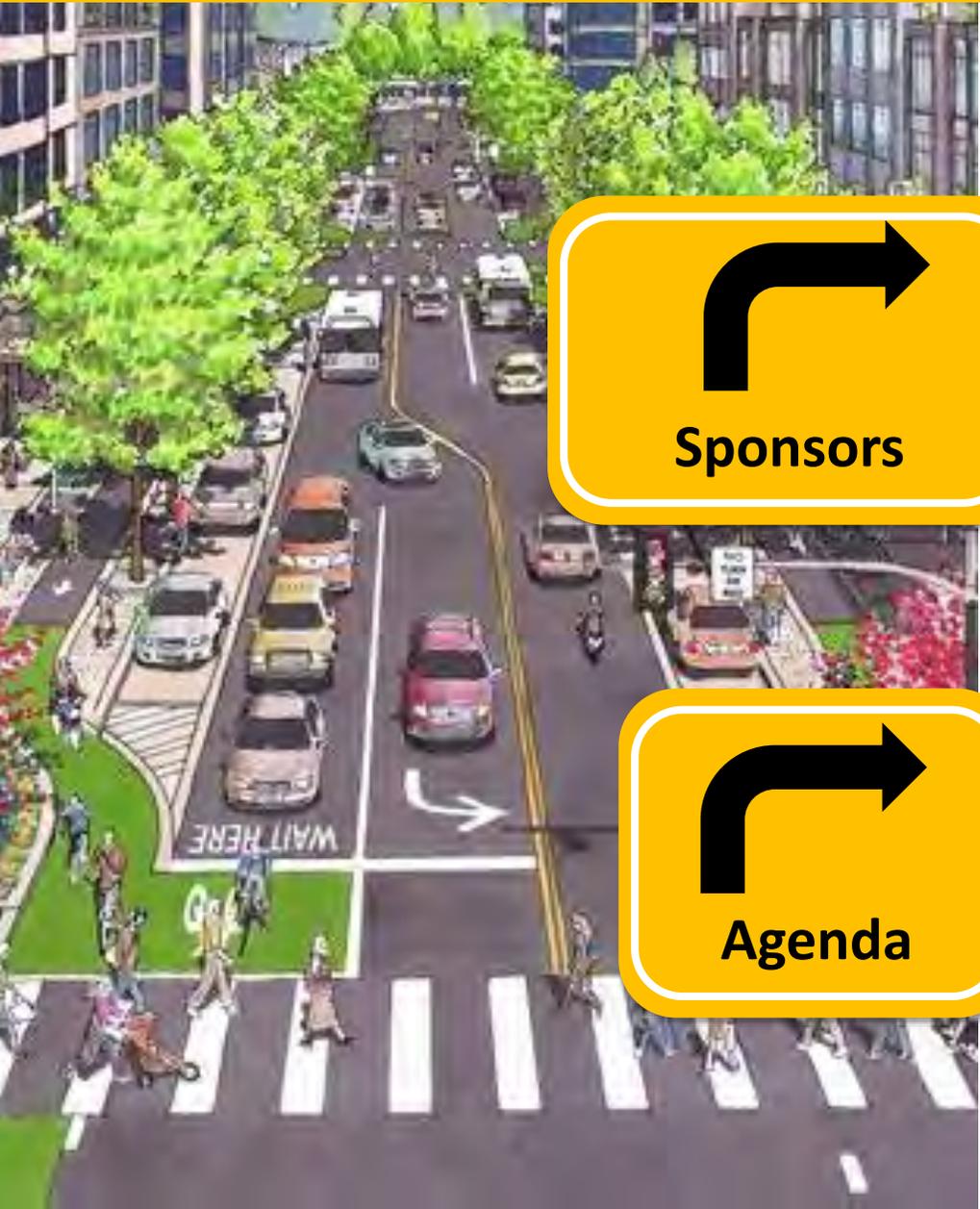


New York State Active Transportation & Complete Streets

TRAINING



Active Transportation & Complete Streets



TRAINING

Presented by:



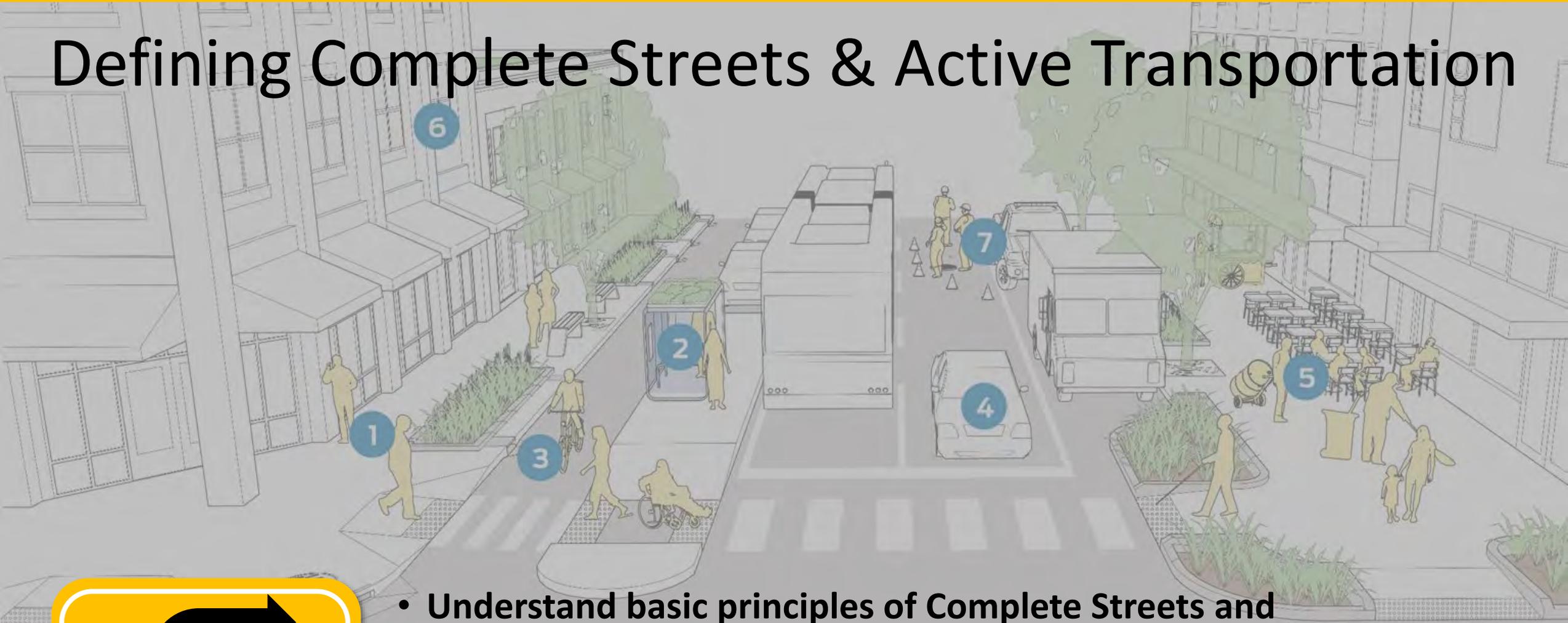
Sponsored by:



This training was supported by the New York State Energy Research and Development Authority (NYSERDA) and the New York State Department of Health (NYSDOH)

- Defining Complete Streets & Active Transportation
- What does Complete Streets Look Like?
- Integrated Transportation Systems
- Establishing a Policy Framework
- Implementing Complete Streets
- Evaluating Success

Defining Complete Streets & Active Transportation



- Understand basic principles of Complete Streets and active transportation
- Illustrate the benefits of Complete Streets
- Discuss what active transportation and complete streets means for your community

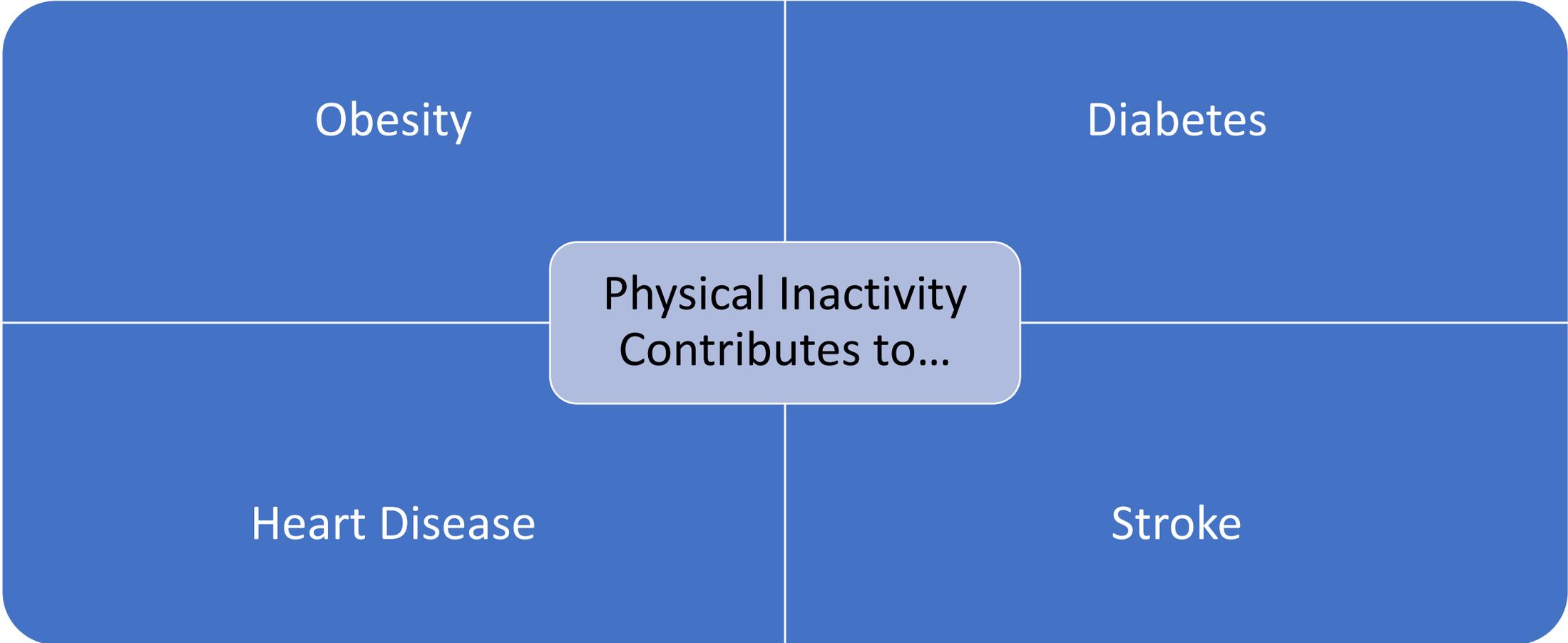
Q:

What is
“active transportation”?

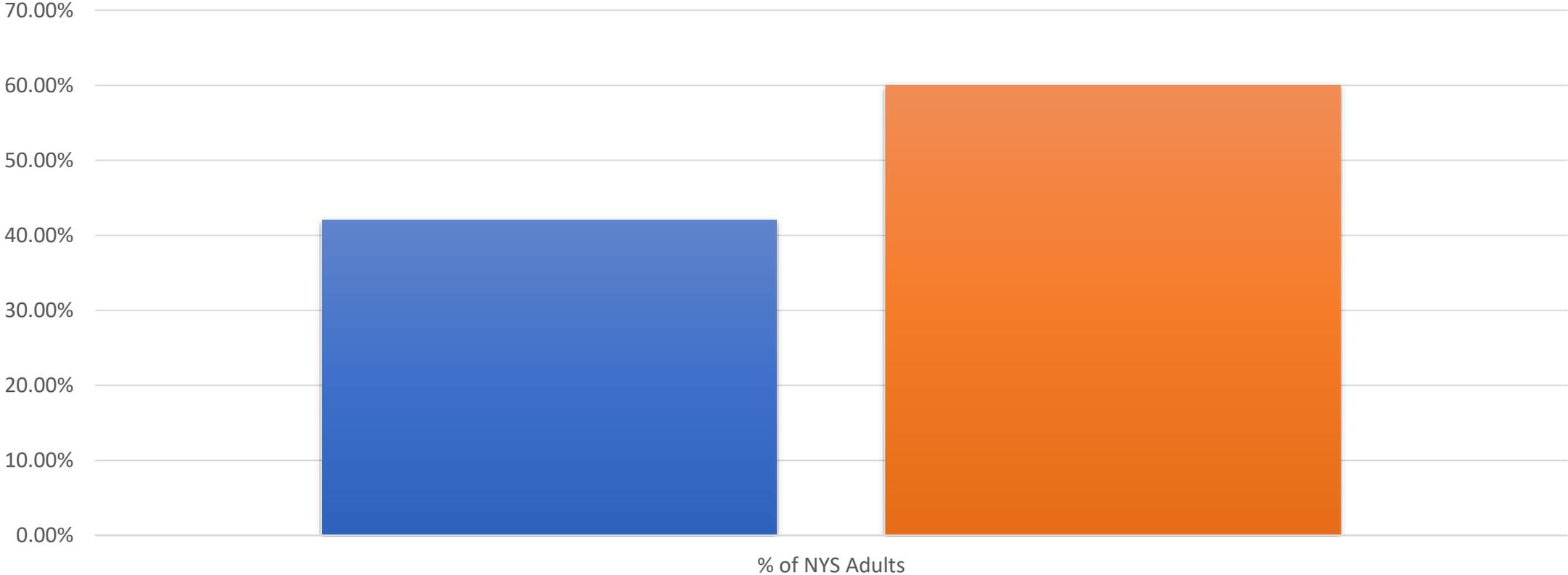
A:

“...any self-propelled, human-powered mode of transportation such as walking or bicycling.”





