

Meaningful Making Impact

A night photograph of a city street. In the center, a median strip is filled with a memorial made of small, colorful objects and a cross. The street is lit by streetlights, and cars are visible in the distance. Buildings line the street, and a billboard is visible on the right.

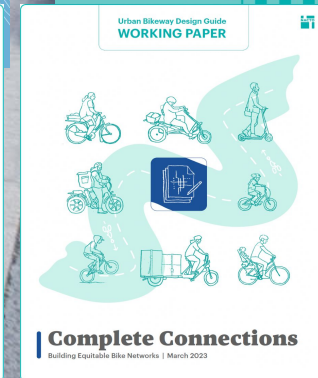
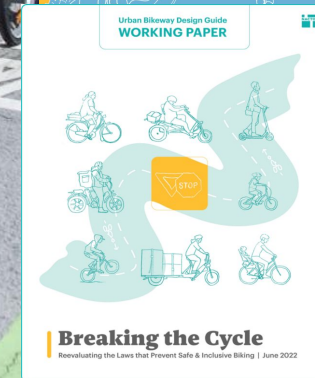
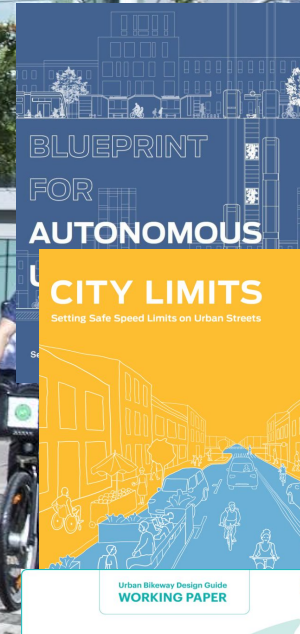
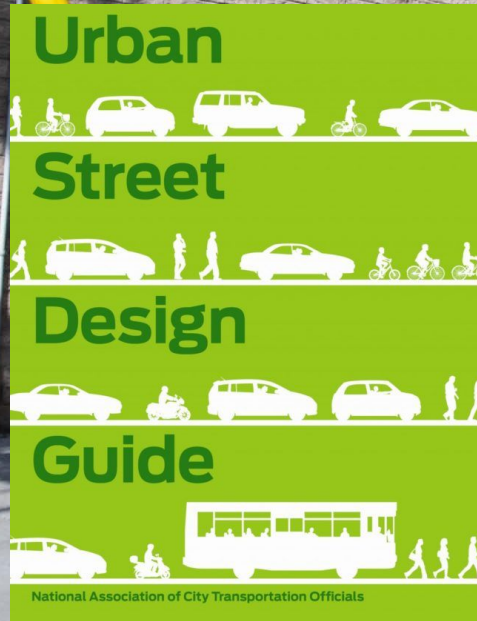
DTN Lisbon, Fall 2025

Zabè Bent, Development Studies, IGOT
@ZabèBent







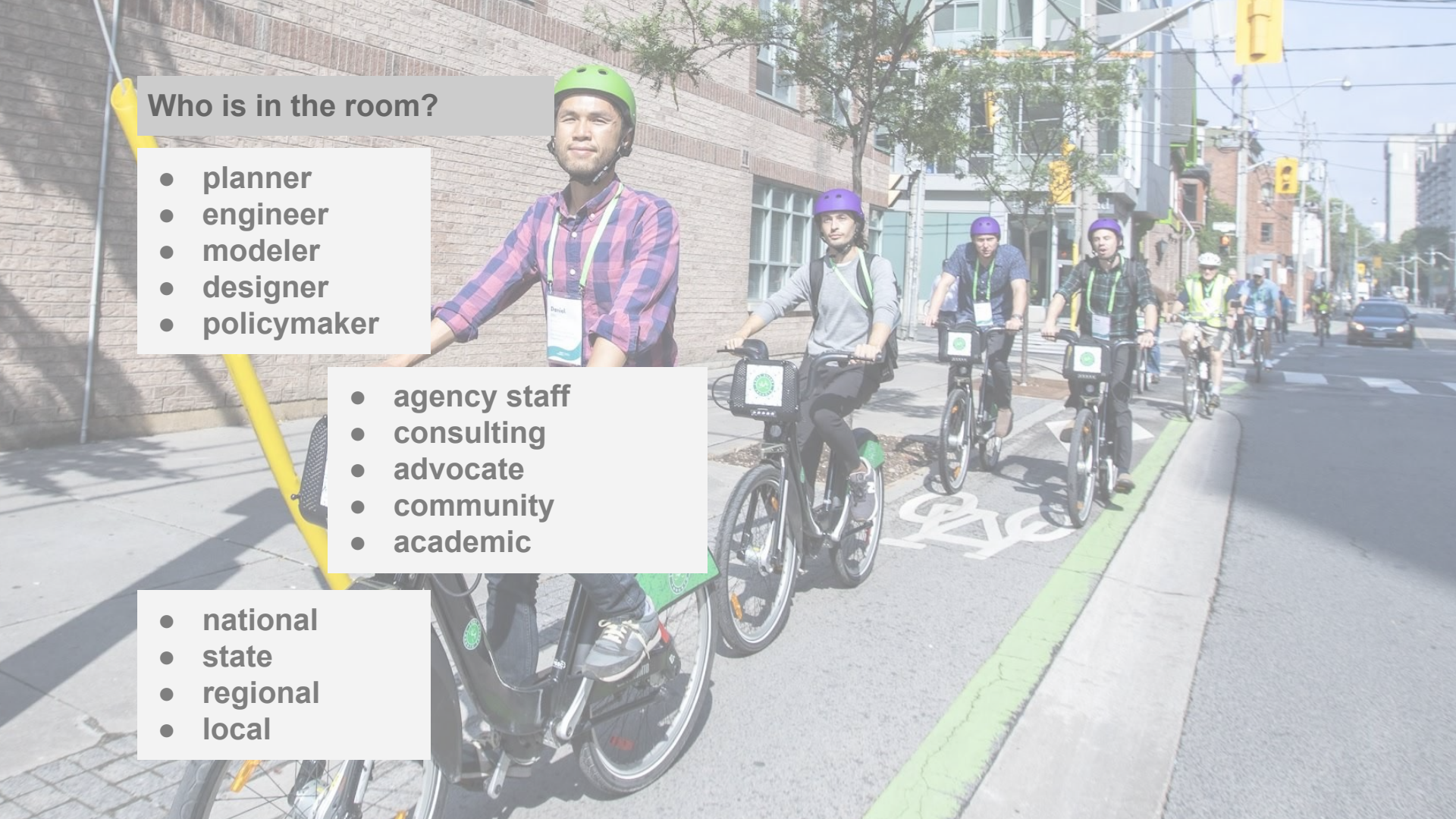


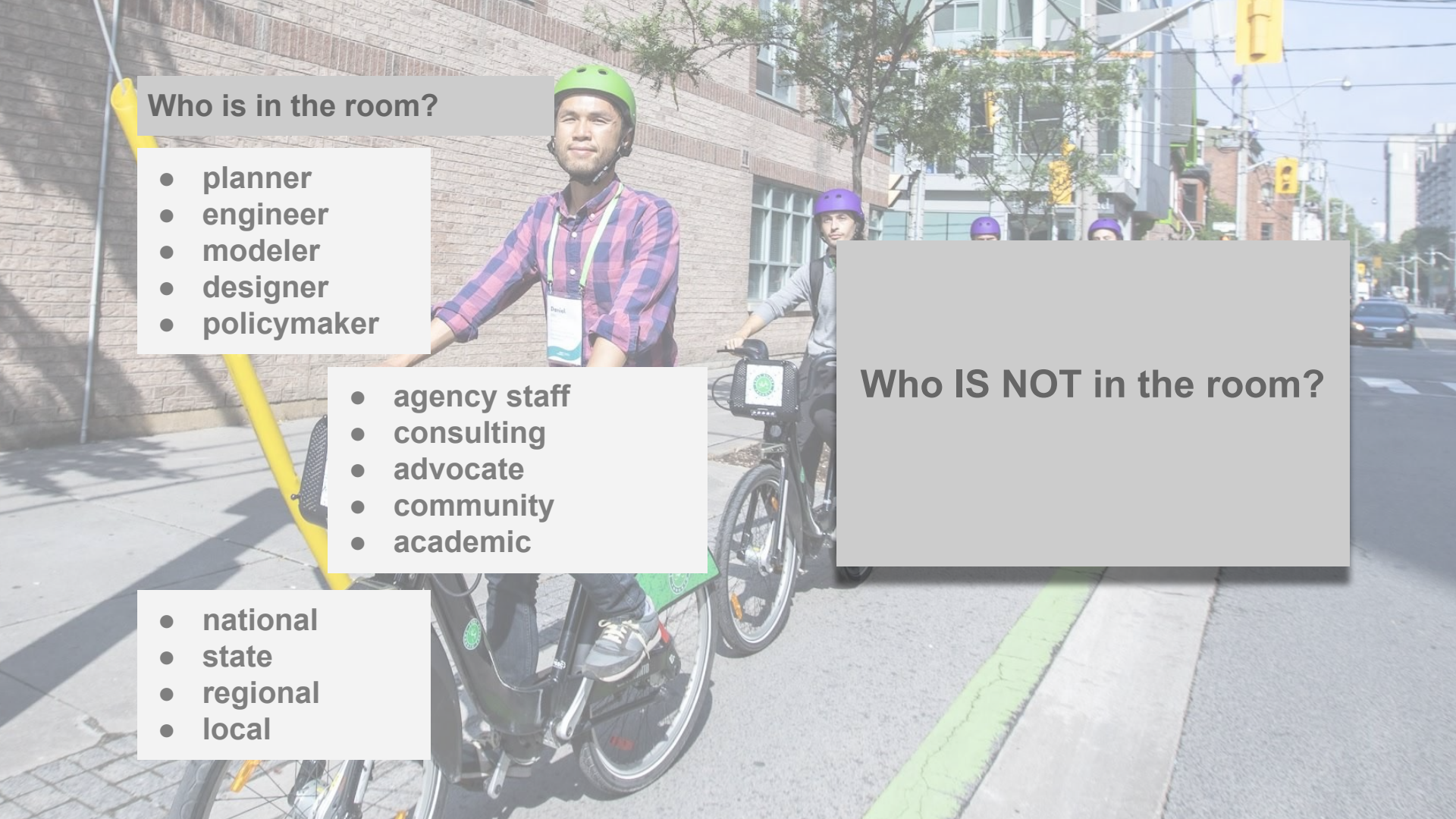
Who is in the room?

- planner
- engineer
- modeler
- designer
- policymaker

- agency staff
- consulting
- advocate
- community
- academic

- national
- state
- regional
- local



A photograph of a city street scene with several people riding bicycles. In the foreground, a man wearing a green helmet and a red and blue plaid shirt is riding a bicycle. Behind him, another person wearing a purple helmet is visible. The background shows a brick building, trees, and a city street with traffic lights and a car. The image is overlaid with several text boxes.

Who is in the room?

- planner
- engineer
- modeler
- designer
- policymaker

- agency staff
- consulting
- advocate
- community
- academic

- national
- state
- regional
- local

Who IS NOT in the room?

THINKING IMPACT

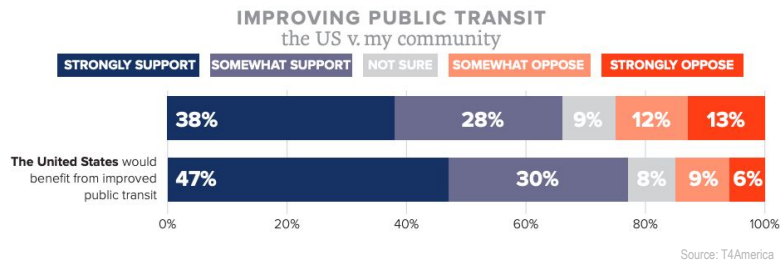
- **WHY** are we pursuing this project?
What outcomes are we trying to change?
- **WHO** is most helped? Most harmed?
How does the policy/program/projects
change their experience & outcomes?
How do we ensure it addresses their needs?
- **HOW** do we partner with those excluded?
- **WHY** are we pursuing this project?
What outcomes are we trying to change?



What is your “why”?

