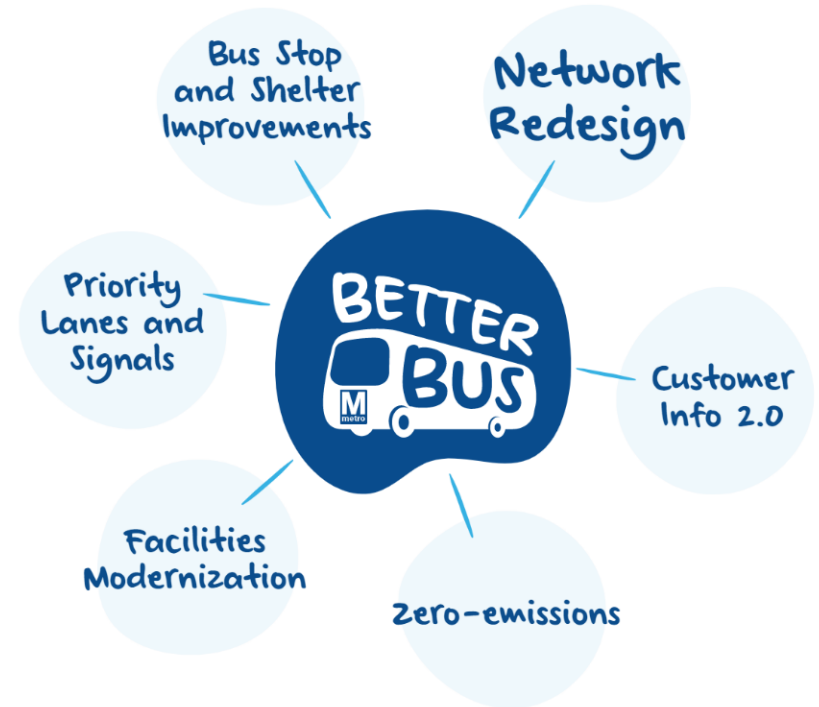
March 31, 2023





Metro's Better Bus Initiative

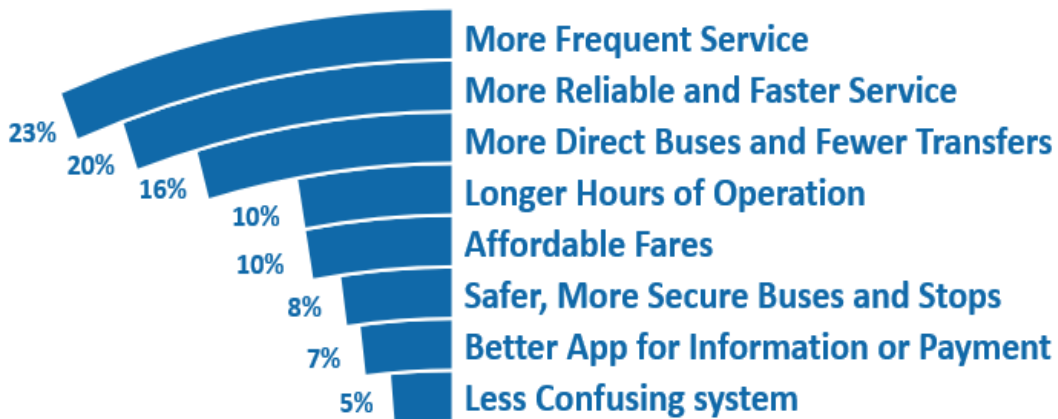
Framework that Metro is advancing to transform bus into a fast, frequent, reliable, affordable service that feels unified to the customer.



Current and Potential Customers' Priorities



Survey Results: Bus Customer Priorities



Bus Transformation Project (2018)

...ridership here would increase exponentially if buses were frequent and preferably in dedicated lanes

Bus stops need to be safe, convenient, and comfortable. A lot of bus stops do not have benches, seats, or cover from the elements.