NYS Adults Overweight or Obese

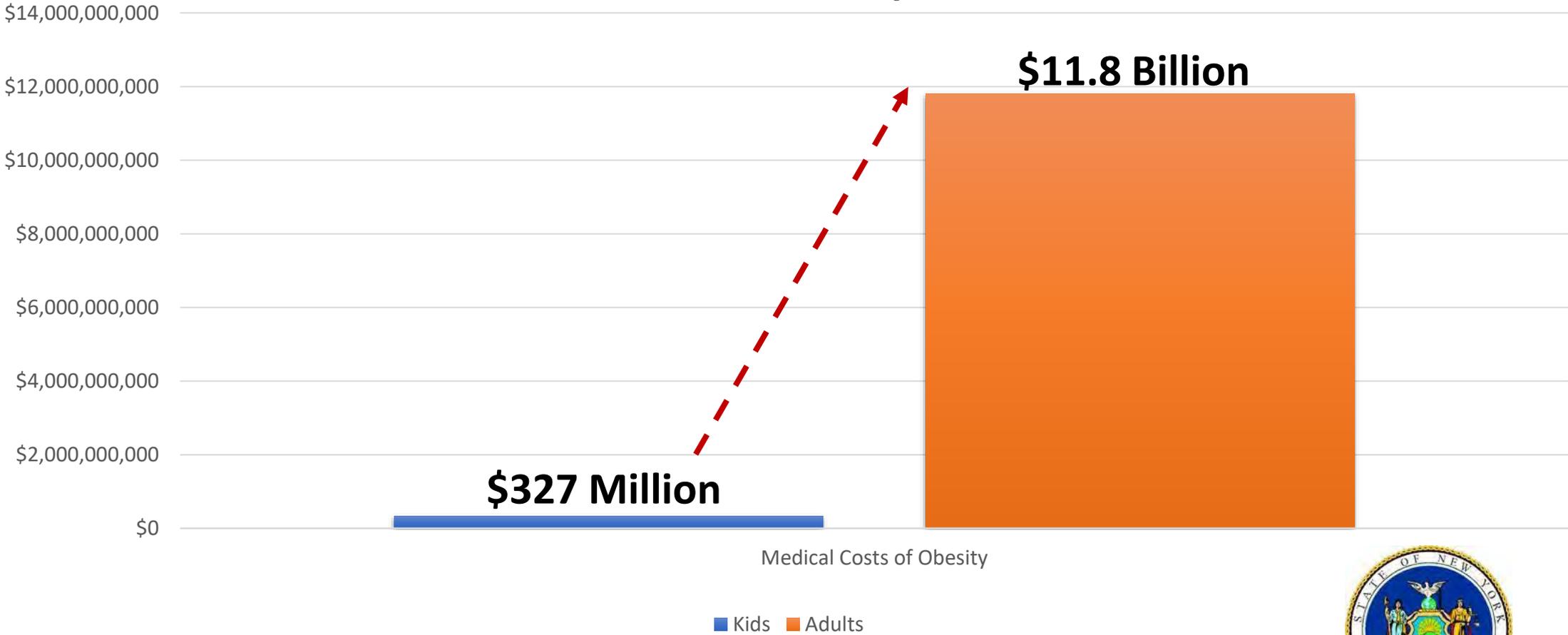


■ 1997 ■ 2016



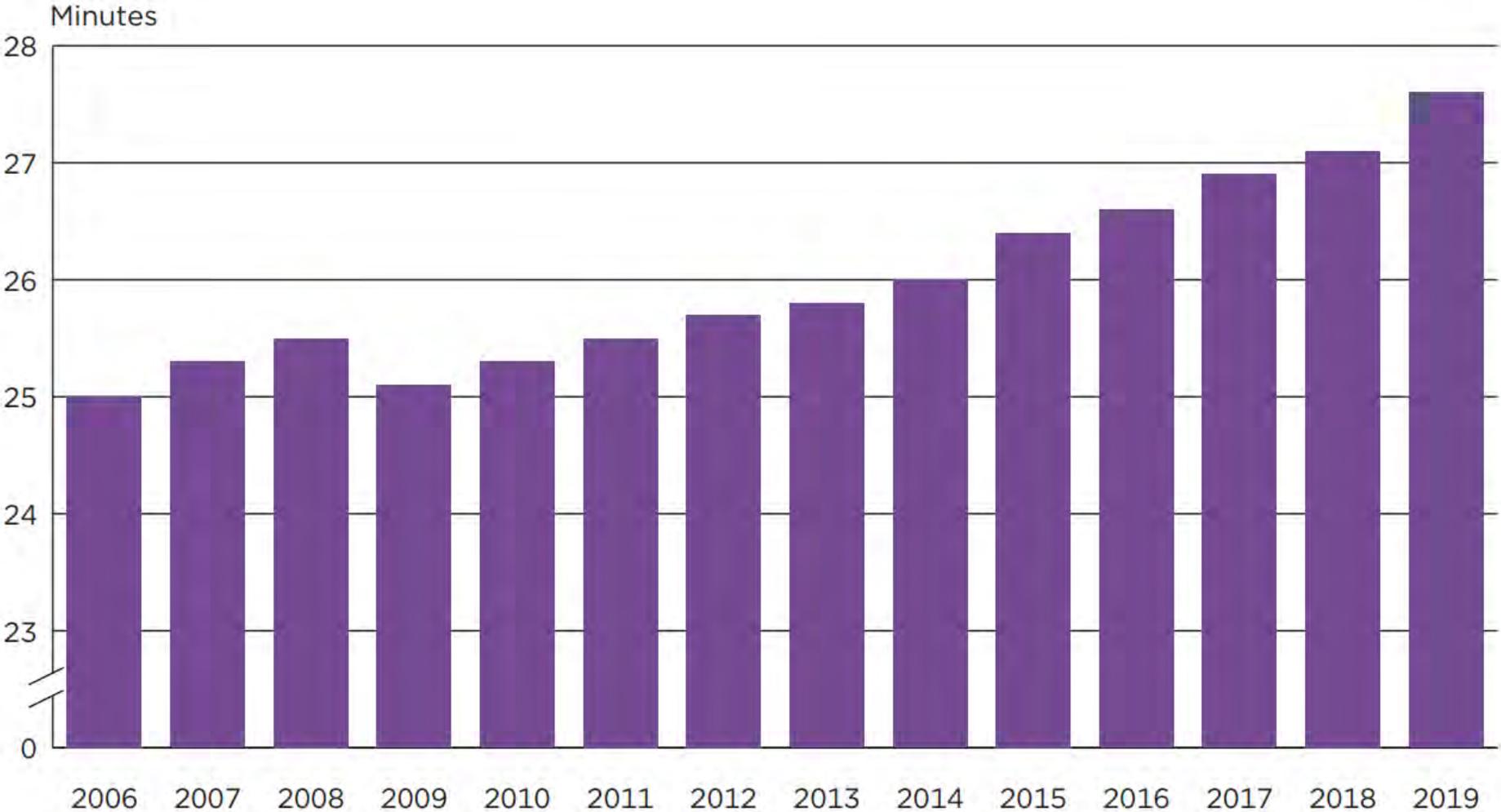
Department of Health

The Cost of Obesity

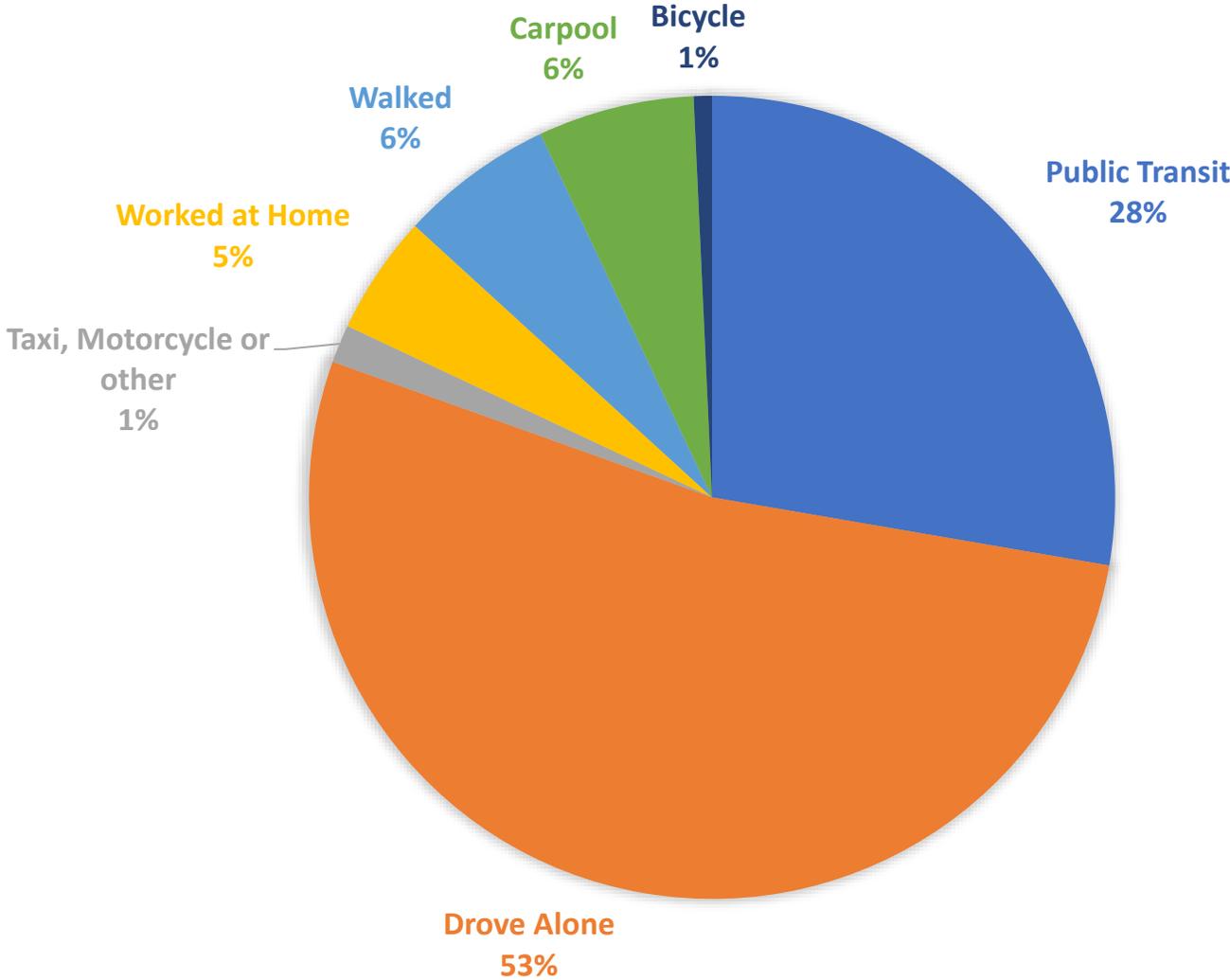


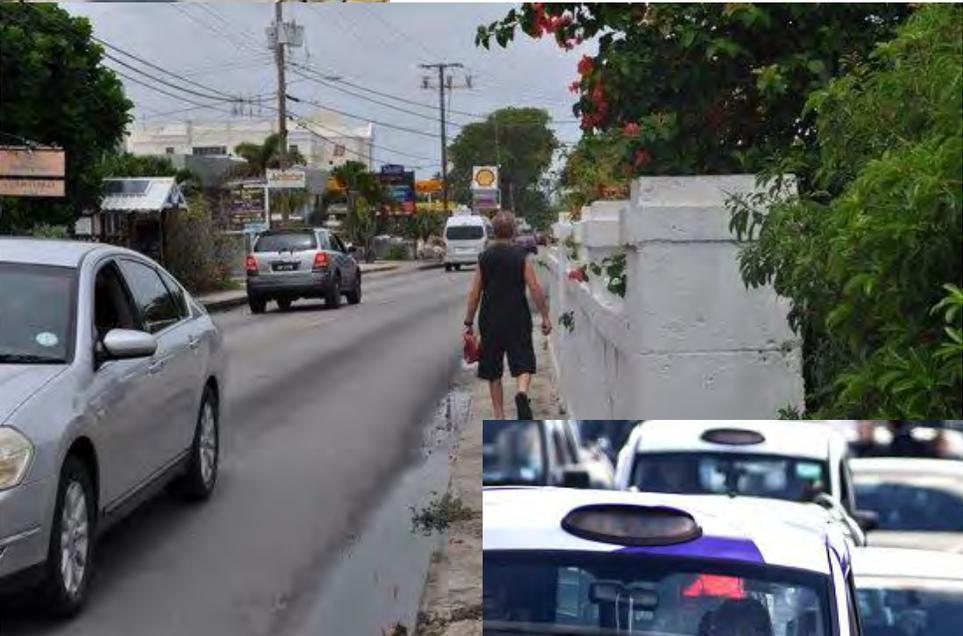
Average Travel Time to Work in the United States: 2006 to 2019

(Workers 16 years and over who did not work from home)