- good at maths
 - good at coding
 - climate change
 - traffic safety
 - traffic management
 - love cars or trains
 - ...?
- personal
 - political

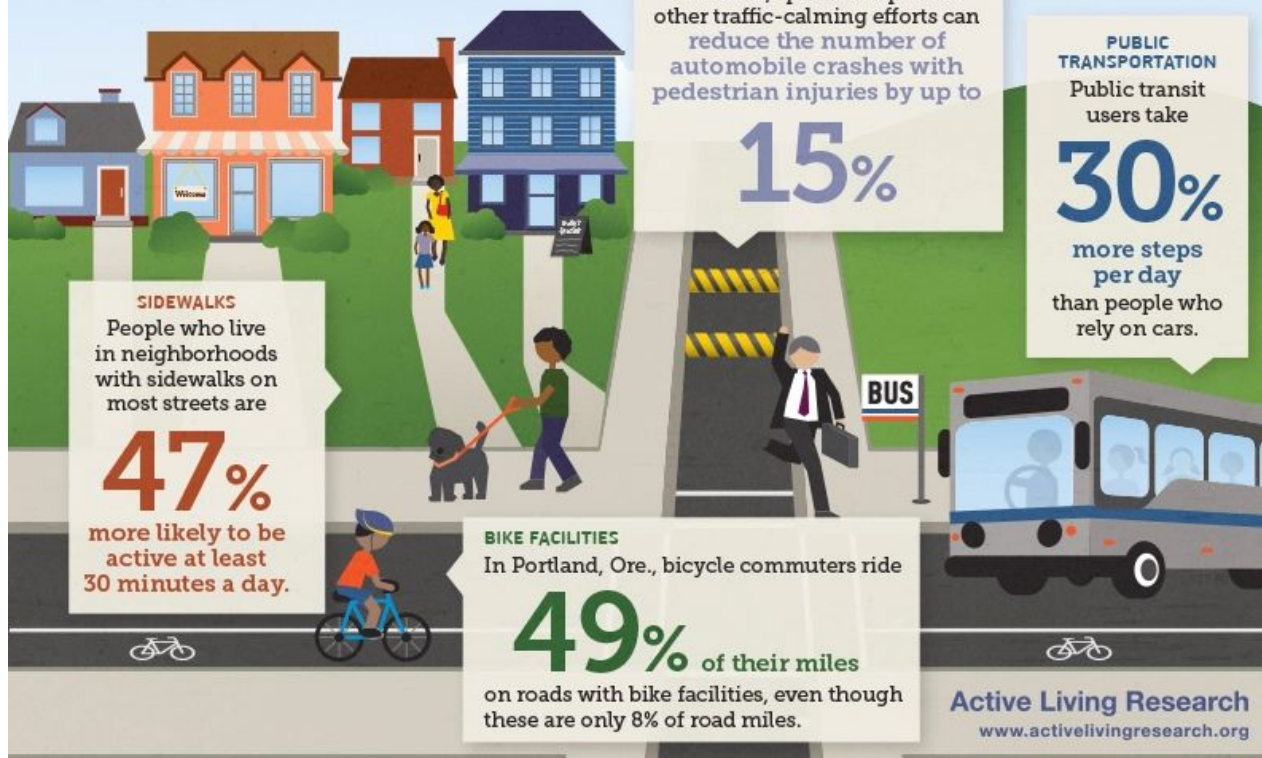




THE ROLE OF

Transportation

IN PROMOTING PHYSICAL ACTIVITY



Sources: SIDEWALKS: Sallis J, Bowles H, Bauman A, et al. "Neighborhood Environments and Physical Activity among Adults in 11 Countries." *American Journal of Preventive Medicine*, 36(6): 484-490, June 2009. BIKE LANES: Dill J et al. *Bicycling for Transportation and Health: The Role of Infrastructure*. *Journal of Public Health Policy* (2009) 30, 595-5110. doi:10.1057/jphp.2008.56). TRAFFIC CALMING: Bunn F, Collier T, Frost C, et al. "Area-Wide Traffic Calming for Preventing Traffic Related Injuries." *Cochrane Database of Systematic Reviews* (1), January 2003; Elvik R. "Area-Wide Urban Traffic Calming Schemes: A Meta-Analysis of Safety Effects." *Accident Analysis and Prevention*, 33(3): 327-336, May 2001. PUBLIC TRANSPORTATION: Edwards R. "Public Transit, Obesity, and Medical Costs: Assessing the Magnitudes." *Preventive Medicine*, 46(1): 14-21, January 2008.

Setting Goals

UN SDG GOAL 11.2:

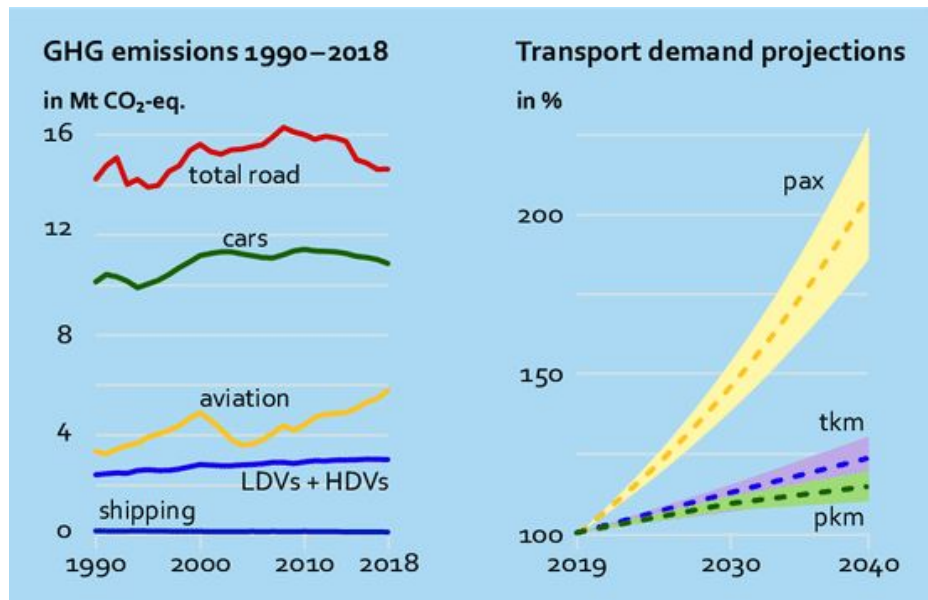
by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Focus on Why

transport generates as much as

28%

of Greenhouse Gas Emissions



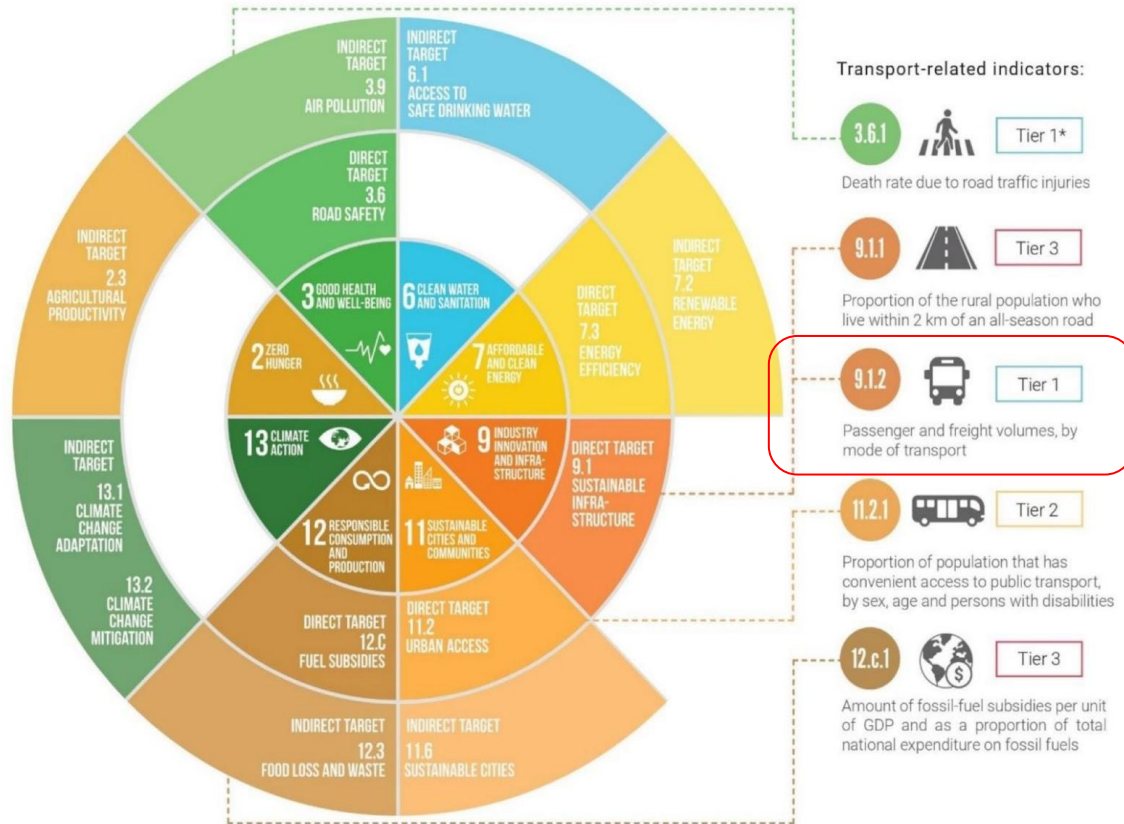
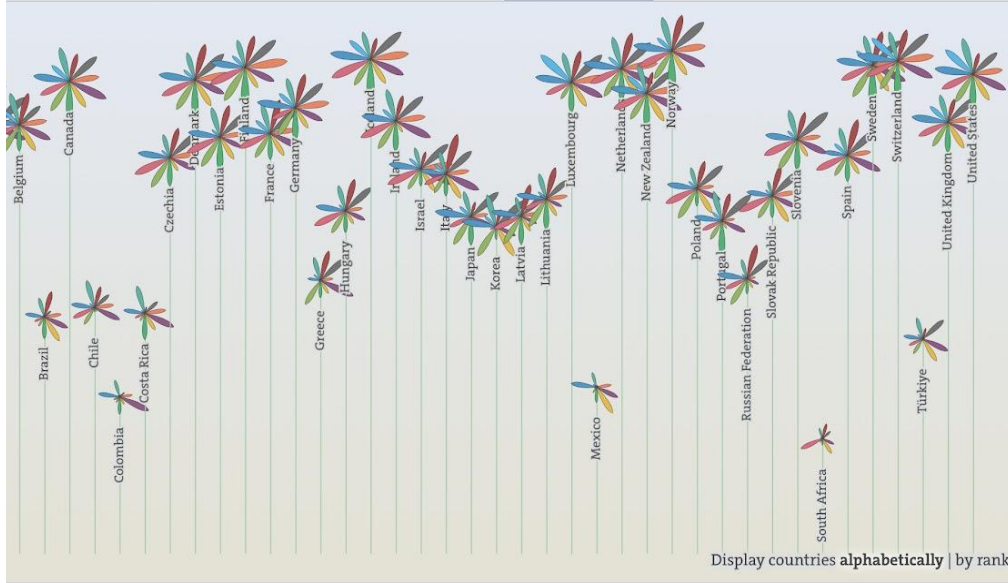


Figure i: Direct and indirect transport targets and indicators



Create Your Better Life Index

Rate the topics according to their
importance to you:

	Housing	<input type="range"/>
	Income	<input type="range"/>
	Jobs	<input type="range"/>
	Community	<input type="range"/>
	Education	<input type="range"/>
	Environment	<input type="range"/>
	Civic Engagement	<input type="range"/>
	Health	<input type="range"/>
	Life Satisfaction	<input type="range"/>
	Safety	<input type="range"/>
	Work-Life Balance	<input type="range"/>

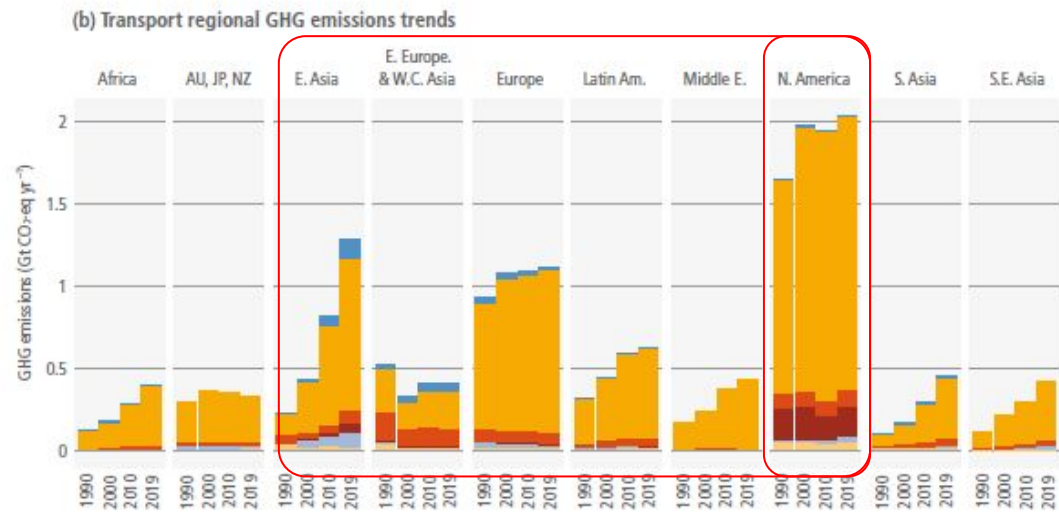
Reset Help

Gender differences

Compare with others

Share your index

???