Prioritizing the bus will help make them more reliable and reduce the bunching, which is really frustrating

Reliable! If the bus were quicker – or if there was a dedicated bus lane – I would take the bus

A Great Bus System Delivers



- **Regional Connectivity** – Matches when and where people want to travel



- **Quality Customer and Operator Experience** – Provides **fast**, frequent, and **reliable** service



- **Equity** – Addresses inequities and increases access to opportunity for disenfranchised communities

To transport more customers, create safer streets, and improve air quality

A Great Bus System Also Includes



Legible, intuitive, coordinated, and accessible information to plan, pay, and ride, regardless of the operator



Transit hubs with **seamless connections** to transit, bikeshare, and carshare, providing safe, secure, easy to use transfers



Bus stops with shelters, seating, lighting, and accurate real-time information, connected with sidewalks and safe pedestrian crossings



Clean, comfortable, secure vehicles that are environmentally sustainable



Exceptional customer experience from start to finish



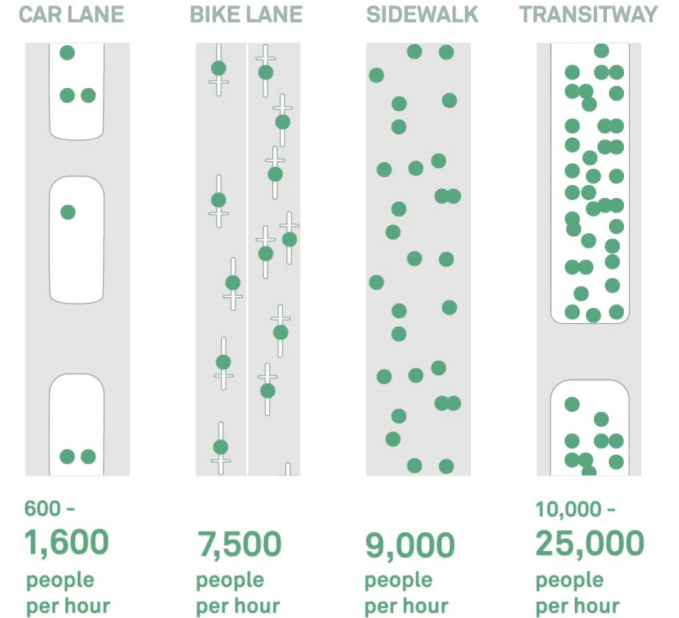
Transit priority and enforced, dedicated lanes to enable reliable service



Consistent work schedules and attractive facilities that improve quality of life for front-line staff

Metro's Bus Priority Program

Dedicated team focused on strategies and initiatives that improve **bus operating speeds** and **reliability** for an improved rider experience, environmental stewardship, and financial stewardship.

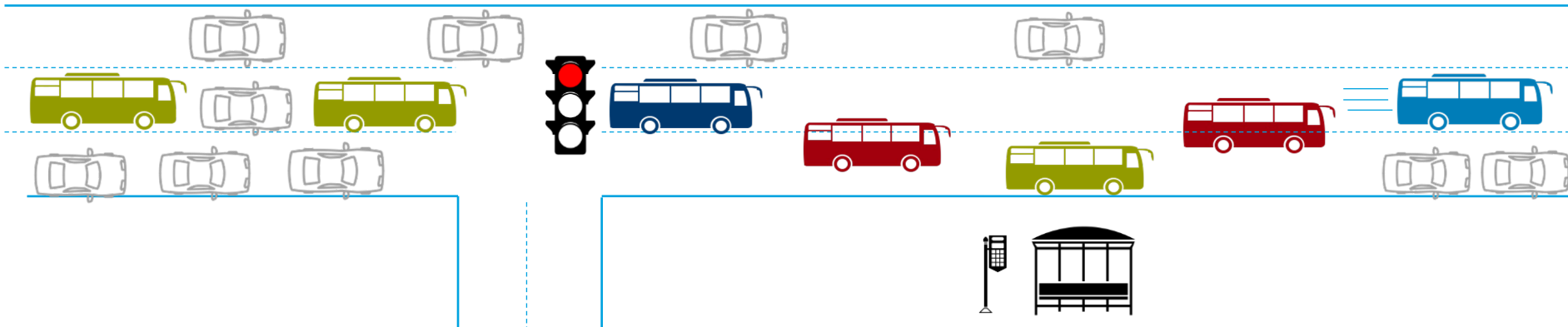


Program Vision

Make bus the **mode of choice** and increase ridership by improving its ease of use, accessibility, and reliability of service for everyone in the region.