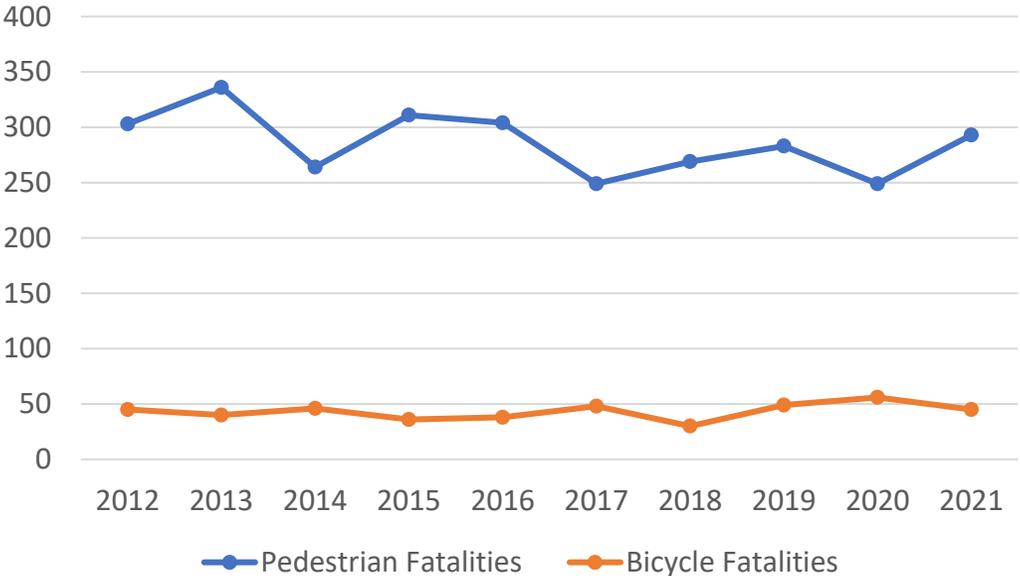
2019 NY STATE MODESHARE



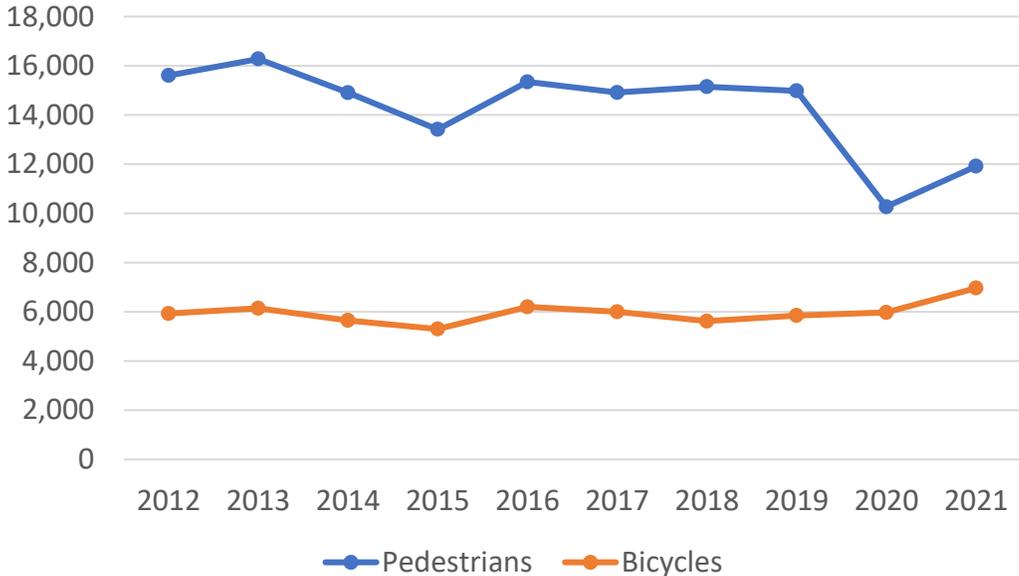


NYS Traffic Safety Data

Bike/Ped Fatalities

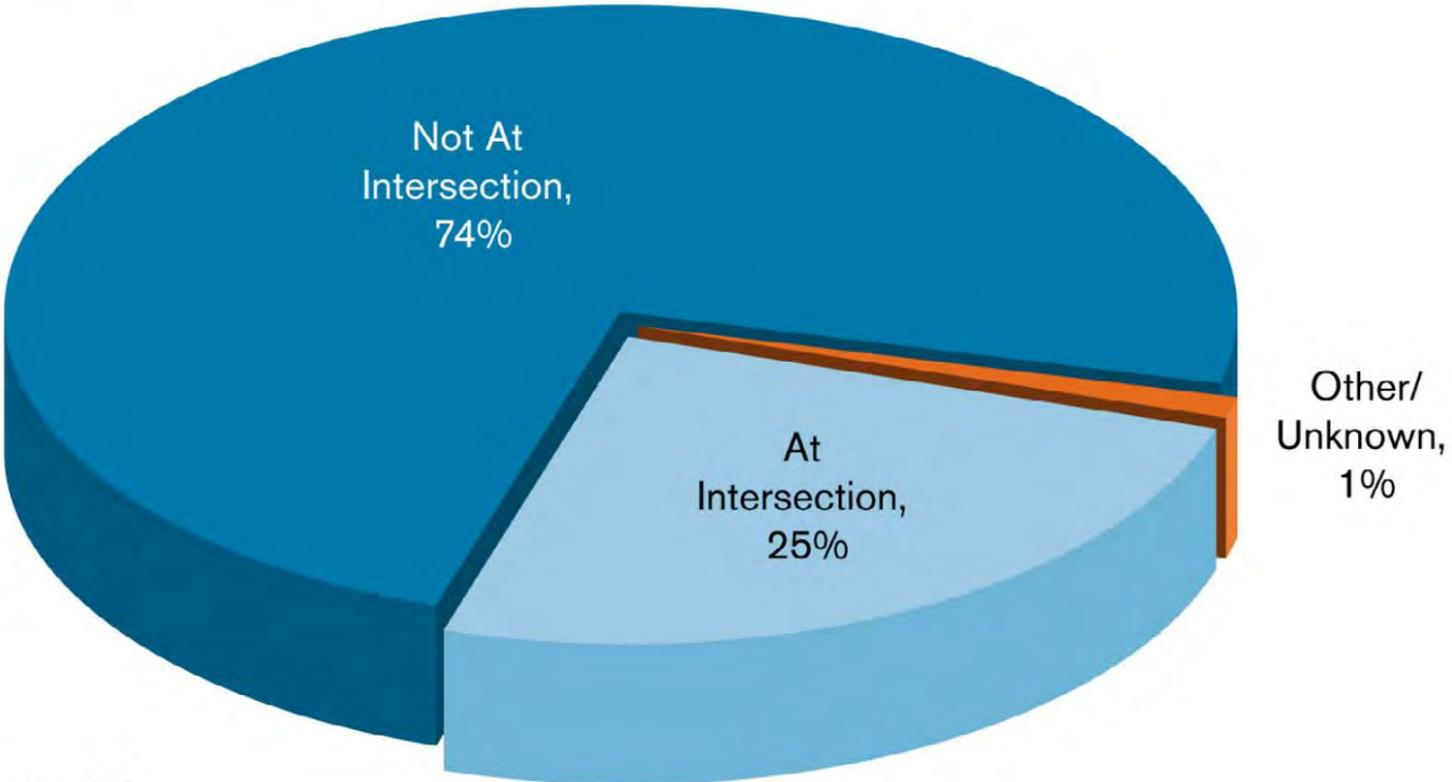


Bike/Ped Injuries



Where are pedestrian fatalities taking place?

Figure 11 Pedestrian Fatality Locations, 2019



Source: FARS

Q:

What are
“Complete Streets”?

A:

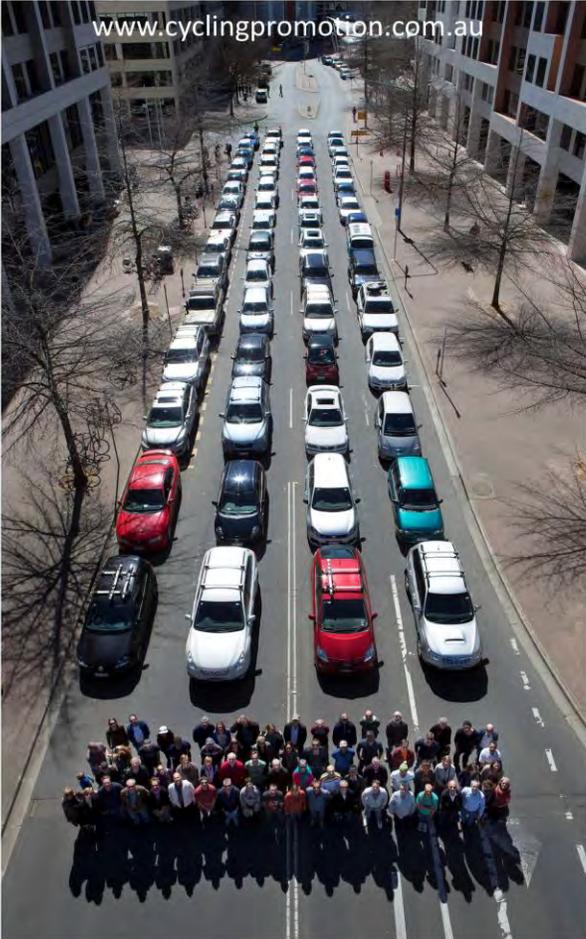
“[Streets] designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.”



Smart Growth America
Making Neighborhoods Great Together



Maximizing Efficiency & Space



What causes climate change?

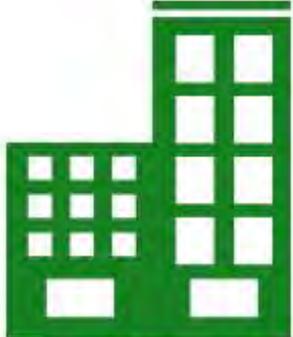
Most of New York's emissions come from transportation, electricity, and heating.



TRANSPORTATION
34%



RESIDENTIAL
22%



COMMERCIAL
22%



INDUSTRY
14%



WASTE
7%

Equity



Placemaking



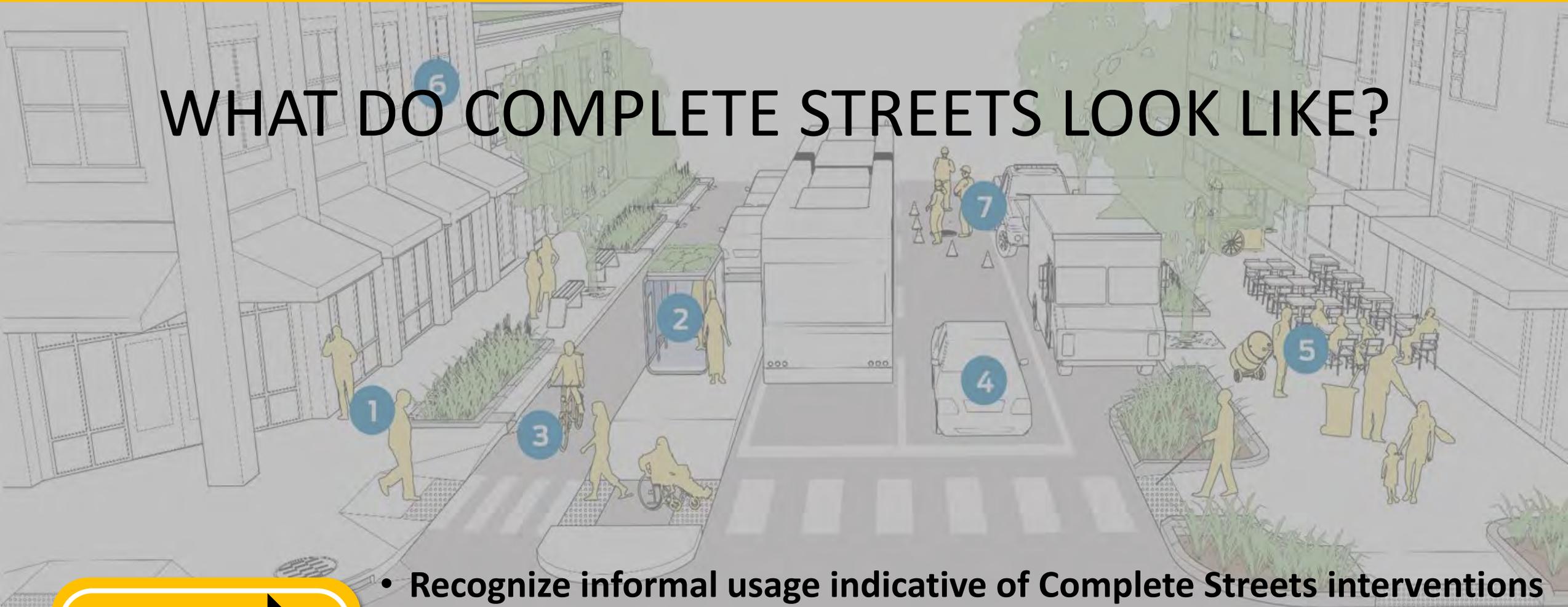
Freight Mobility



Complete Streets in Action



WHAT DO COMPLETE STREETS LOOK LIKE?



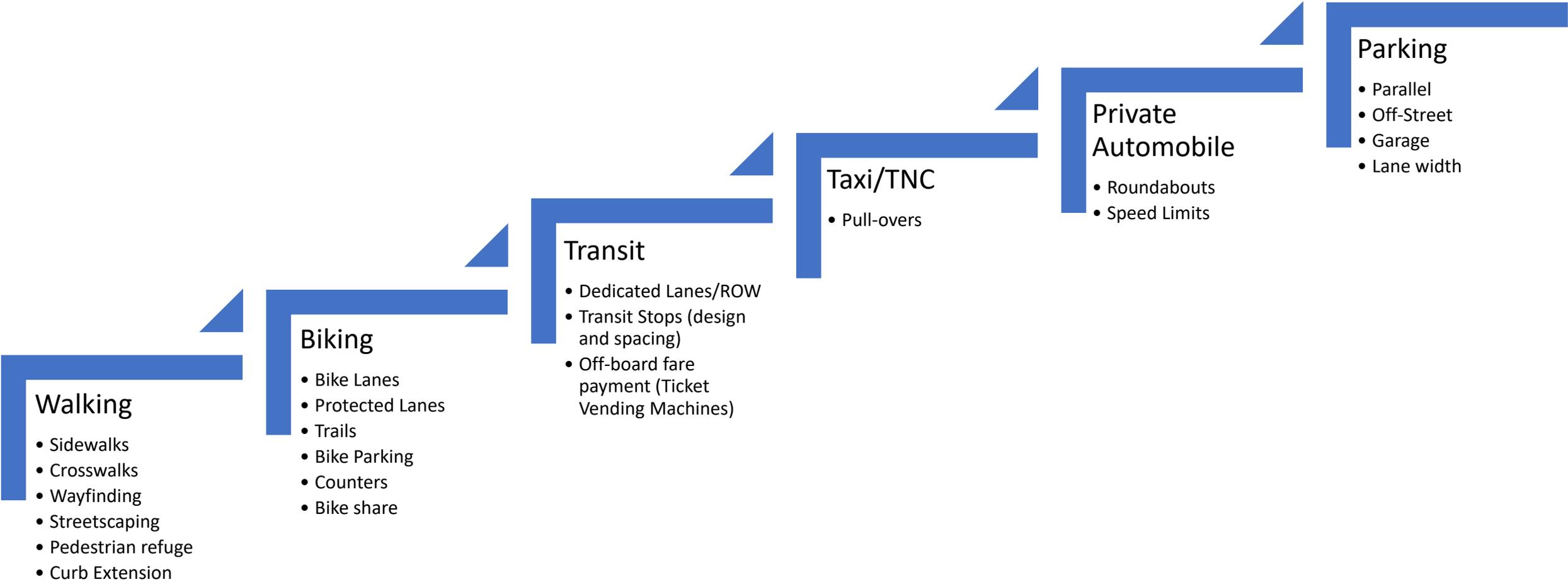
- Recognize informal usage indicative of Complete Streets interventions
- Learn how to establish a modal hierarchy
- Introduce common infrastructure treatments
- Apply lessons learned from the walk/bike audit to envision Complete Streets

Recognizing Patterns

- Are there goat paths?
- Are bikers taking specific shortcuts?
- Is there community interest in a path or street treatment?
- Where do kids hang out?



Choosing the Right Design...