IPCC Ch 10 Transport. In IPCC, 2022: Climate Change 2022: Mitigation of Climate Change
<https://www.ipcc.ch/report/ar6/wg3/chapter/chapter-10/>

The background of the entire image is a grid of 100 small, square aerial photographs of various urban environments. These photos show a mix of dense city centers with tall buildings, suburban areas with single-family homes, and green spaces like parks and sports fields. The grid is composed of 10 rows and 10 columns. A solid blue horizontal band runs across the middle of the image, serving as a backdrop for the title text.

STREETS

The background of the entire slide is a large mosaic composed of many small, square aerial photographs. These photos show various urban environments, including dense city blocks with colorful buildings, wide green parks with trees and paths, and riverfronts with bridges and waterfront buildings. The mosaic is arranged in a grid-like pattern, with the blue text boxes overlaid on it.

Largest network of continuous public space

ONE OF OUR BIGGEST ASSETS IN CITIES!

Multimodal streets are efficient streets

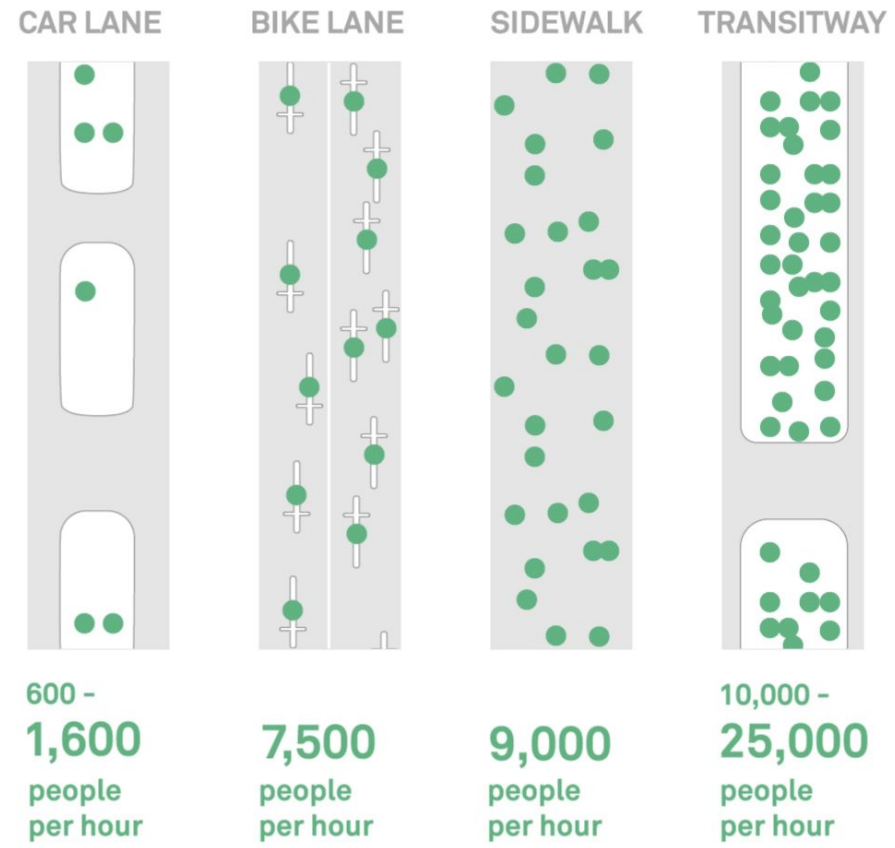
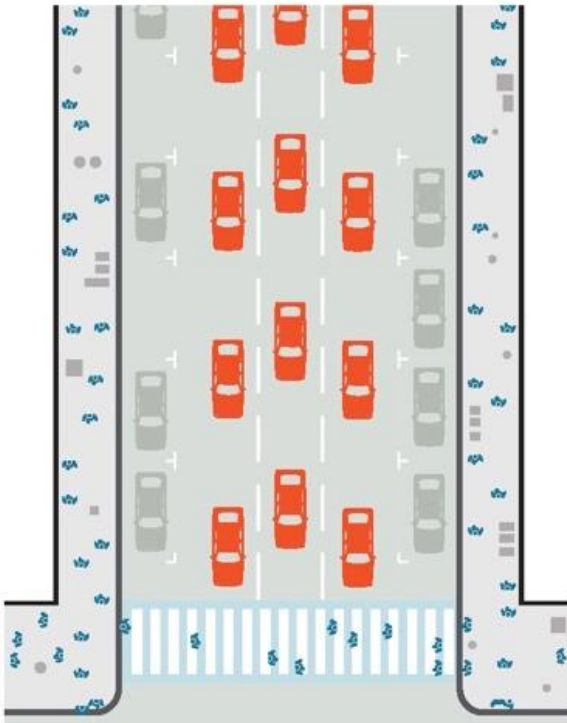


Image: NACTO

Success depends on how you allocate space

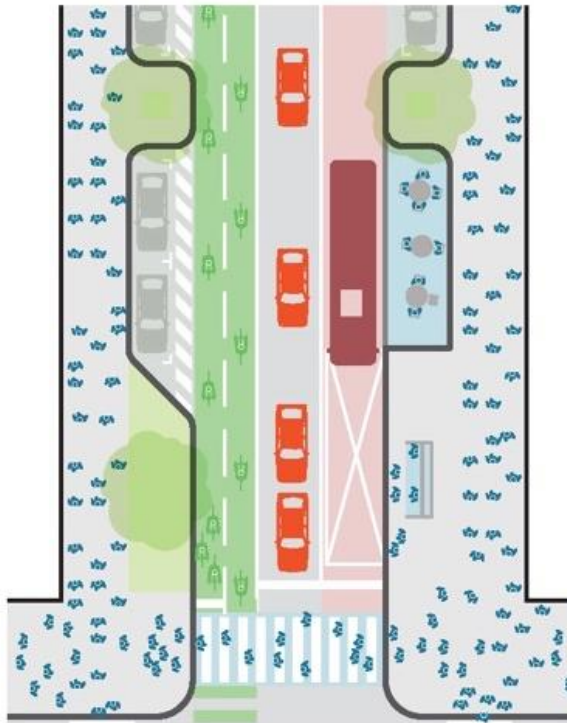
Car-Oriented Street



Total capacity:

12,300
people/ h

Multimodal Street



Total capacity:

30,100
people/ h

x 2.4
people

Image: NACTO



Image: NACTO



Image: NACTO



Image: NACTO



So, why do we keep building roads like this?

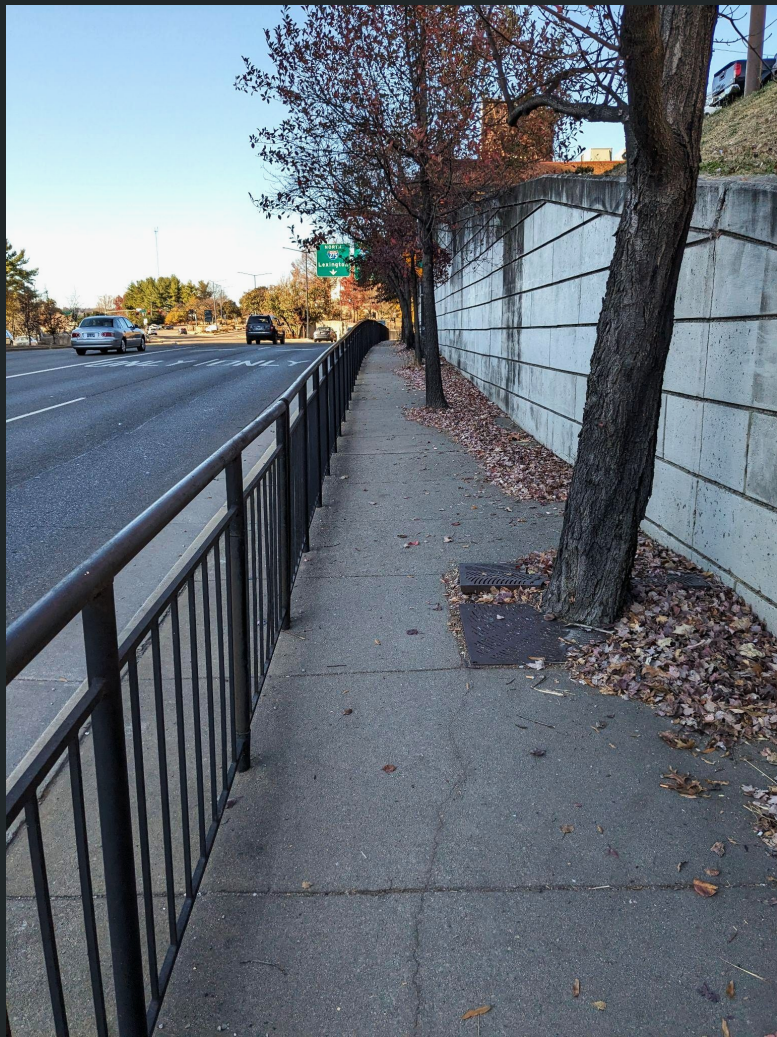
Or this...



Or this...













When we could be building this:



What's working? What's not working? For whom?