Priority Treatments Improve Bus Speed and Reliability



Speed

Traffic Congestion

Signal Delay

Stop Delay:
Deceleration

Dwell Time

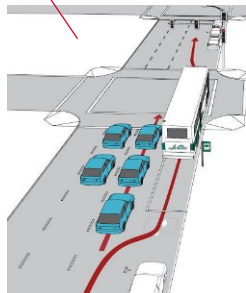
Stop Delay:
Acceleration

Free Flow

Time



1. Dedicated Bus Lanes
2. Automated Enforcement Program



3. Transit Signal Priority
4. Queue Jumps



5. All-Door Boarding
 - Bus Islands
 - Stop Consolidation



Projects Include



1 *Transit Signal Priority (TSP)*

a. Extended green

b. Truncated red

Buses request an extended green or truncated red light to reduce wait times

2 *Queue Jumps*

Give buses a head start with additional travel lane and special signal

3 *Camera Enforcement*

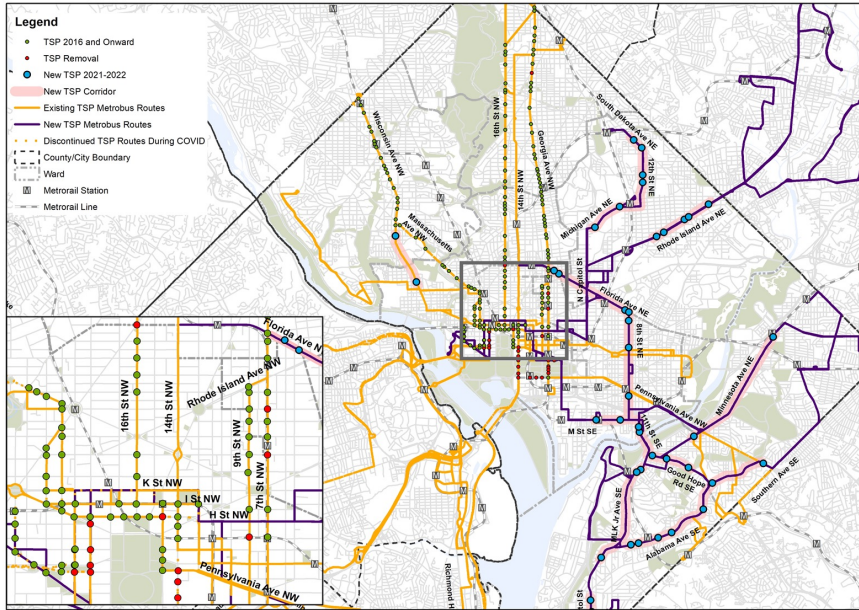
Sends video of violations to jurisdictions to issue citations and deter future misuse

4 *All-door Boarding*

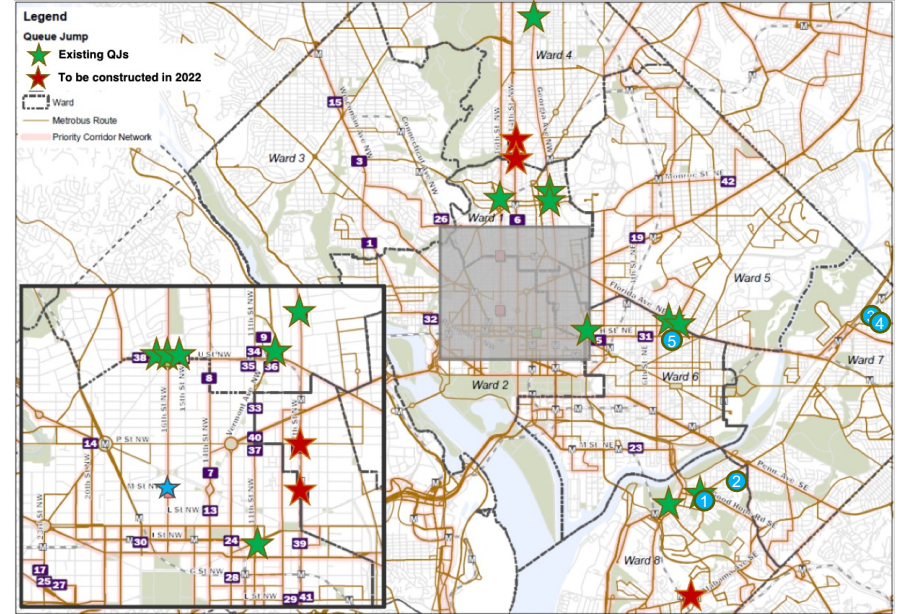
Reduces dwell time by allowing passengers to board from all doors