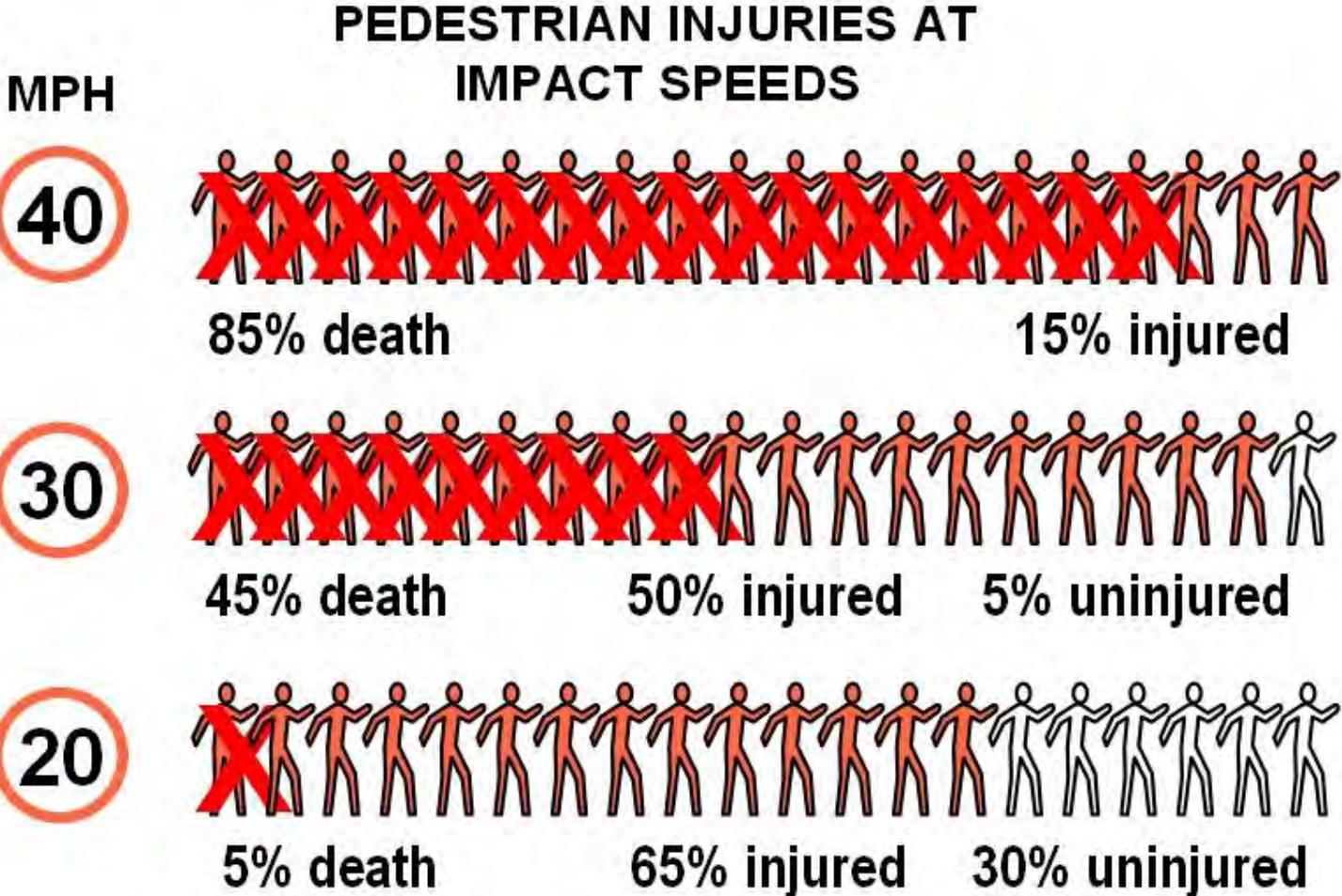
Correct design invites correct use!



“Road Diet”



Slowing Down Traffic



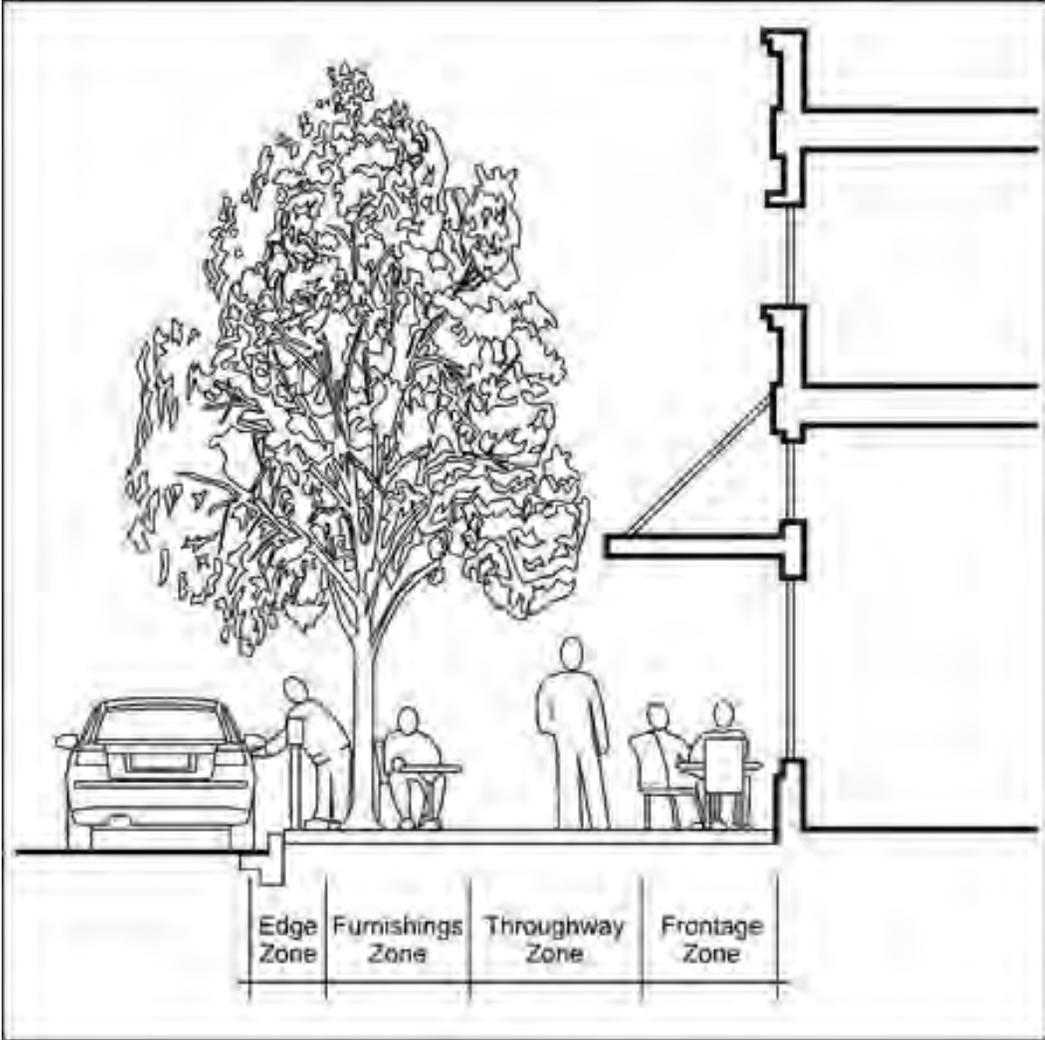
Narrow Lanes Reduce Speed



“Road Diet”



Sidewalks - Urban



Sidewalks - Rural



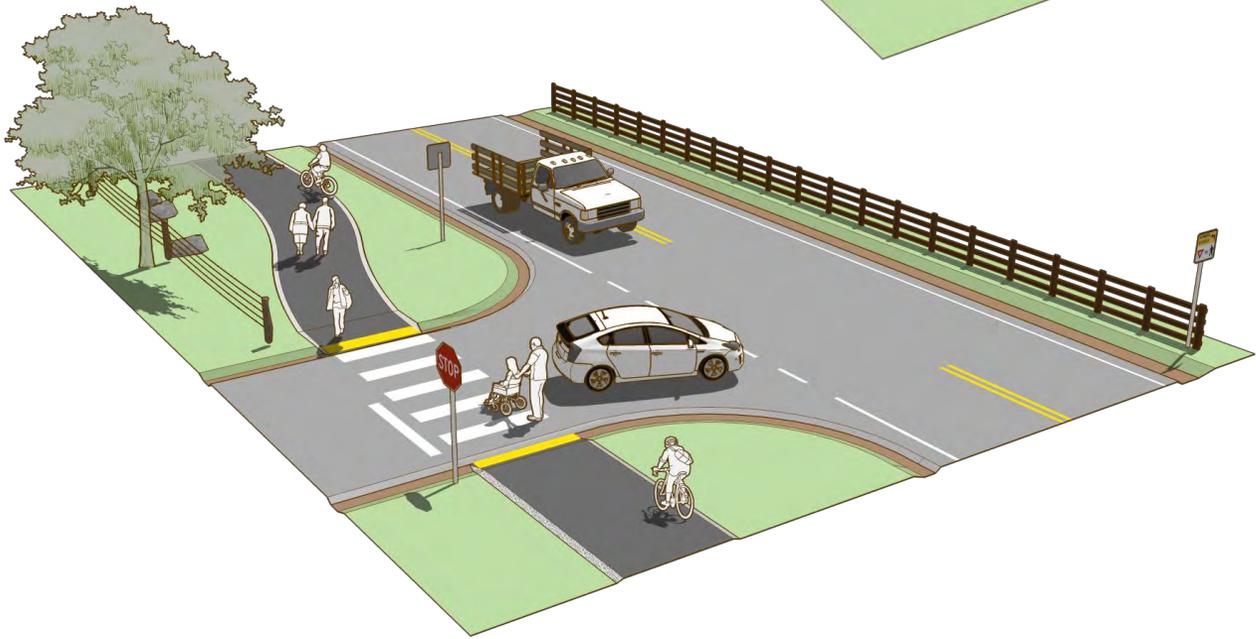
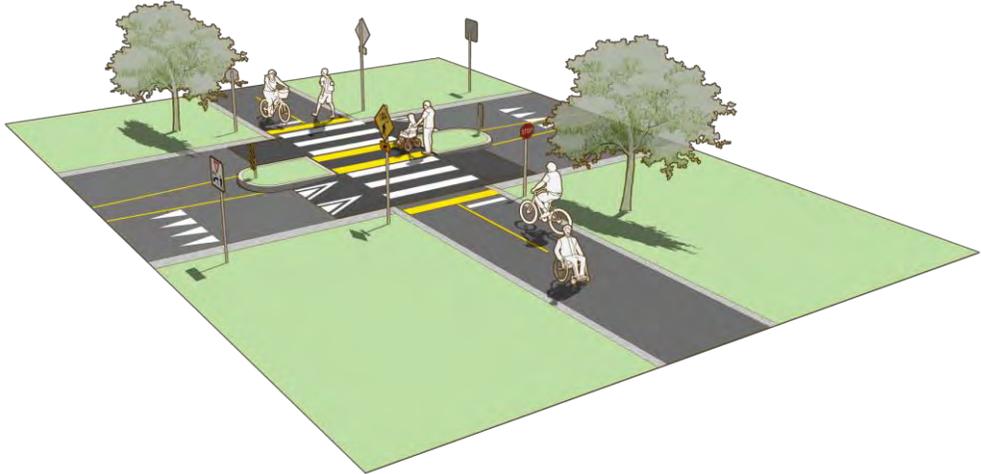
Frontage Zone