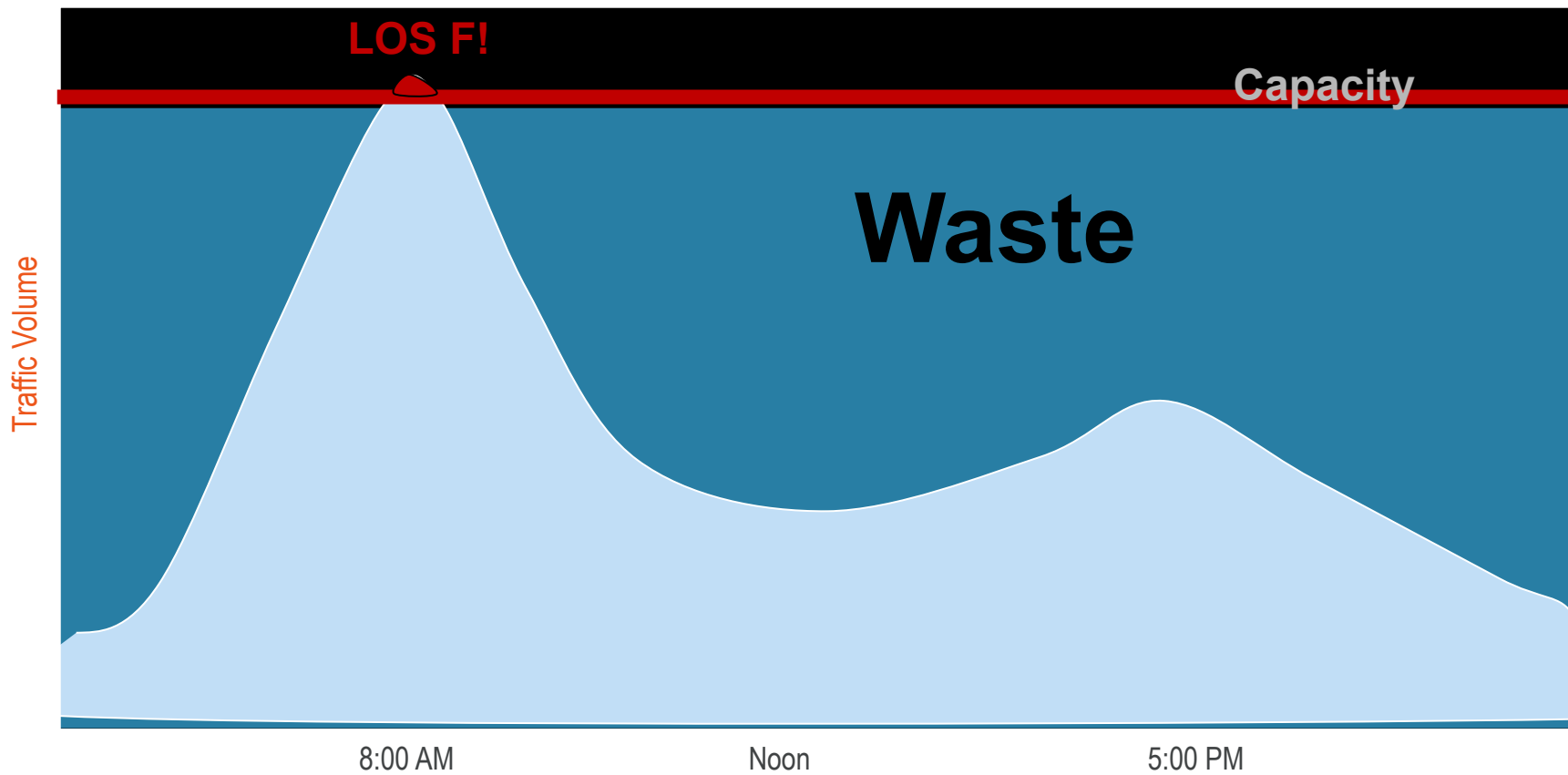


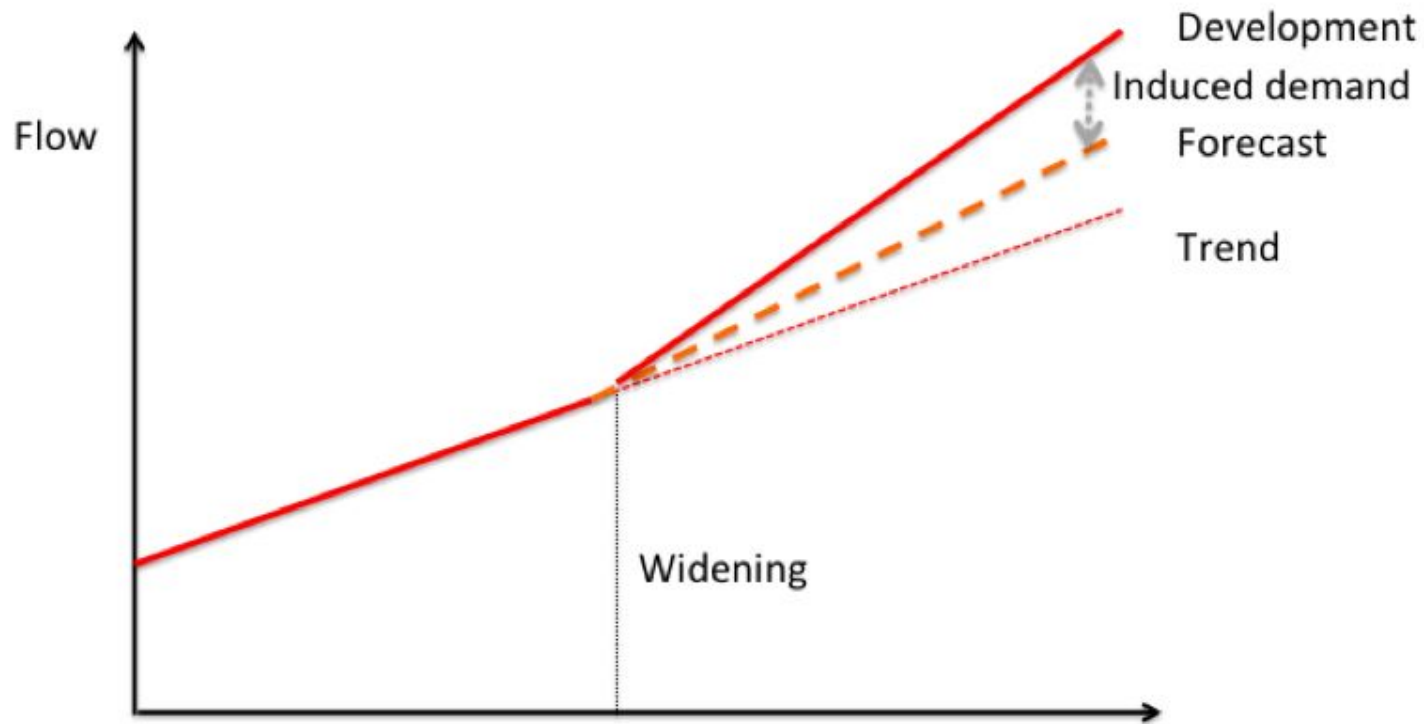


A or F?



A or F?

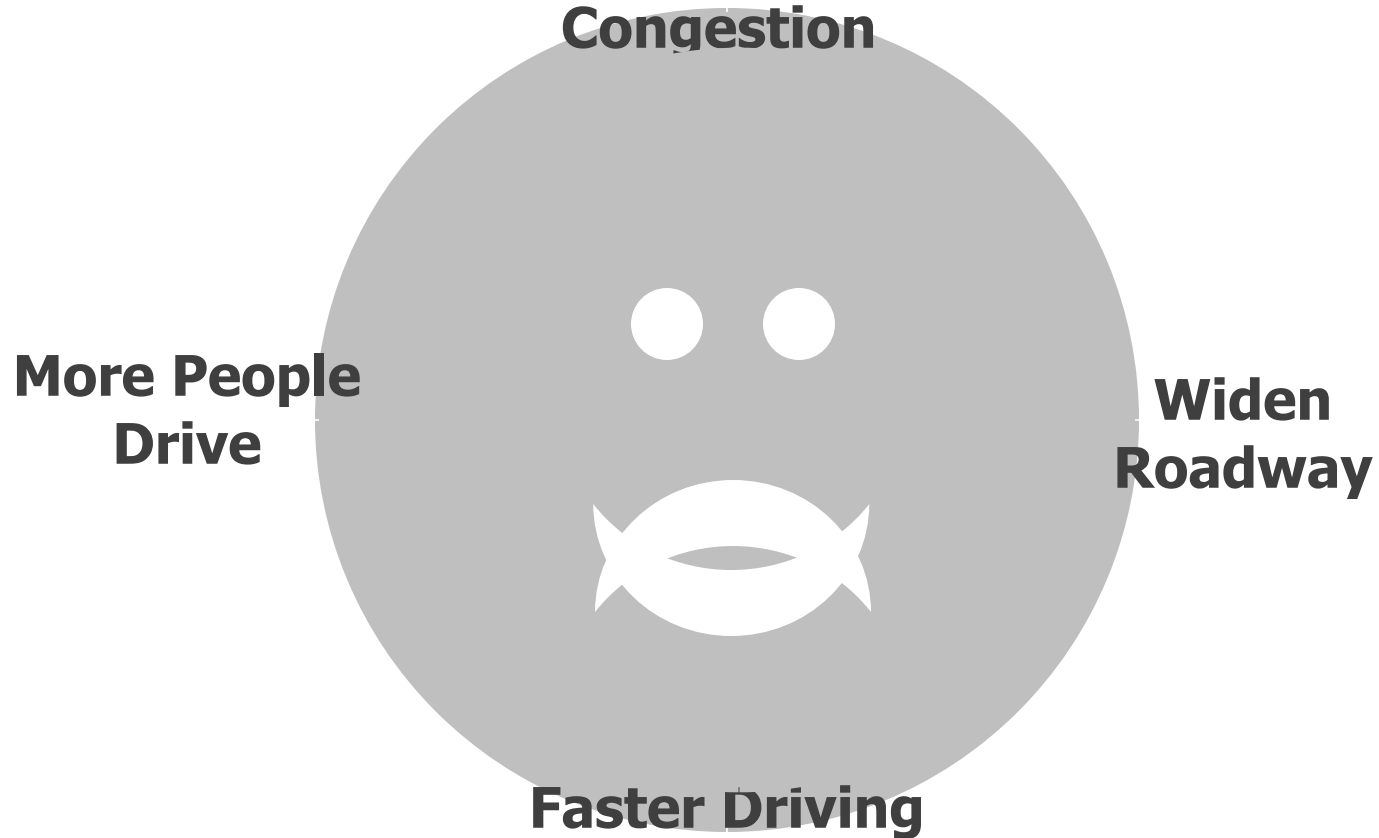




Downs, A. (2004). Still Stuck in Traffic. Washington DC, Brookings Institute.

Speck, J. (2018). Understand Induced Demand. In: Walkable City Rules. Island Press, Washington, DC.
https://doi.org/10.5822/978-1-61091-899-2_27

Yet, we keep building...



How are we doing?



How are we doing?

Hi Zabe! You may be interested in Jan Whittington's work screening projects for climate and social impacts (<https://www.climatesolutionsintl.com/product>) and Shalini Vajjhala's work on pre-planning (<https://precollective.org/>). For physical-risk screening, GRI Risk Viewer <https://global.infrastructureresilience.org>

Zabe,
I saw your update post and I'm thrilled you're working on this stuff. I've been thinking about some adjacent topics--basically the way we do long-range planning still make any sense, irrespective of the models--and would love to talk that through with you. In that vein, two possibilities:

So Your Project was Derailed. Now What?

📍 Hynes Convention Center, 3rd Floor, Room 302

We often have lofty, yet reasonable goals and plans for street transformation at the outset of a project—but new information or feedback can send the project down a different path. Join us for a discussion with agency leaders who have seen technical, engagement, or political winds blow their projects in a new or unexpected direction. We'll talk about managing public expectations, project outcomes, and team morale in challenging times.

Breakout Session

Speakers



Zabe Bent
Director of Design
NACTO



Michael Carroll
Deputy Managing Director
City of Philadelphia Office of Transportation and Infrastruct...



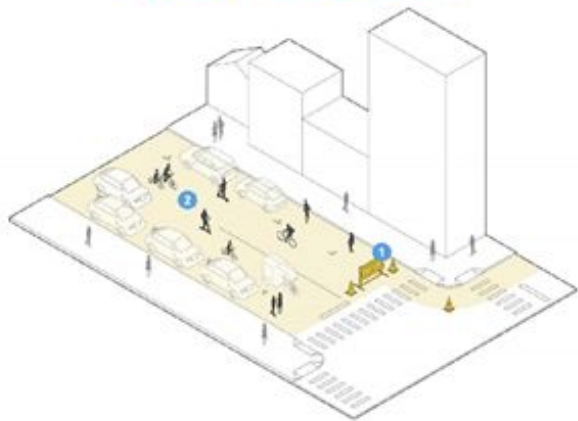
Gia Biagi
Commissioner
Chicago Department of Transportation



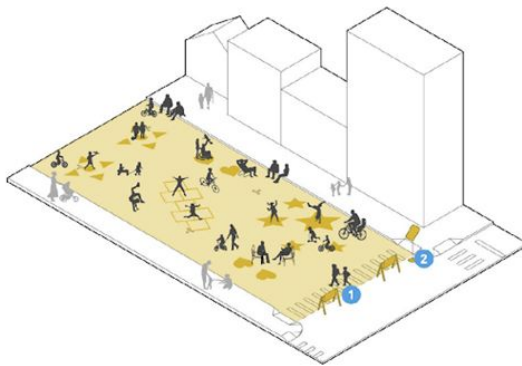
Ryan Russo
Principal
Together Projects

What can you do with more street space? With slower speeds?