TSP and Queue Jumps



Over 250 TSP intersections in the District and Northern Virginia



20+ queue jumps in DC

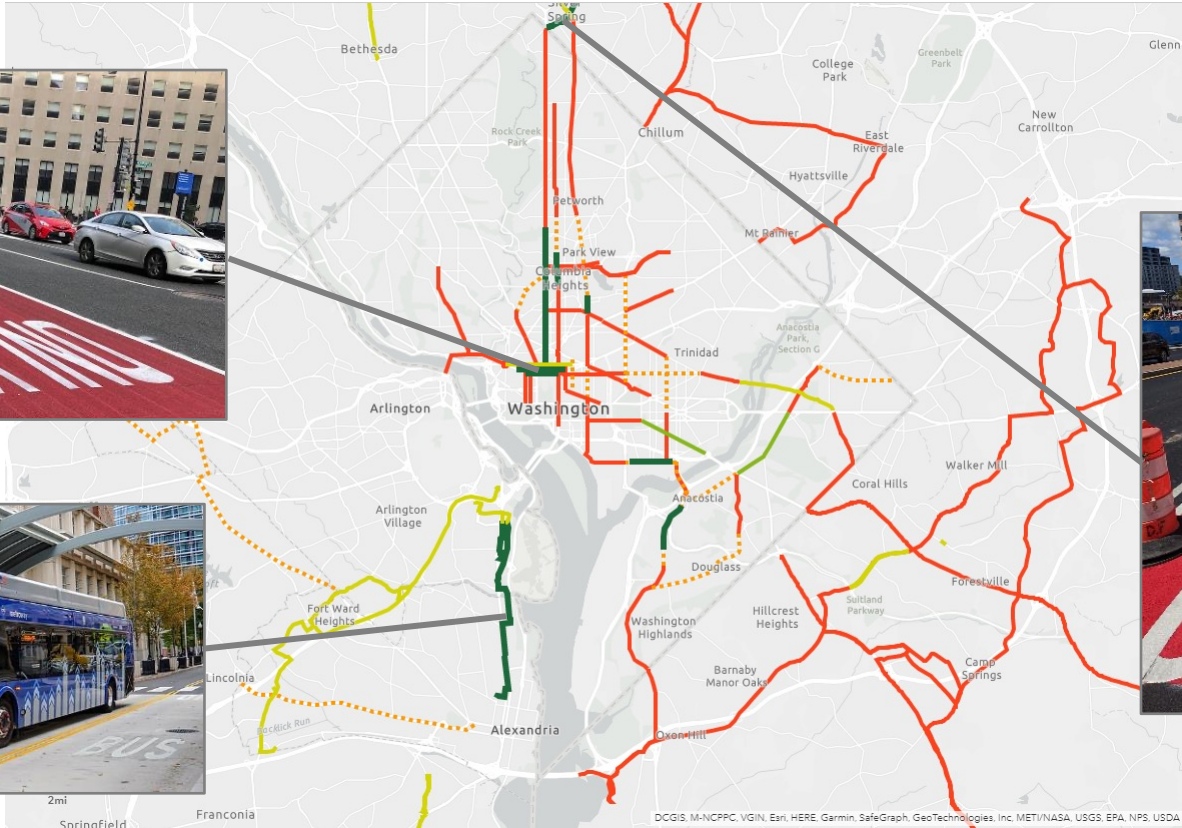
Facilitating More Bus Lanes in the Region



DC Bus Lanes
Downtown Network



61
Metroway in
VA



- Legend**
- Open
 - Design/Engr
 - Planning
 - Concept



MD Bus
Lane



Automated Lane Enforcement

Bus lanes are meant to speed buses up **BUT** unauthorized vehicles in bus lanes and bus stops slow buses down.



Source: Dan Malouff

Peer cities have improved bus performance with Automated Lane Enforcement

- New York City: Automatic Bus Lane Enforcement (ABLE) increased bus speeds 7 to 31 percent.
- San Francisco: Transit Only Lane Enforcement (TOLE) program reduced afternoon delay 7 to 20 percent.

Ride the Bus!



- Bus priority help us to deliver on our goal of **Service Excellence** for our customers.
- **Regional Partnerships** are vital to delivering bus priority projects.
- Even diesel buses are more **sustainable** than driving.

Goals of Metro's Strategic Transformation Plan





**Urban Land
Institute**

DC Councilmember Charles Allen

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Streetscape Accessibility?



Streetscape Accessibility?













90 96 X3
metrobus
GET TO GO! 1001600 NEXT BUS 96 X3 MATA.COM





SUBWAY

\$1.89

NEW! NATURALLY NOT SWEETENED
SALAD

23515













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Audience Q&A

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