Throughway Zone

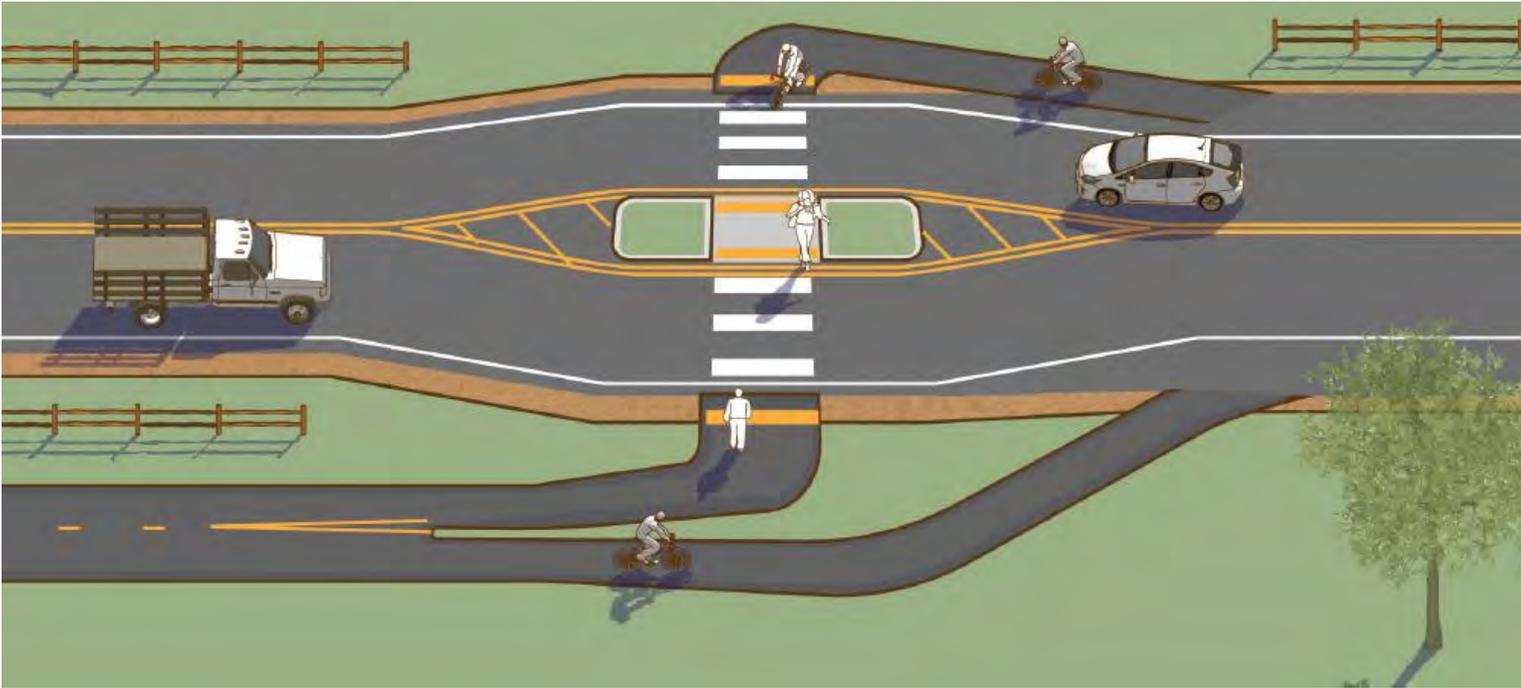
Edge Zone

Curb/Planter Zone

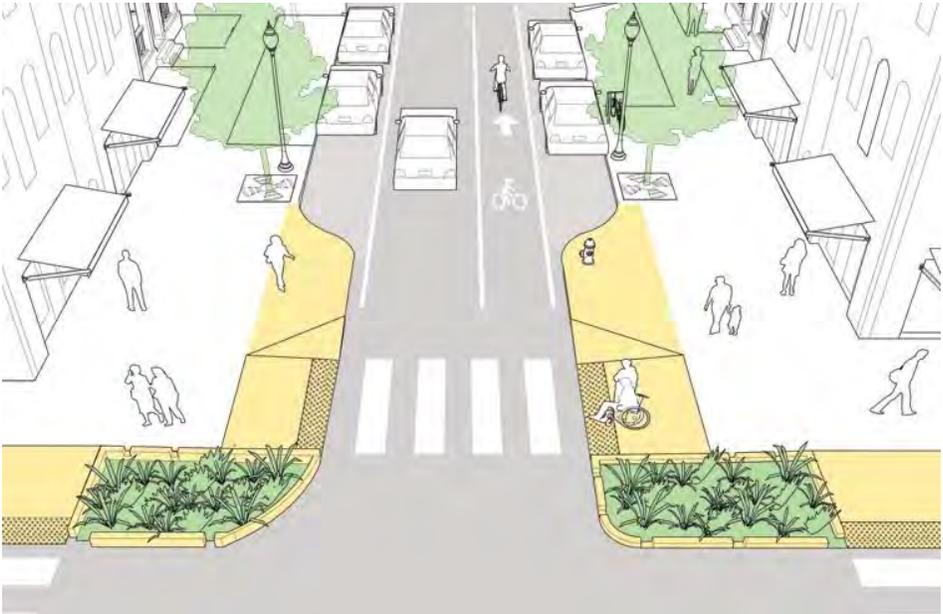
Shared Use Sidewalks / Sidepaths



Transition Points w/Separated Facilities



Curb Extensions



Speed Bumps



Crosswalks



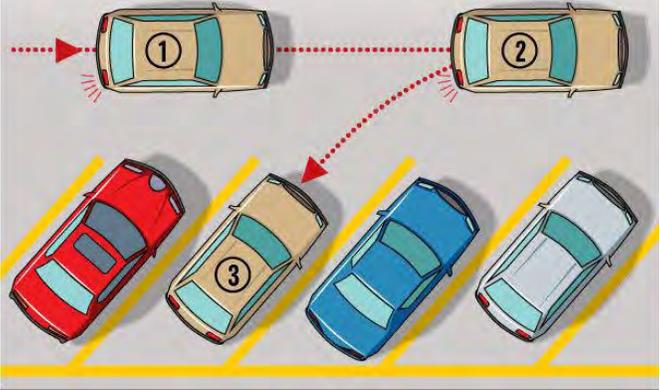
Parking



Parallel Parking

REVERSE ANGLE PARKING

- 1. Signal for turn
- 2. Stop just past the parking space
- 3. Back into the space, using side mirrors to view lines



Angled Parking



Protected Bike Lanes



Good Old Fashioned Bike Lane



Shared Routes



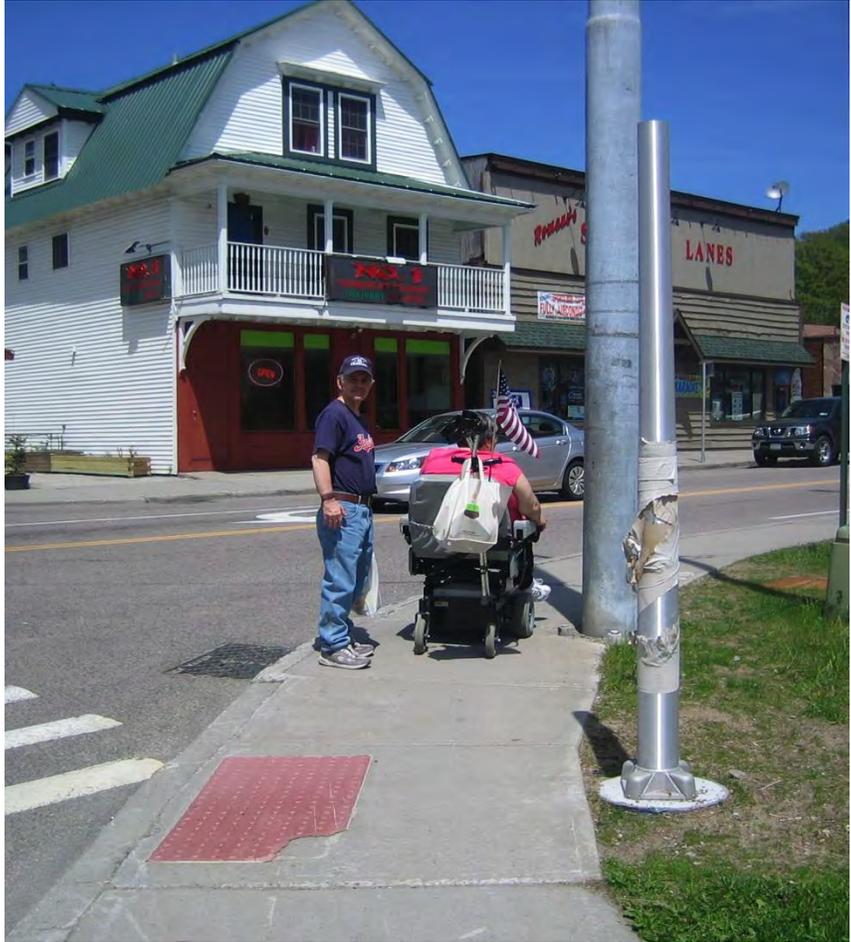
Bike Parking



Bike Corral



ADA Accessibility



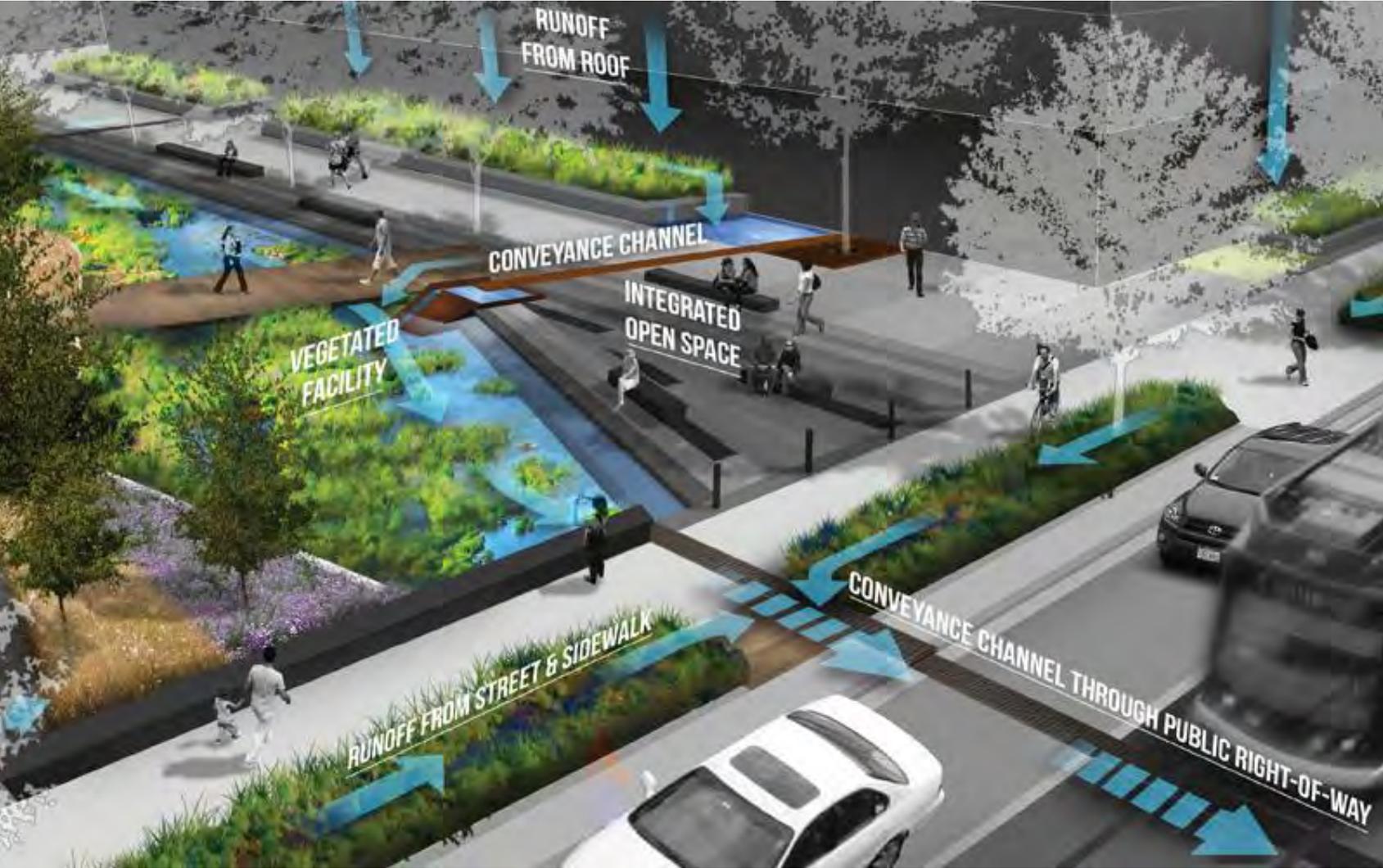
Streetscaping & Public Art



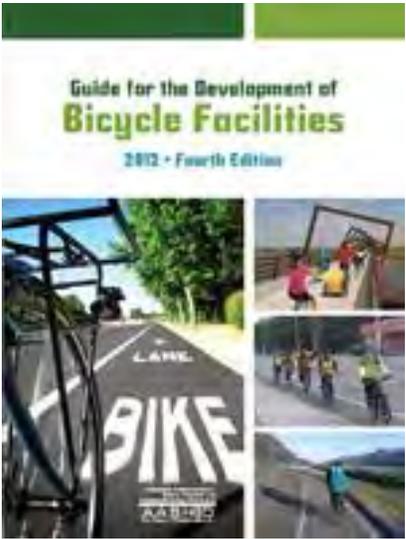
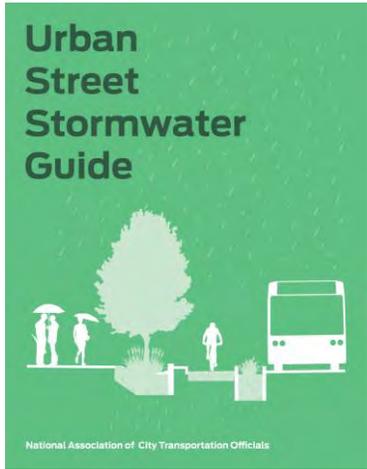
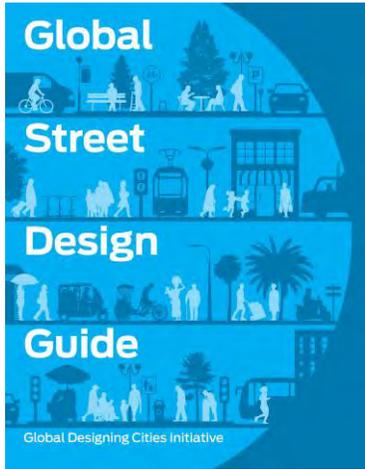
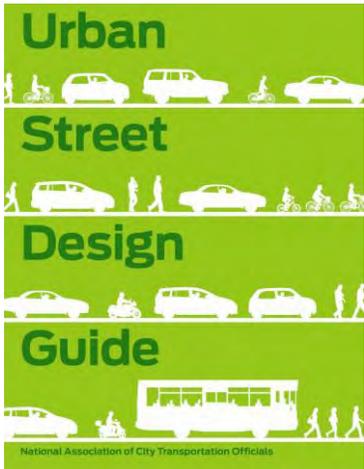
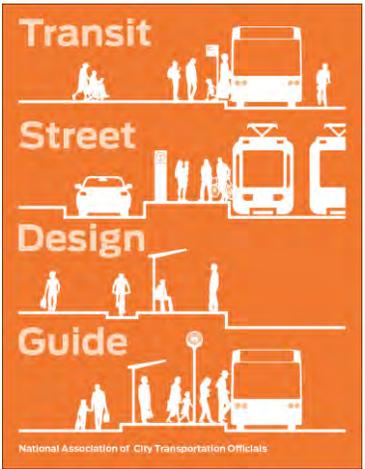
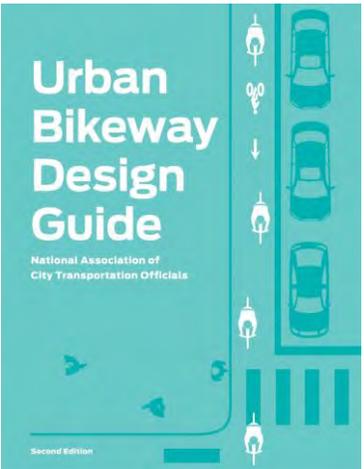
Case Study in Creativity



Environmental Considerations



Tools & Resources

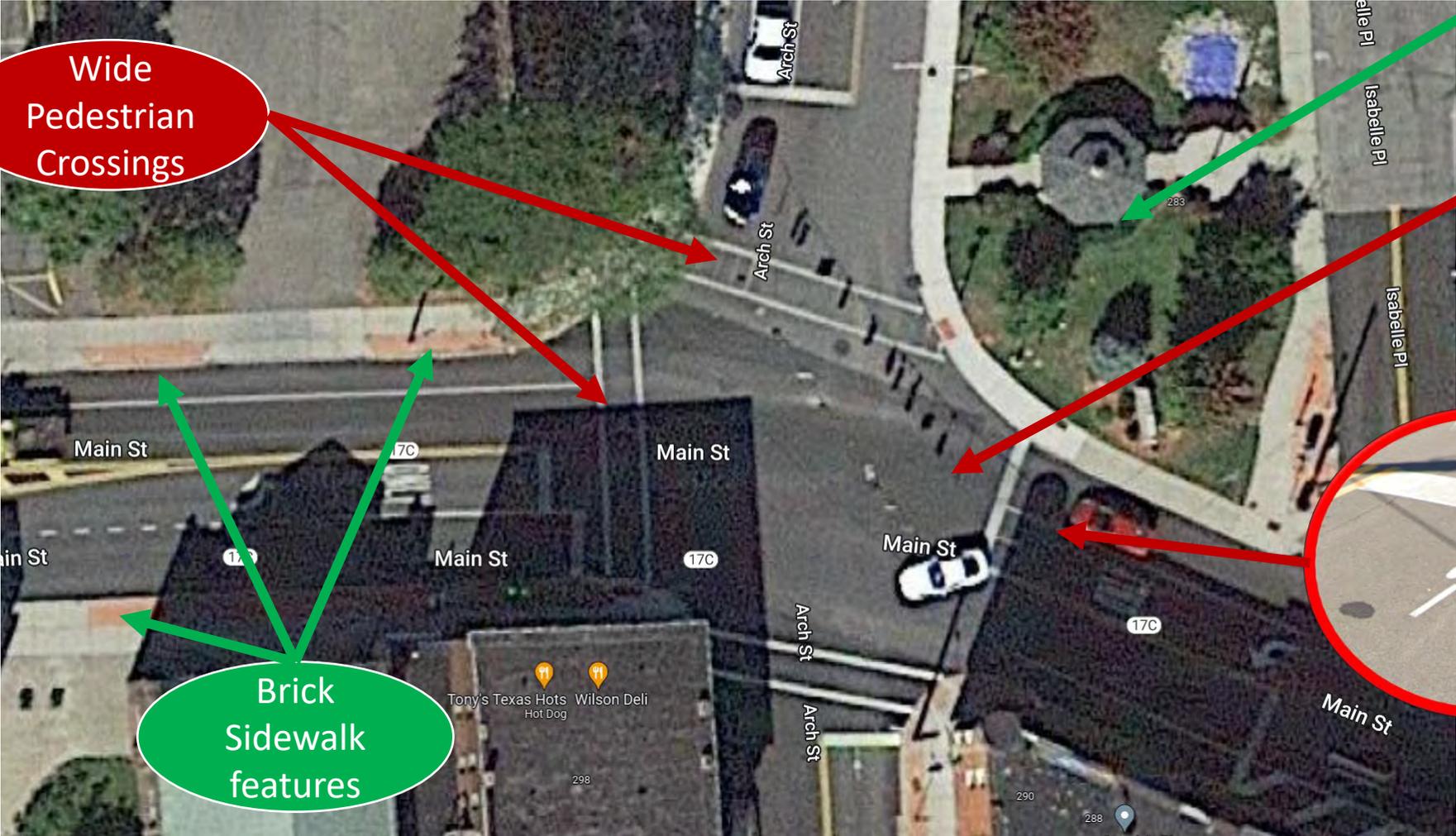


Let's take a walk!