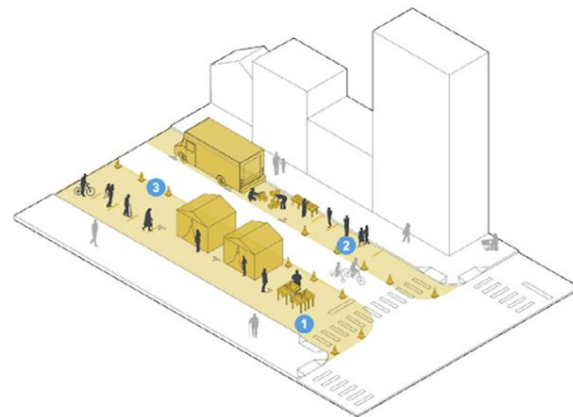
Slow Streets



Open/Play Streets



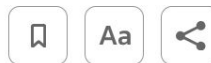
Critical Services



US traffic deaths down in 2023 but remain above pre-pandemic levels

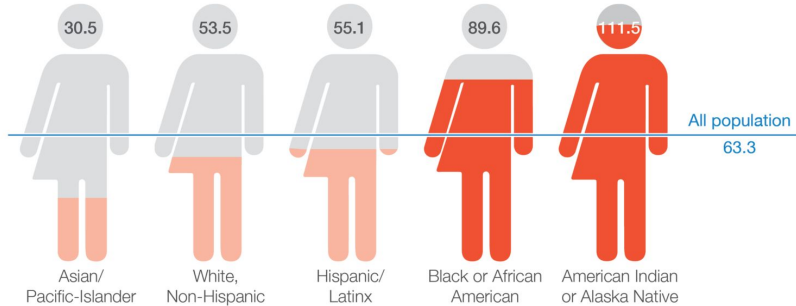
By David Shepardson

September 28, 2023 12:59 PM EDT · Updated September 28, 2023



The burden is not shared equally

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



People walking in lower-income areas are struck and killed at much higher rates. People walking in wealthier neighborhoods are killed at far lower rates



Statistics on Car Crashes Caused by Human Error

The statistics surrounding car crashes and human error are alarming. According to the [National Highway Traffic Safety Administration](#), approximately 94% of all car crashes are attributed to human error. This statistic underscores the critical importance of driver behavior in road safety. It's important to note that this doesn't mean that human error is the only factor in 94% of crashes. That is, the critical reason for the crash—the last event in the chain of events leading to the collision—was attributed to human error 94% of the time. In most cases, there are many other factors that play a role as well.

Common Types of Human Errors Leading to Car Crashes

Various types of human errors frequently

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How AI will divide the best from the rest

Optimists hope the technology will be a great equaliser. Instead, it looks likely to widen social divides

[Share](#)

ILLUSTRATION: RICARDO REY

U.S. DOT

U.S. DOT Orders Review of All Grants Related to Green Infrastructure, Bikes

U.S. Department of Transportation Secretary Sean Duffy is coming for our bike lanes — and the time to act is now.



By Gersh Kuntzman

12:00 AM EDT on March 12, 2025

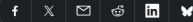


Photo: Gersh Kuntzman

U.S. Department of Transportation Secretary Sean Duffy has ordered officials to stop action on all Biden-era discretionary grants to build bike lanes and other "green infrastructure" so the agency can review the project for possible removal.



People don't put themselves at risk without a reason.
It's impossible to make a good decision
if the infrastructure doesn't let you.

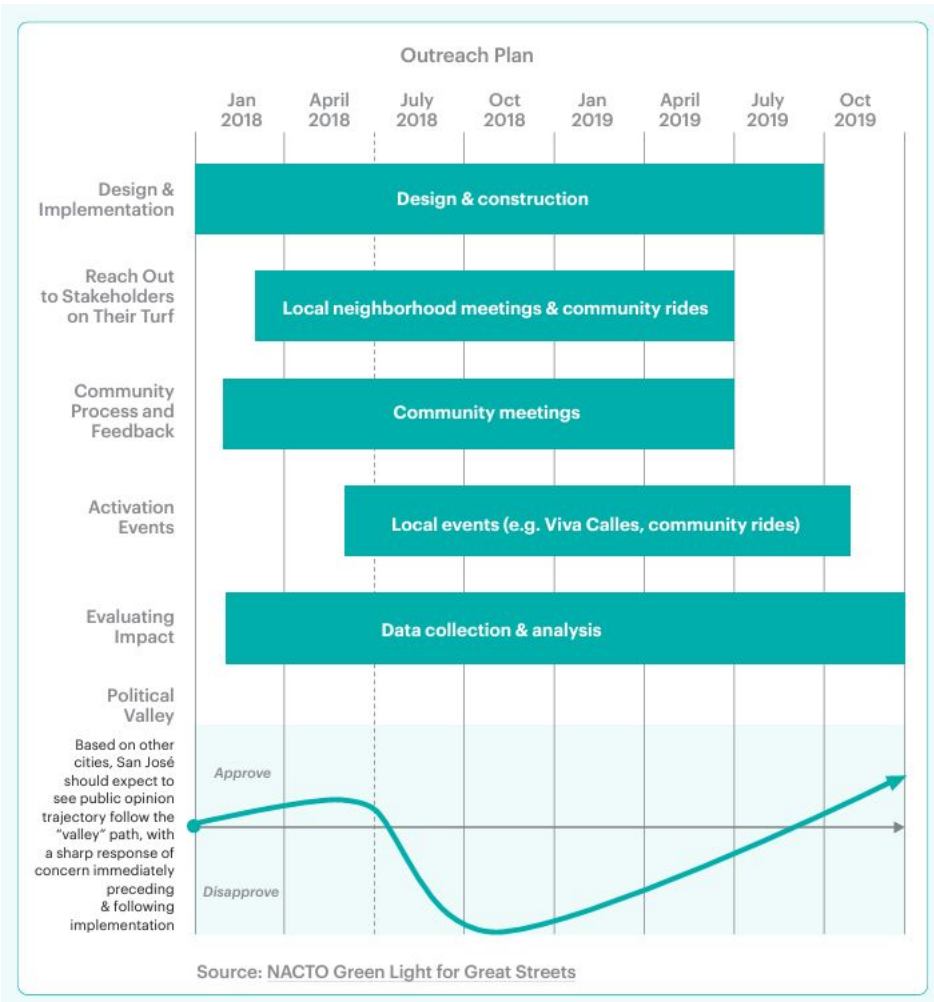


50% of people on bikes
were riding on the sidewalk



3% of people on bikes
ride on the sidewalk

Anticipate Political Valleys



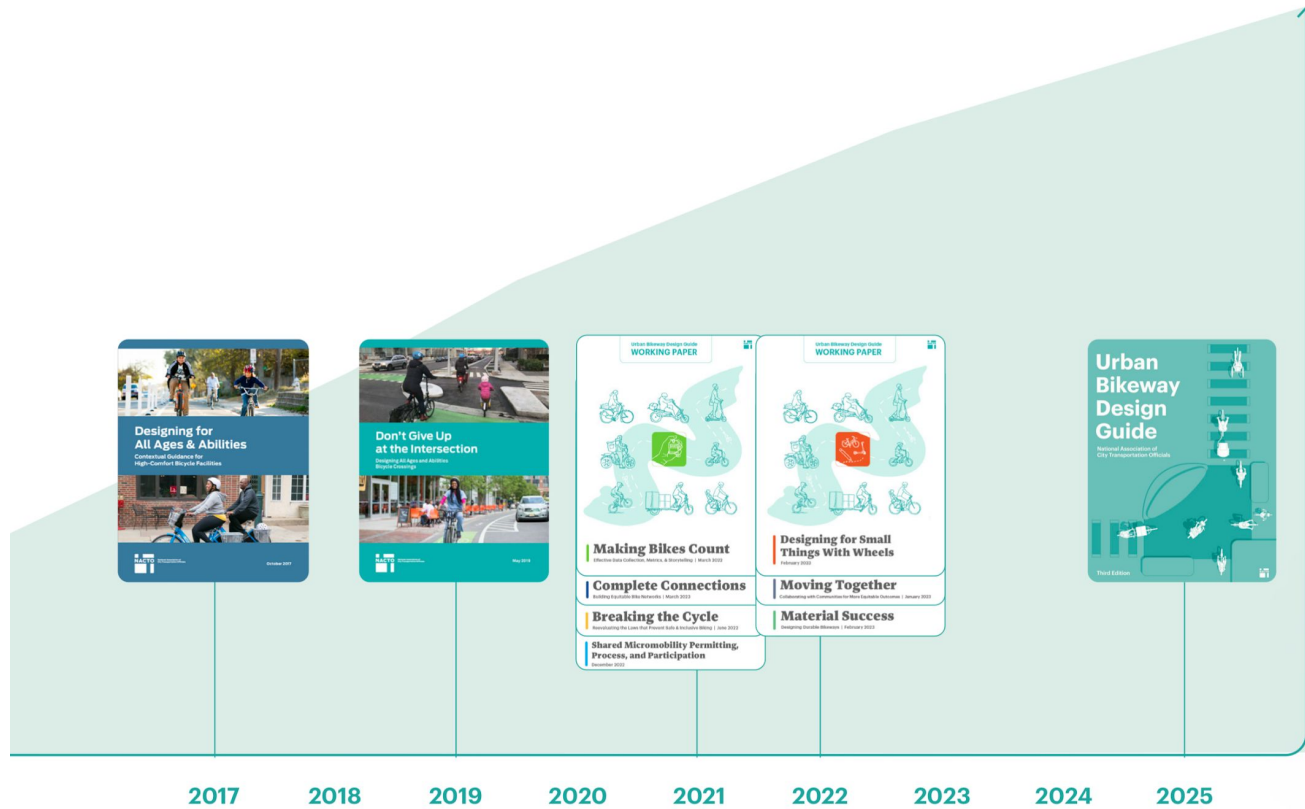


Image: NACTO Urban Bikeway Design Guide

BIKEWAY DESIGN VEHICLE

Bikeway use is growing in tandem with the diversity of devices, in size and speed, being used. This growth requires new thinking about street and bikeway design. When designing bikeways, the most common devices fit into one of four operational categories:

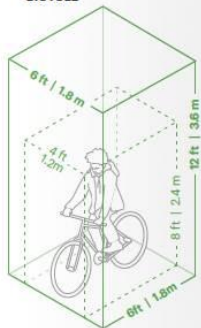
- **Mini devices:** Electric and non-electric scooters, skateboards, rollerblades, and other devices under 20 in (50 cm) wide that are typically used while a person is standing upright
- **Typical bikes:** Electric and conventional upright bikes and tricycles, as well as recumbent bikes, hand cycles, and any wheeled devices up to 2.5 ft (0.8 m) wide
- **Cargo bikes:** Electric and conventional bikes and tricycles between 2.5-3 ft (0.8-0.9 m) wide that have an extended wheelbase or that are pulling a trailer
- **Extra-large bikes:** large freight tricycles, pedicabs, and other devices between 3 ft (0.9 m) and typically up to 4.5 ft (1.4 m) wide

Devices from all of these categories should be expected in any bikeway. Designers should provide appropriate width and turning space for the longest and widest device possible.

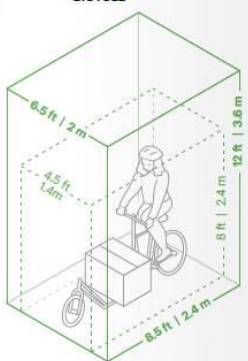
TYPICAL CHILD BICYCLE (AGES 4-8)



TYPICAL ADULT BICYCLE



CARGO BICYCLE

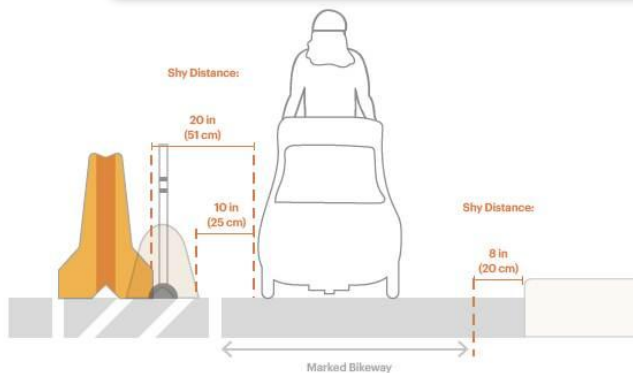
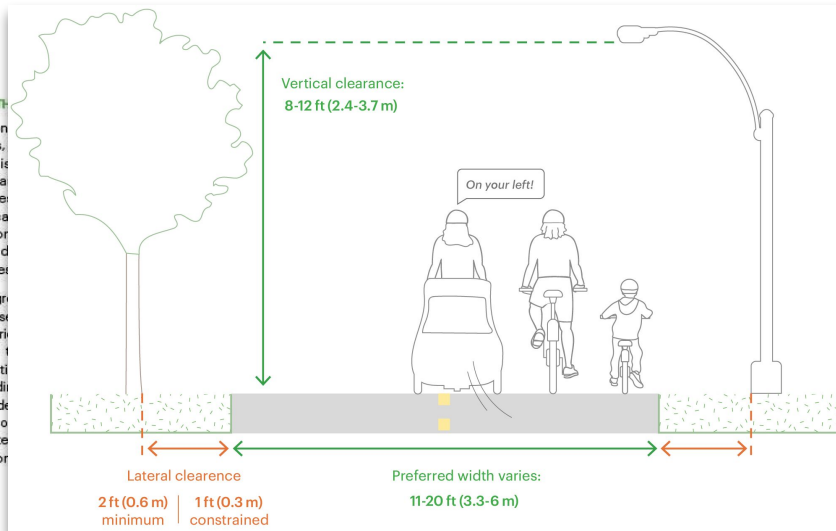


— DESIRED OPERATING SPACE
- - - MINIMUM OPERATING SPACE

RIDEABLE WIDTH

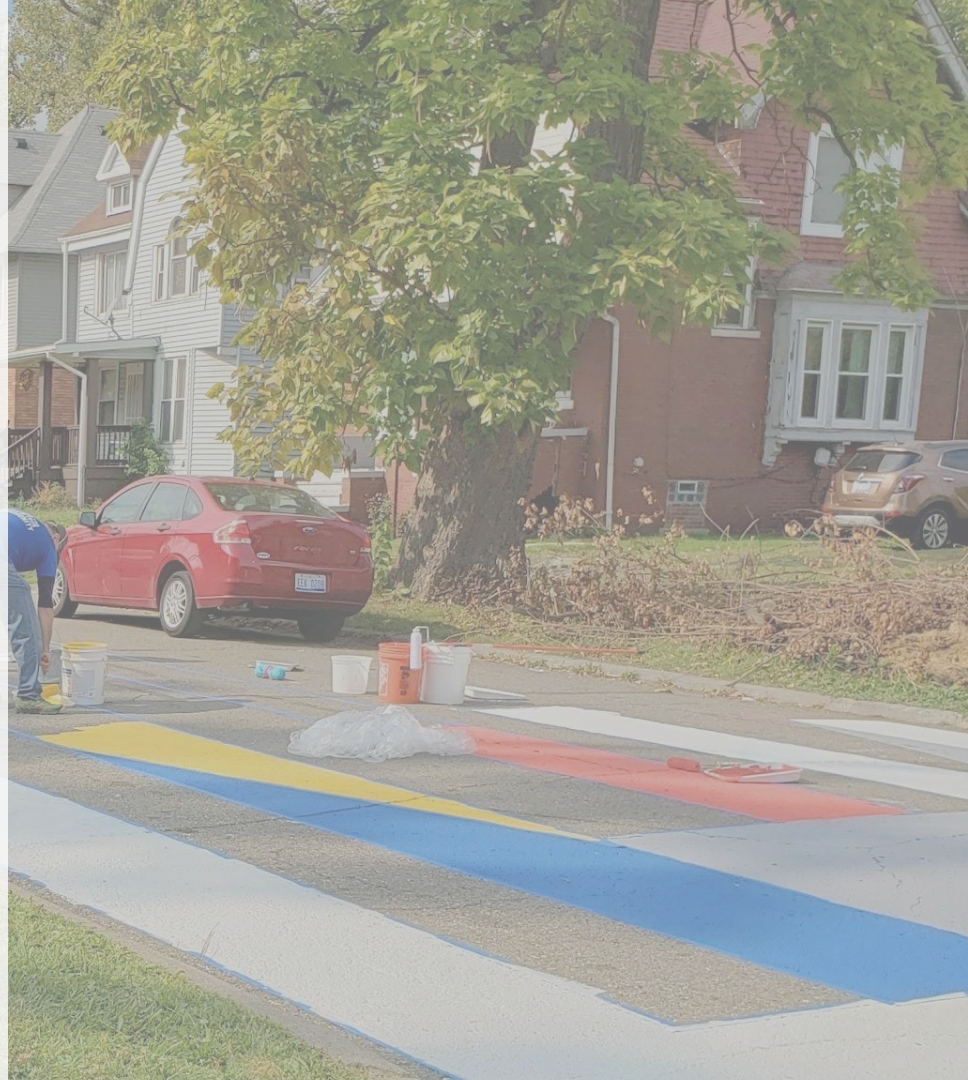
In shared environments, bike boulevards, to-curb width is people on bikes a mobility devices any space allocated or curb extension other bikeways d cific width to the

As bikeway use grows, use a more diverse and a wider variety of bikeways need to meet new operating as platooning, riding and passing. Wide comfortably accommodate users. Wide protection are valuable for



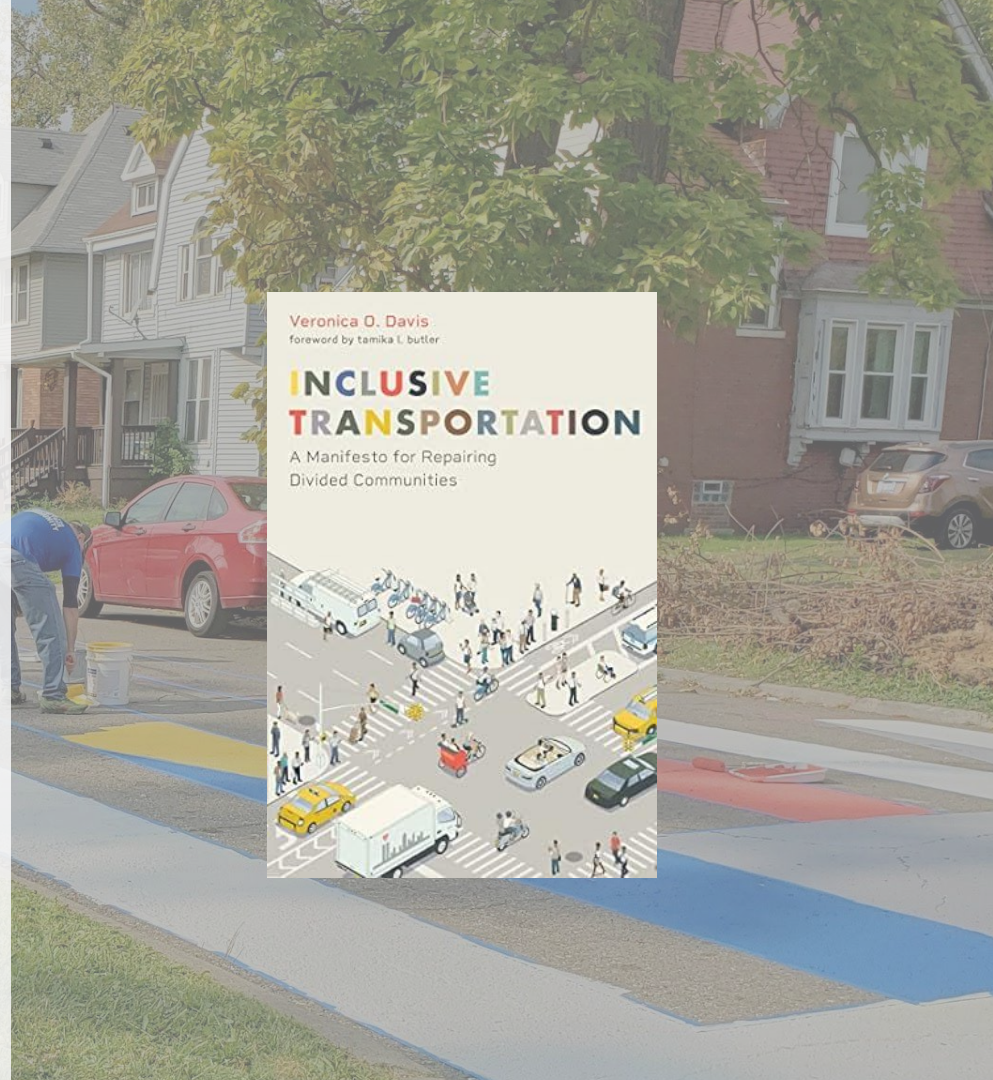
Key concepts:

- how a bill becomes a law
- how Federal spending works
- organizing institutional information makes work easier
- short- vs long-term changes the analysis & the approach
- communicating effectively will increase success



Key concepts:

- how policy becomes law
- how local/national spending works
- organizing institutional information makes work easier
- short- vs long-term changes the analysis & the approach
- communicating effectively will increase success
- understanding context can improve trust



To keep in mind:

- project management work is critical
- learn the acronyms but use them sparingly
- know your role & your partners' roles
- when to navigate politics
- ask who is not in the room



To keep in mind:

- project management work is critical
- learn the acronyms but use them sparingly
- know your role & your partners' roles
- when to navigate politics
- ask who is not in the room
- use your powers -- for good!



This is why I'm hot
@velaparatodo

Replying to @zabebent

I thought that there was a mythical "policy comptroller." Very few agencies actually enforce policy goals - Especially if developed by a previous administration. As a practitioner it is up to you to know which goals are most relevant, and to align project outcomes with said goals



Thank you!
Questions?

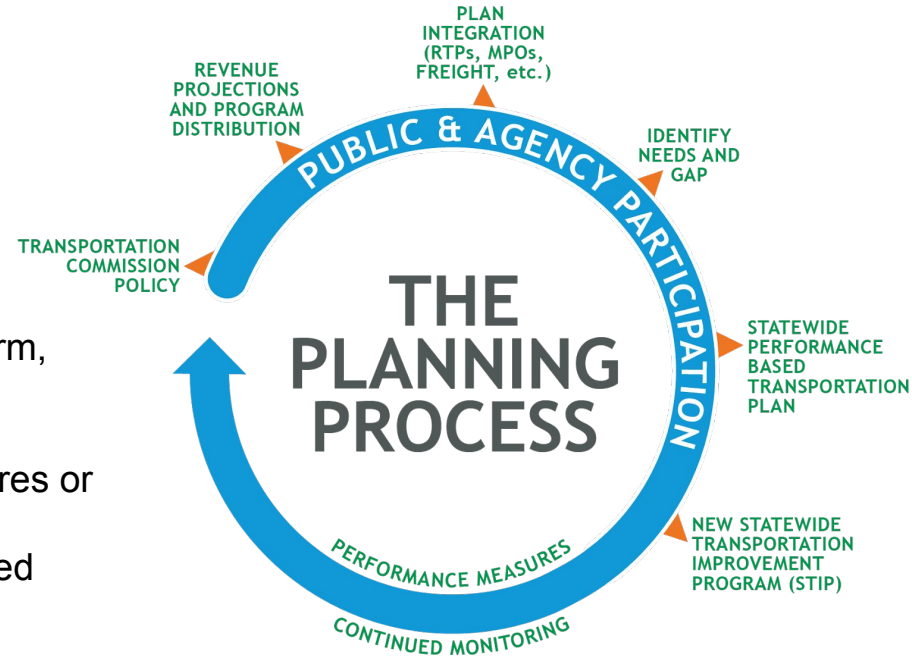
@ZabeBent



So, why is this so hard to change?