Main & Arch Street (Existing)



Main & Arch Street (Audit)



Wide Pedestrian Crossings

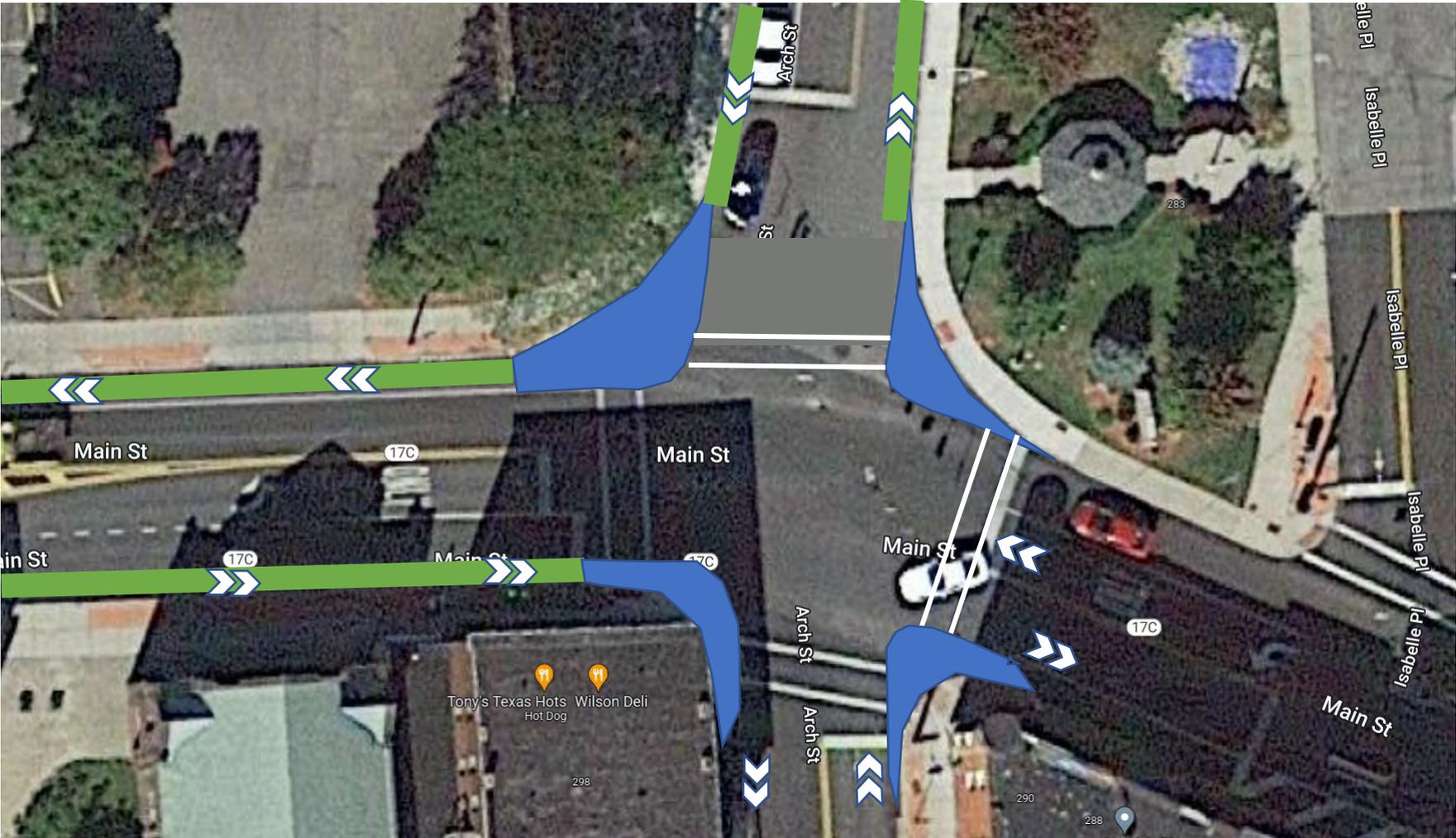
Park Space

No Crosswalk

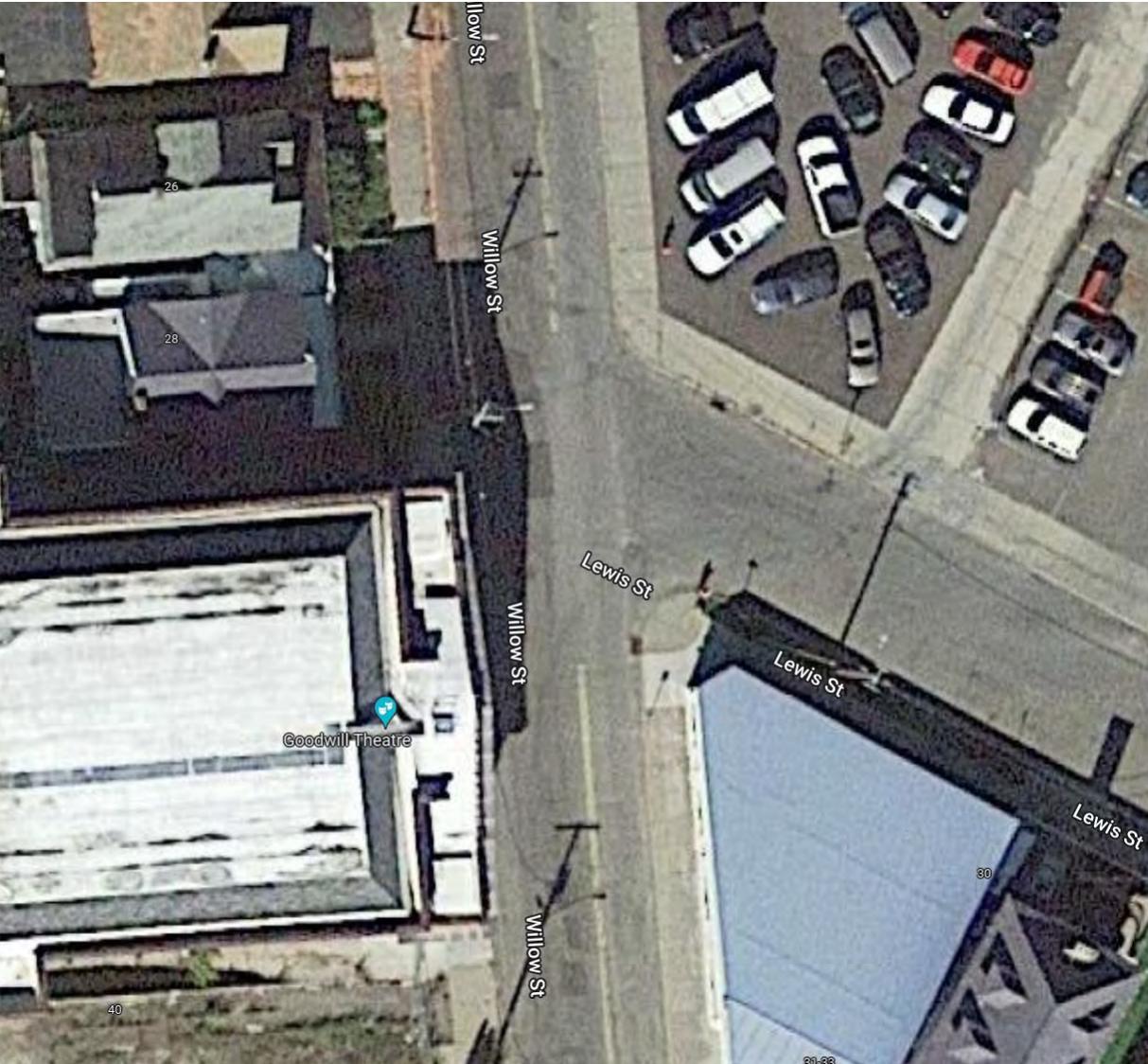
Brick Sidewalk features



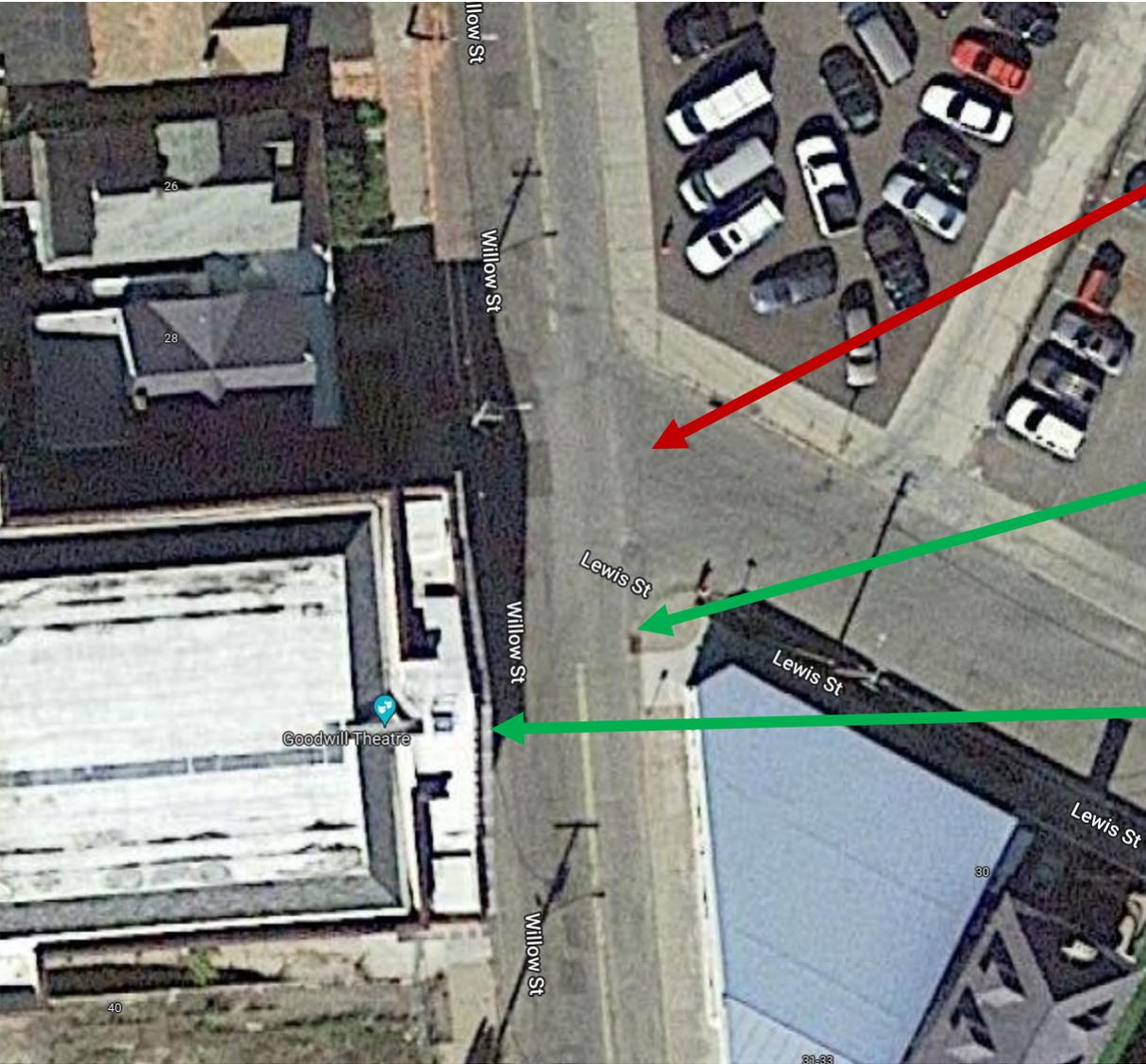
Main & Arch Street (Visioning)



Corliss Ave, Lewis St, Jennison Ave (Existing)



Willow & Lewis (Audit)