Problem

Mobility projects underperform,
contributing to unmet goals
Most interventions focus on
performance/ impact measures or
analysis tools
Visioning not fully represented





Connecticut (*credit: CTDOT*)



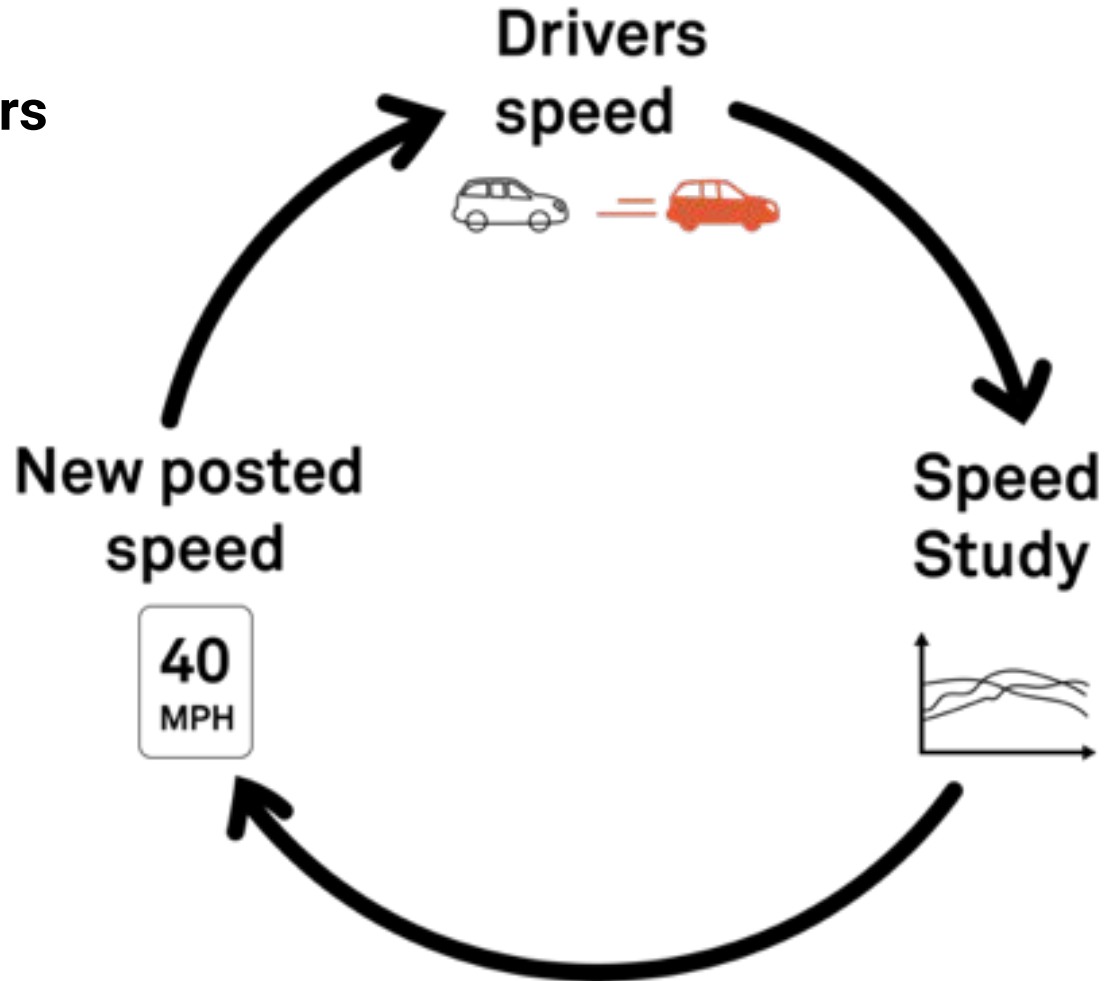
New York City (credit: NYCDOT)

1930s 1940s 1950s 1960s 1970s 1980s 1990s 2000s 2010s

Sadly, during the last 100 years, people have become an afterthought.



**Our system
rewards drivers
who speed.**



THE EFFECT OF VEHICLE SPEED ON PEDESTRIAN FATALITIES



5% chance of
pedestrian fatality



45% chance of
pedestrian fatality



85% chance of
pedestrian fatality



Source: Killing Speed and Saving Lives, U.K. Dept. of Transportation, London, England. See also Lingpen, Rudolph, Motor Vehicle Accident Reconstruction and Cause Analysis, Fourth Edition, Cheltenham, VA, The Motor Company, 1996, p. 463.

Urban Arterials:
57% of urban traffic fatalities
2/3 of walk & bike fatalities
But only 15% of the urban road network



Image: NACTO

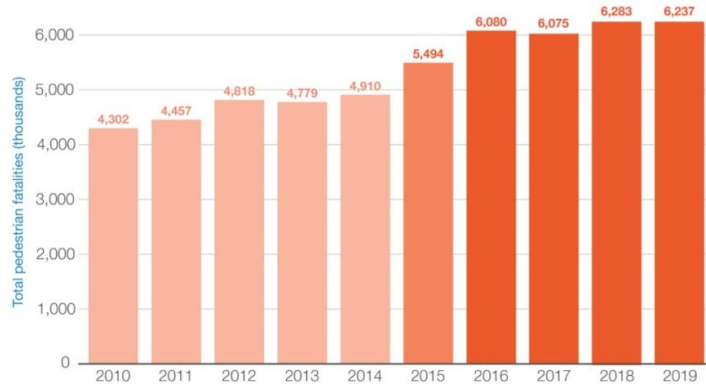
15% of streets, but **73%** of deaths



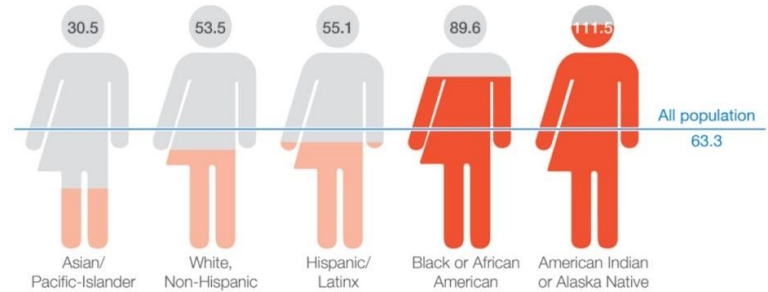
5:05 30°

The risk of fatality from dangerous street design is not evenly distributed.

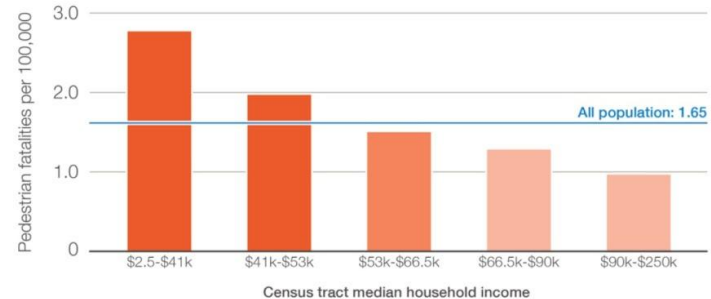
45% INCREASE
In Pedestrians Being Struck and Killed



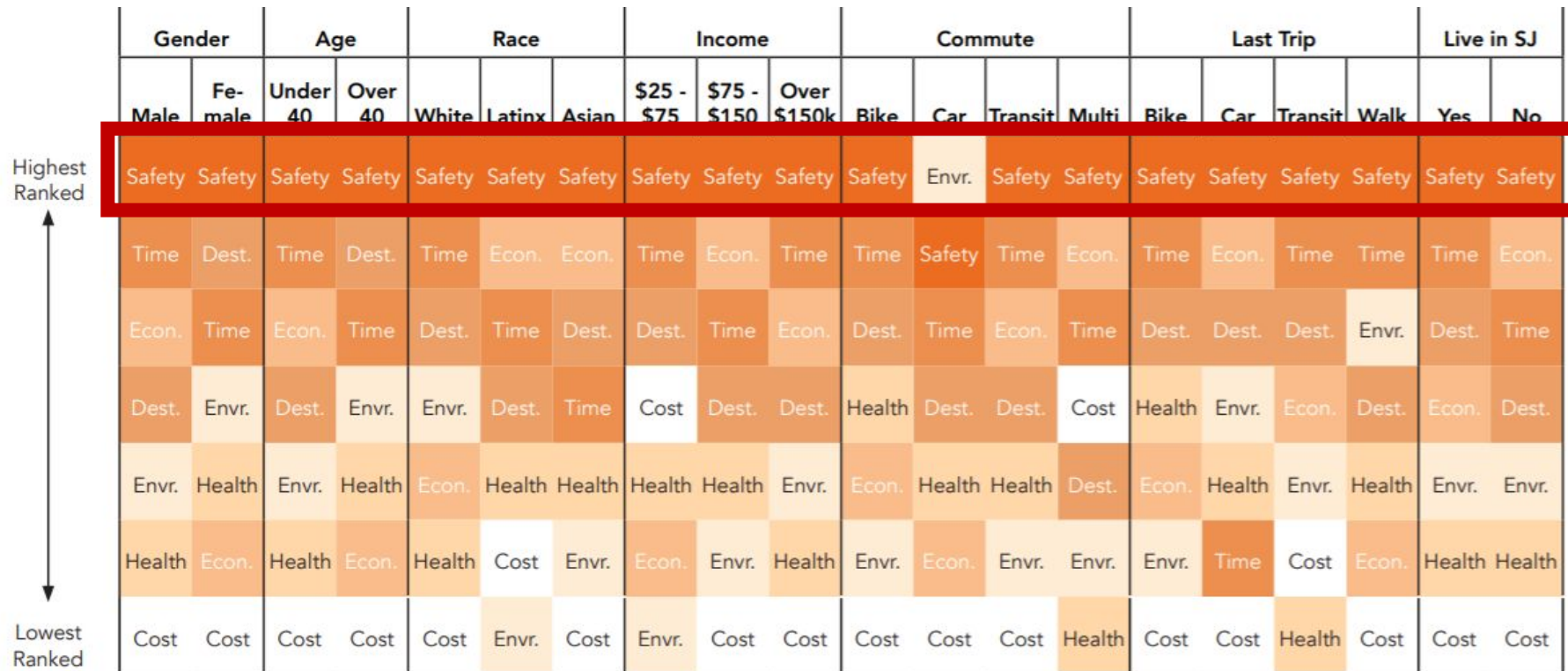
THE BURDEN IS NOT SHARED EQUALLY
Pedestrian Danger by Race and Ethnicity



LOW-INCOME PEOPLE
Are Struck and Killed at Much Higher Rates



People want Safety, Safety, Safety!



Legend:

Safety

Time Savings

Access to Destinations

Economic Savings

NHTSA Early Estimates Show Record Increase in Fatalities Nationwide

Share:    

August 17, 2022 | Washington, DC

The National Highway Traffic Safety Administration today released its [early estimates of traffic fatalities for the first quarter of 2022](#).

NHTSA estimates that 9,560 people died in motor vehicle traffic crashes in the first quarter of 2022. This is an increase of about 7% as compared to the 8,935 fatalities projected for the same quarter in 2021. This would be the highest number of first-quarter fatalities since 2002.

According to NHTSA's early estimates, the fatality rate for the first quarter of 2022 increased to 1.27 fatalities per 100 million vehicle miles traveled, up from the projected rate of 1.25 fatalities per 100 million vehicle miles in the first quarter of 2021.



52% of urban arterials in the U.S.
are state-owned





75% border low-income neighborhoods

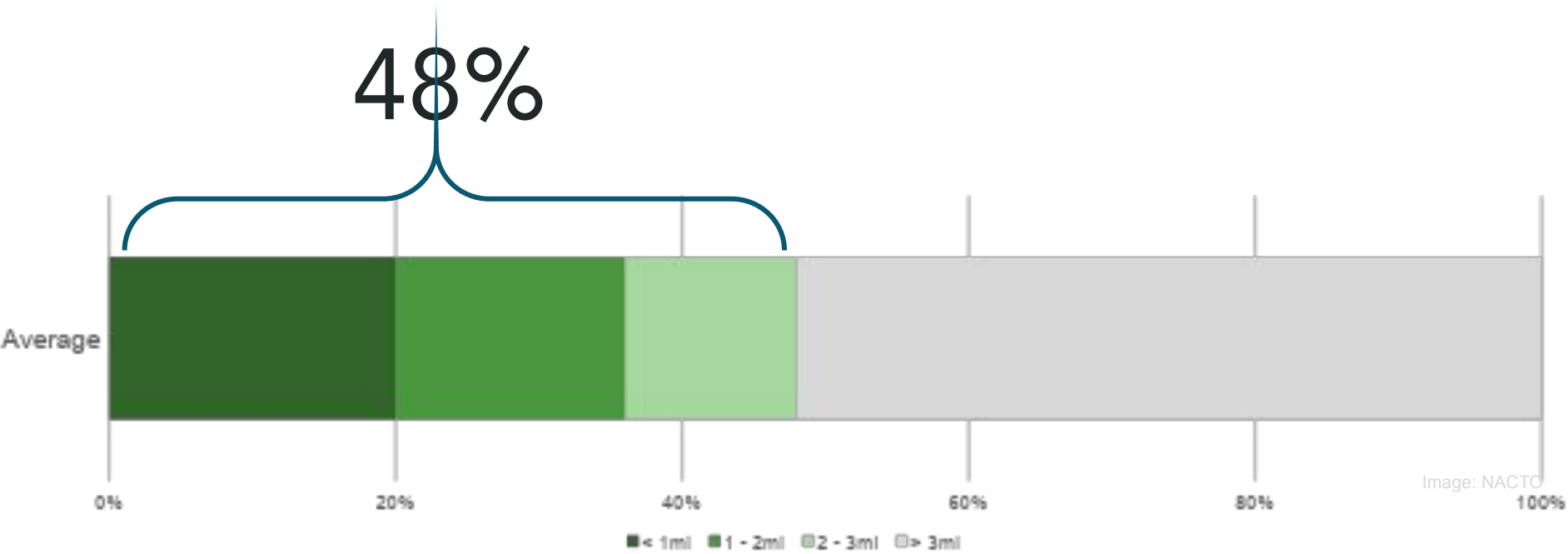
DISCONNECTED NETWORK



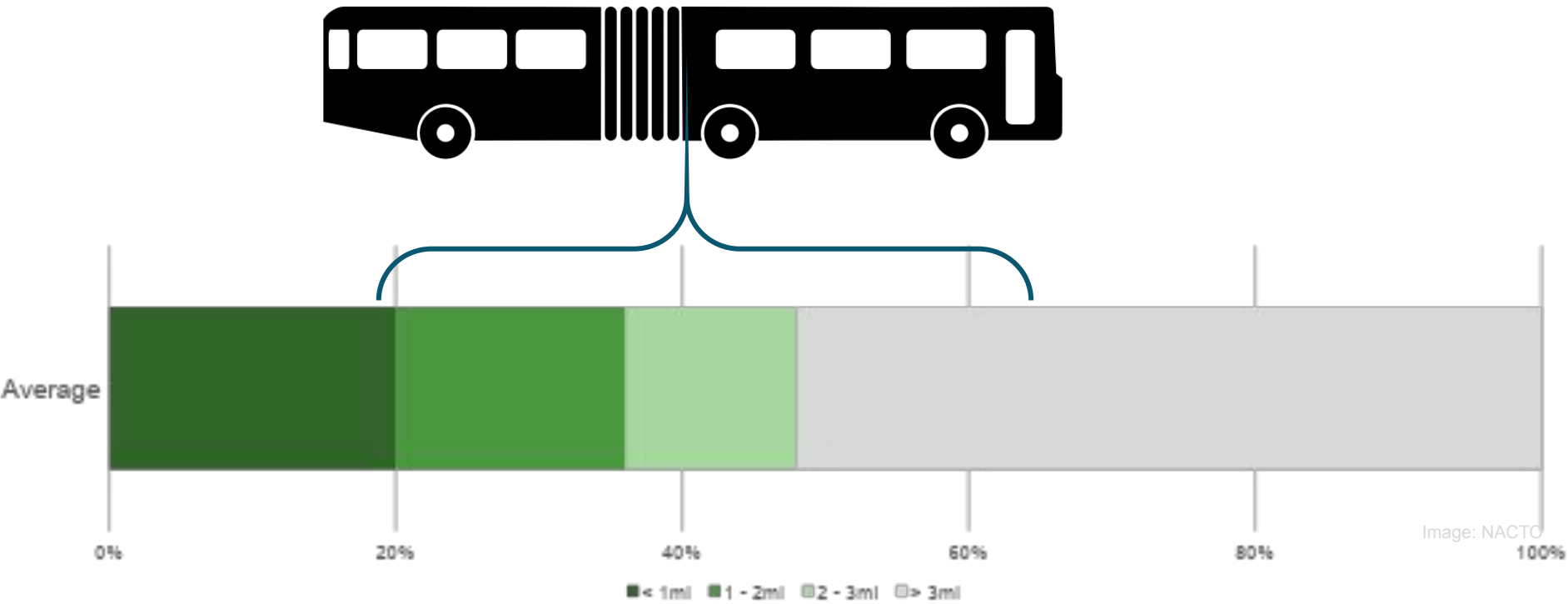
CONNECTED NETWORK



Many US car trips are under 3 miles



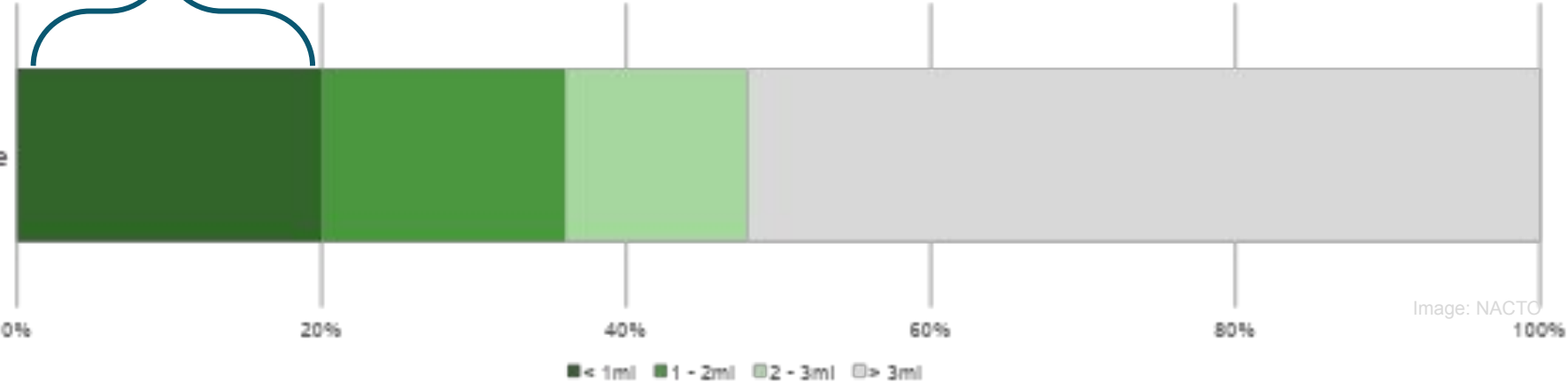
Many US car trips are under 3 miles



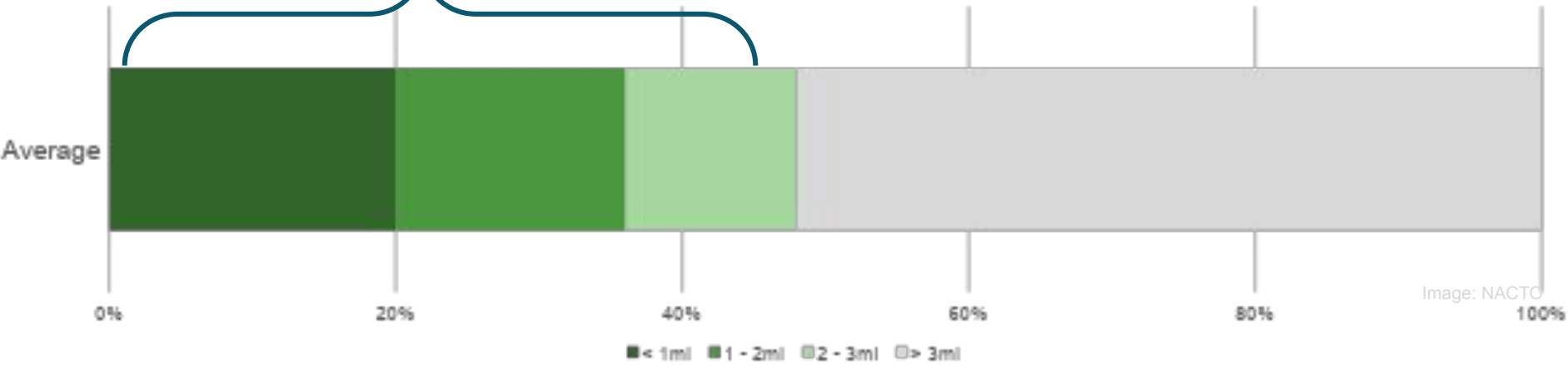
Many US car trips are under 3 miles



Average



Many US car trips are under 3 miles





NACTO
@NACTO

...

"If we can legislate hurt and harm, then we can legislate equity and justice." - [@RepPressley](#) speaking now at [#NACTO2022](#)



1:37 PM · Sep 9, 2022 from Boston, MA · Twitter for Android



SPEED
LIMIT
35

BICYCLES
MAY USE
SIDEWALK

BIKE PATH

Manor

What does safety mean?

Safe from what?

Safe for whom?





We Did It Joe!
@PatrickOfToday

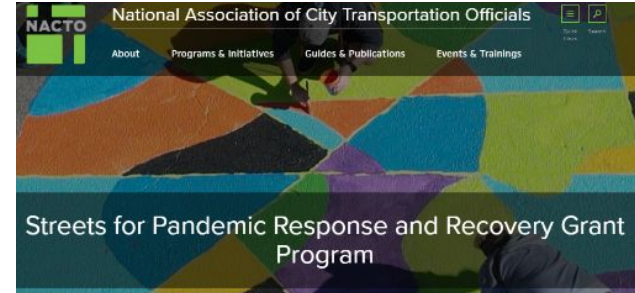


Four Wednesdays in January



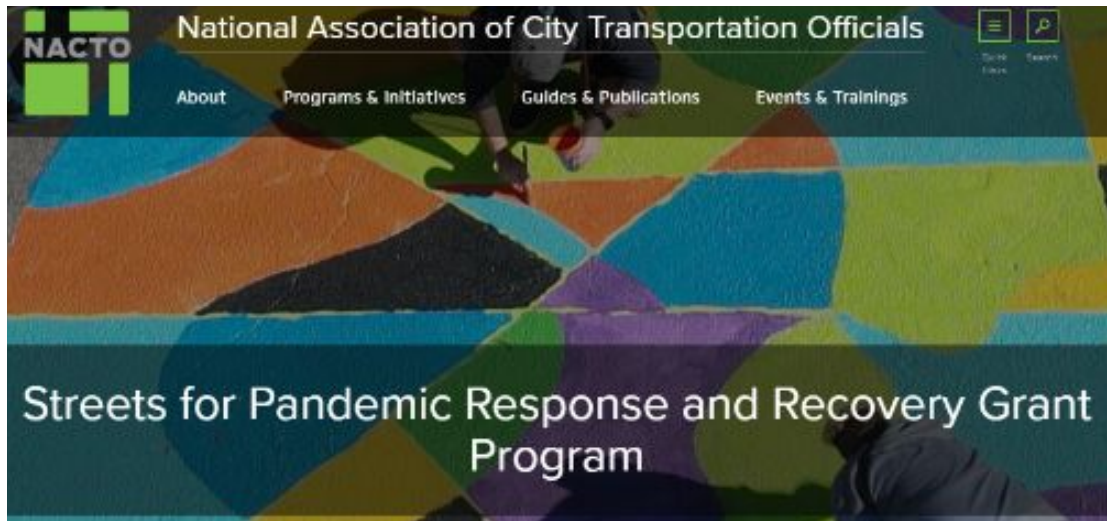
4:19 PM · Jan 27, 2021 · Twitter Web App

- listen, determine the route problem & best solution(s)
- build trust, communication, relationships to improve stewardship and project outcomes
- more than just the project: meet people where they are, see the whole person and community
- collaborative work (community orgs), engagement in all projects regardless of size or place



Zabe Bent | Director of Design
zabe@nacto.org
@zabebent

May 2021



THANK YOU!

Zabe Bent | Director of Design
zabe@nacto.org
@zabebent

May 2021

What do you need to advance this work?

- What are the most pressing mobility & accessibility issues for your cities?
- What are your greatest impediments to implementing safe, sustainable, equitable mobility?
- How can you incorporate shifting needs into your core workplan?

New York City



The Rockaway Wellness Way, which provides space for food distribution, outdoor COVID-19 testing, and information exchange