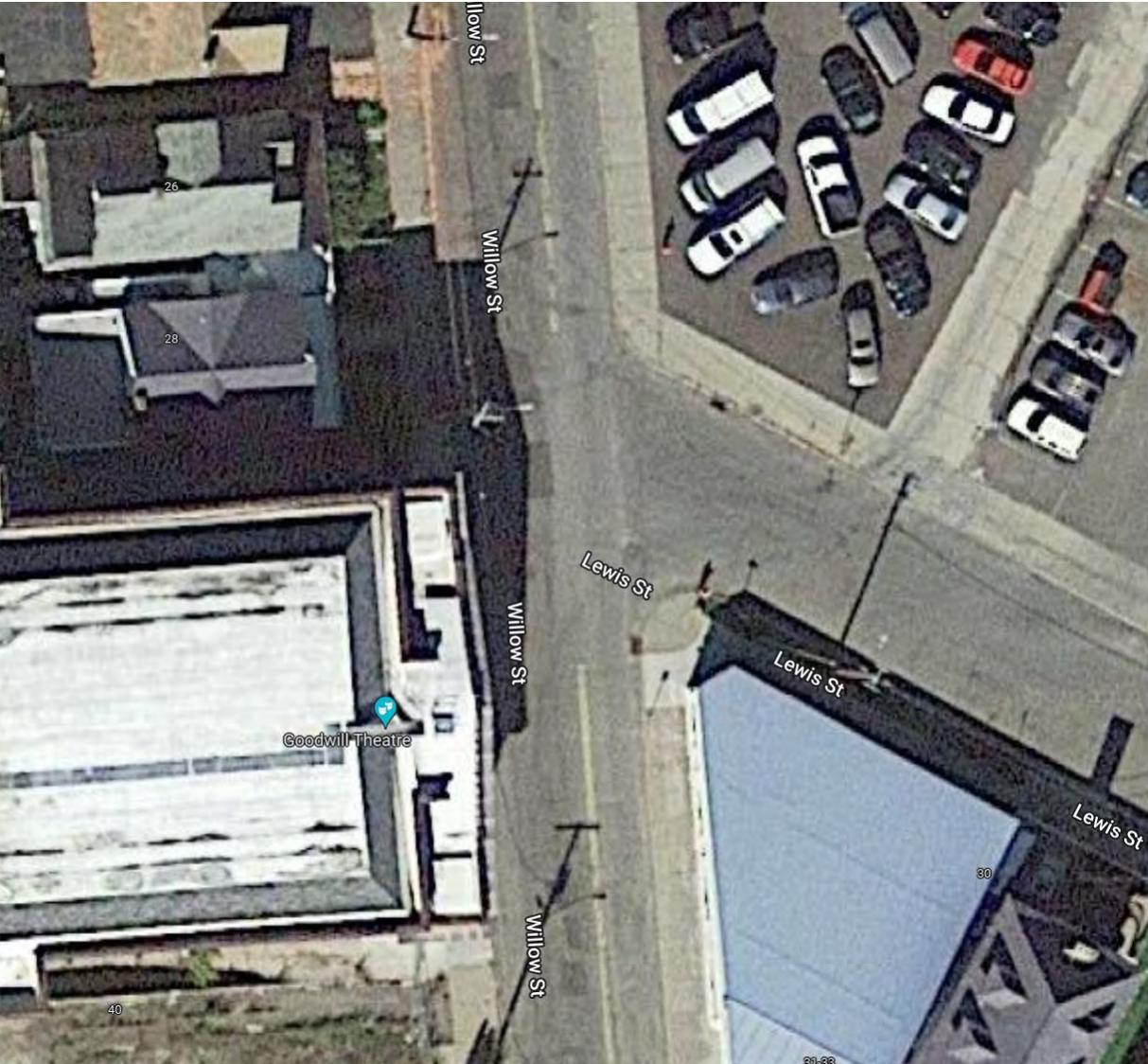


Wide Crossing/No Crosswalk

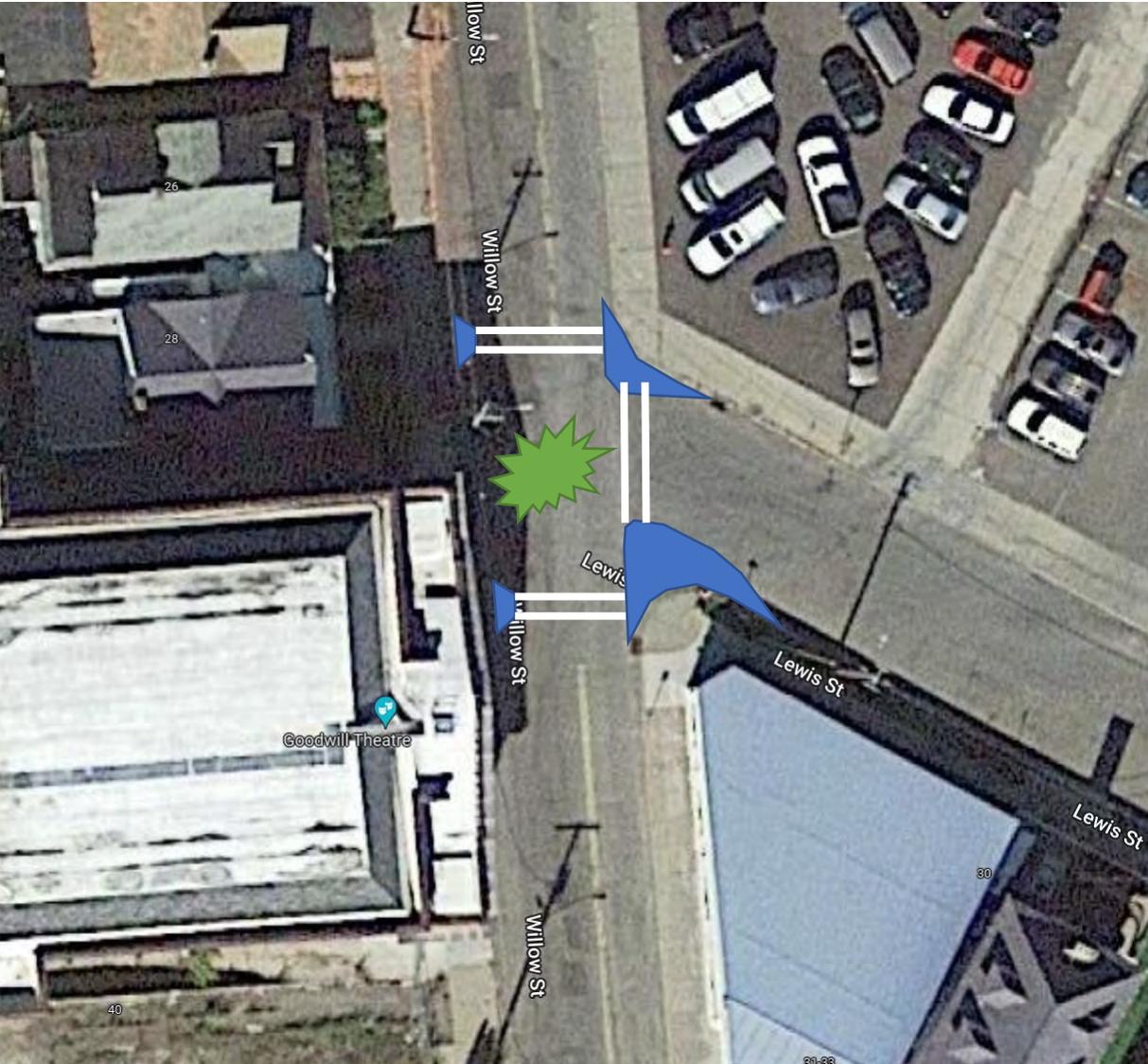
NEW ADA Compliant Curb Ramps

Bike Parking

Corliss Ave, Lewis St, Jennison Ave (Existing)



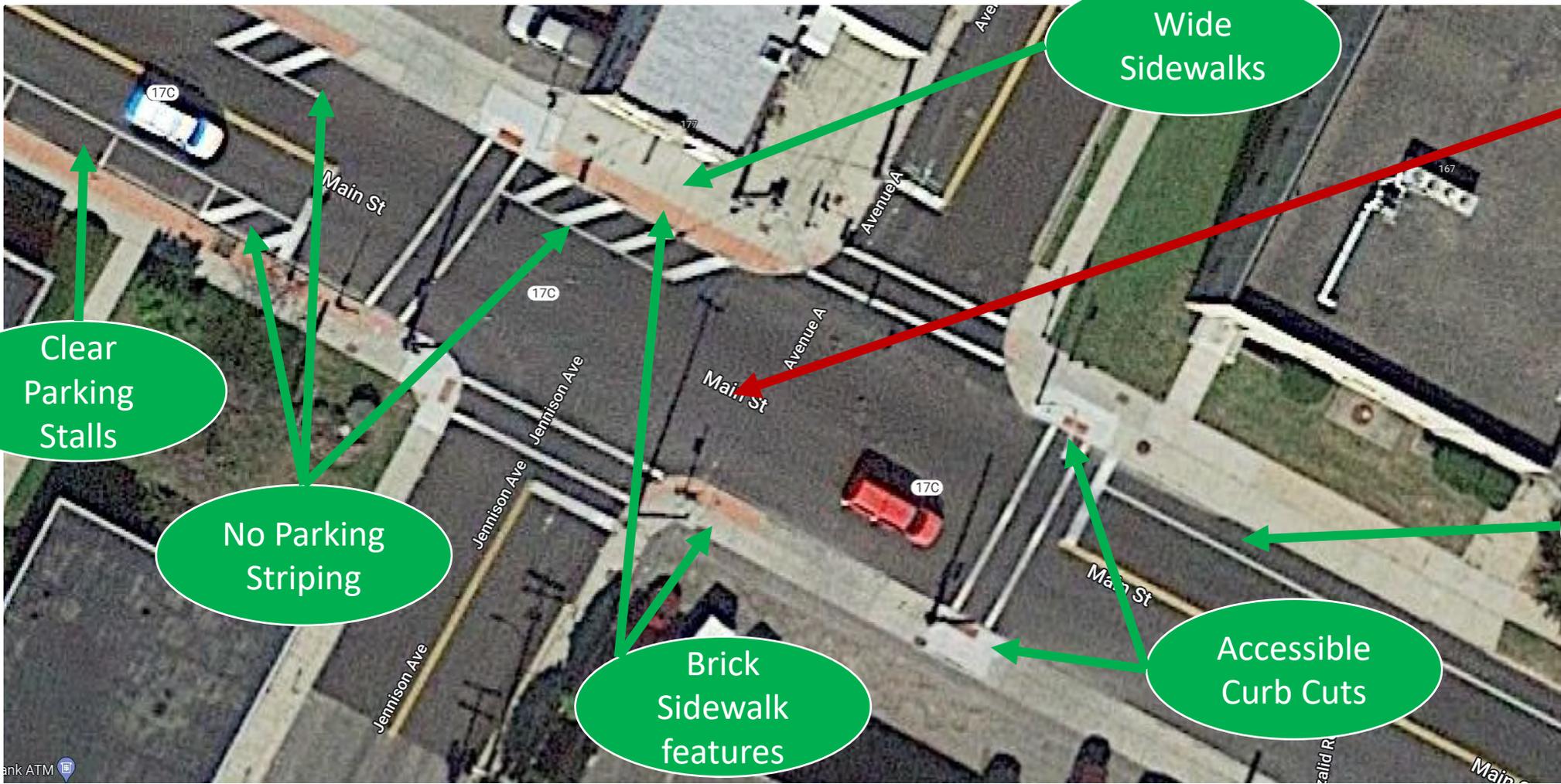
Corliss Ave, Lewis St, Jennison Ave (Visioning) UCS



Jennison Ave, Main Street & Ave A (Existing)



Jennison Ave, Main Street & Ave A (Audit)



No Corner to corner crossing

Wide Shoulders

Clear Parking Stalls

No Parking Striping

Brick Sidewalk features

Wide Sidewalks

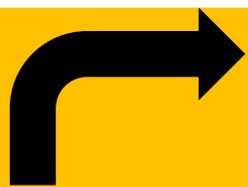
Accessible Curb Cuts

Jennison Ave, Main Street & Ave A (Visioning)UCS



Establishing Policy Framework

- Understand the necessity of a Complete Streets policy
- Dissect the anatomy of a robust Complete Streets policy
- Address common regulatory challenges
- Learn to evaluate effective policy measures



objectives

Q:

Why do communities need a
Complete Streets policy?

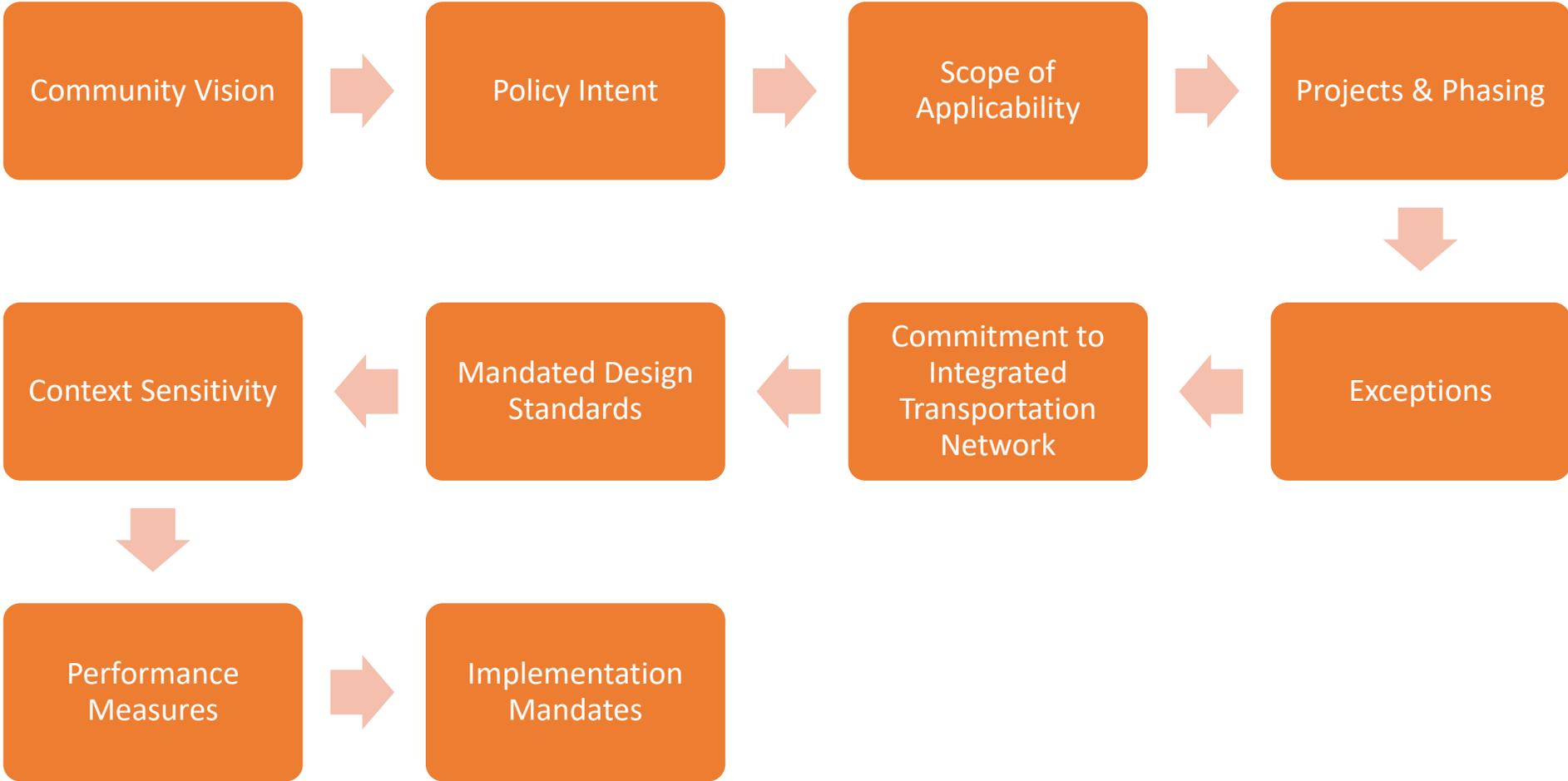
A :

Represents an official mandate to work toward an integrated transportation network for all users, as well as the establishment of a reporting framework.

Functional Classification	Building Use Zone	Pedestrian Zone	Buffer Zone	Transit Lane	Travel/Turn Lane	Median Zone	Bicycle Zone	Parking Zone
DOWNTOWN								
Principal Arterial	High	High	High	High	High	Low	High	High
Minor Arterial	High	High	High	High	High	Low	High	High
Major Collector	High	High	High	High	High	Low	High	High
Local Road	High	High	High	High	High	Low	High	High
NEIGHBORHOOD MIXED USE								
Principal Arterial	High	High	High	High	High	Low	High	High
Minor Arterial	High	High	High	High	High	Low	High	High
Major Collector	High	High	High	High	High	Low	High	High
NEIGHBORHOOD RESIDENTIAL								
Minor Arterial	High	High	High	High	High	Low	High	High
Major Collector	High	High	High	High	High	Low	High	High
Local Road	High	High	High	High	High	Low	High	High
COMMUNITY MIXED USE								
Minor Arterial	High	High	High	High	High	Low	High	High
Major Collector	High	High	High	High	High	Low	High	High
Local Road	High	High	High	High	High	Low	High	High
COMMUNITY COMMERCIAL								
Principal Arterial	High	High	High	High	High	Low	High	High
Minor Arterial	High	High	High	High	High	Low	High	High
Major Collector	High	High	High	High	High	Low	High	High
INDUSTRIAL								
Major Collector	High	High	High	High	High	Low	High	High
Local Road	High	High	High	High	High	Low	High	High

High Priority
Medium Priority
Low Priority

Anatomy of Complete Streets Policy



School Zones

- .25 Miles of roadways passing by a school entrance/exit
- Reduced speed limit
- Specific Hours of Operation with accompanying signage
- Flashing beacons can also be used

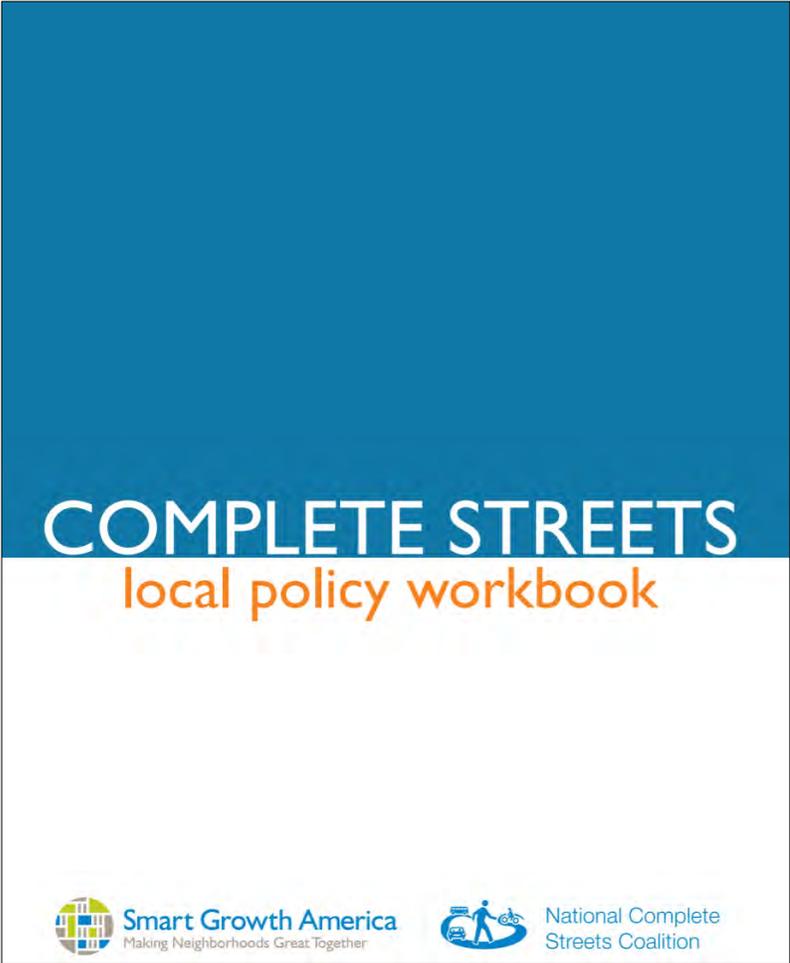
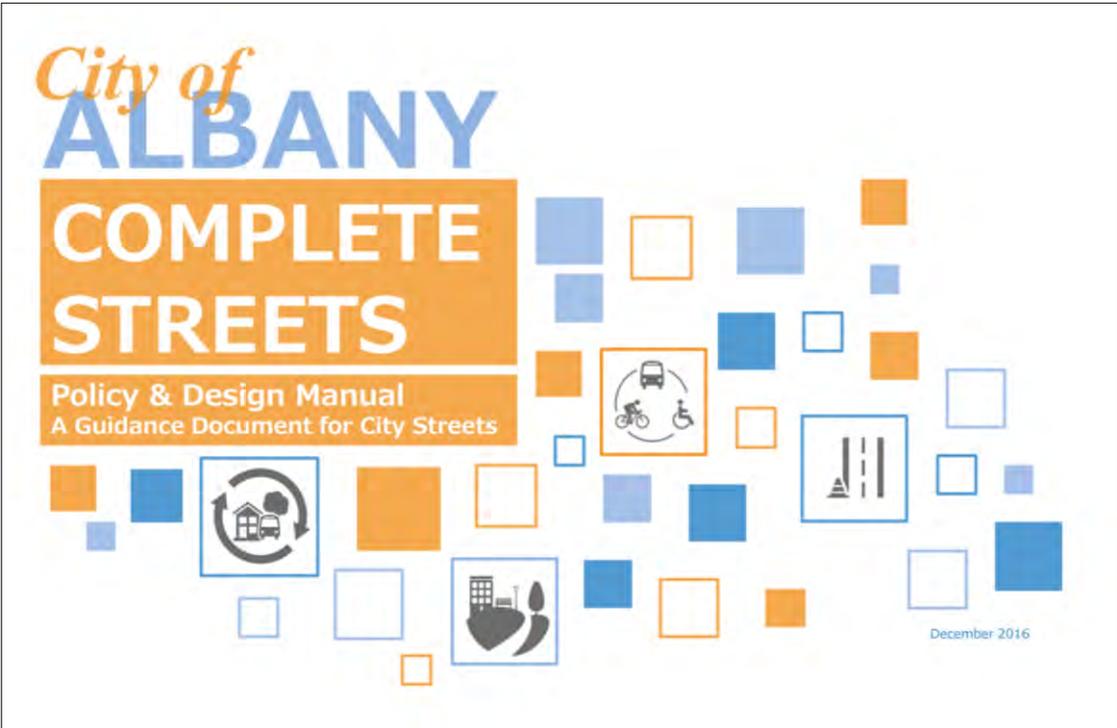


NYC Neighborhood Slow Zones

- *Application-based program led by communities*
- *Implemented in small, self-contained areas with local streets*
- *Reduces speed limit to 20MPH*
- *Uses speed bumps, marking and other place-based treatments.*

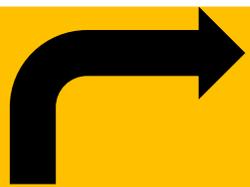


Tools & Resources



Implementing Complete Streets

- Understand the challenges of implementing Complete Streets projects
- Identify strategies for implementing Complete Streets
- Learn about methods for building an advisory group



objectives

Chamber of Commerce/Business Association

Transit Agency



Department of Public works/Transportation (Maybe State DOT)

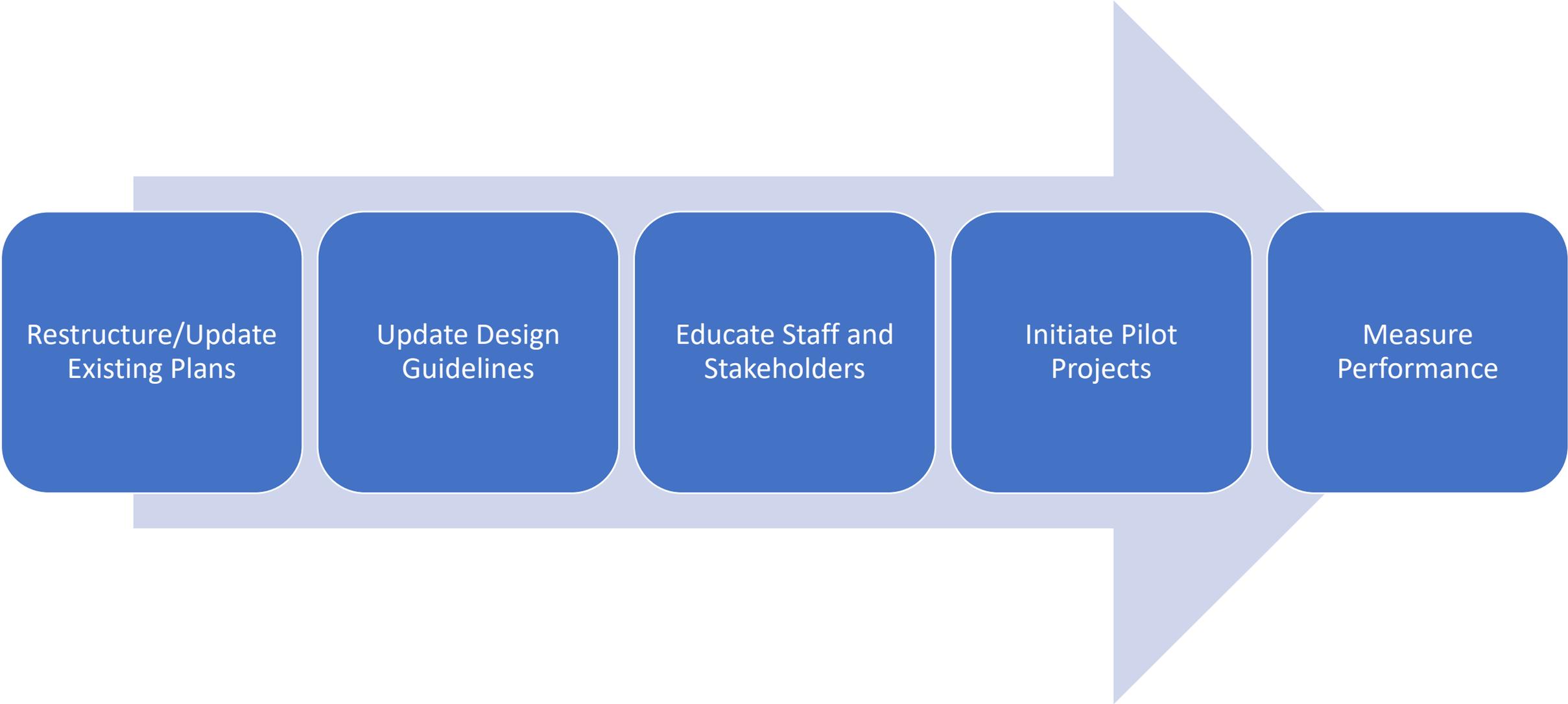
Diverse Stakeholders

Understanding Roles



Customer Concerns	Technical Issue	Partners and Roles			
		TRANSIT AGENCY	PUBLIC SECTOR	PRIVATE SECTOR	ADVOCATES
"How do I get to transit via bicycle?"	Safe routes to transit	Influencer role; communicate customer demand to municipal authority; act as funding partner, provide policy support where possible	Lead role; responsible for planning, implementation and maintenance of facilities; data sharing	Varies; developers may fund bike paths as an abatement and/or amenity in conjunction with development projects	Influencer role; advocate for better bike facilities and connectivity throughout the bike network; help identify demand, balanced with other mode advocacy
"What do I need to know?" "Where can I find information about biking to transit?"	Customer communication and education	Lead role; provide central repository with clear information on using bikes with agency services, facilities and incentives	Lead role; provide accessible information on the bicycle network as it relates to transit facilities; includes wayfinding and route maps	Support role; employers may provide incentives for biking to work and use existing educational materials to illustrate resources	Lead role; provide grassroots messaging to underserved populations; incorporate transit resources into educational materials; provide translations; support events; provide amenities such as parking and showers
"Is there a safe place to store my bicycle?"	Bike parking at or near transit facilities	Lead role; responsible for design, implementation, maintenance and administration of bike parking at transit stations	Varies; provide demand data for bike parking; leads construction; ensures interoperability with bicycle parking if possible; establishes bike parking standards in land-use code	Varies; provide information and incentives for using bike parking; can build own bike parking facilities if near transit	Varies; some advocacy groups may be contracted for operations of bike parking; advocates should otherwise provide information for users
"Can I extend my transit ride with a bike?" "How do I complete my trip by bike at both ends?"	Bikes onboard transit vehicles	Lead role; responsible for operations, policy and administration	Support role; should communicate customer demand to transit agencies; provide data about facility use	Support role; incentivize and encourage bicycle integration with transit; communicate customer demand to transit agencies	Influencer role; provide information to the community; communicate customer needs
"Can I get to transit without using my own bike?"	Bike-share connectivity	Varies; where feasible, work with bike-share operators to ensure clear rules for dockless bikes and efficient placement for stations	Varies; municipalities overseeing planning for bike share should work proactively to ensure adequate capacity at transit stations	Varies; may fund bike-share programs through sponsorship and advertising; may provide incentives for using bike share	Influencer role; promote the use of bike share at the grassroots level and provide education on bike-share resources; work with providers on discounted use and access for unbanked users

Steps to Implementation



Short-Term Pilots...

- Streamline implementation
- Demonstrate feasibility
- Allow for experimentation
- Foster community engagement
- Attract new funding sources



Tag-Along Projects...

- Enable planners and engineers to capitalize on permitting and staging for other projects
- Design today for projects tomorrow
- Bring more bang for the taxpayer's buck



Common Myths...

Businesses will lose customers if we take away parking...

It just won't work here, our community is too unique...

Police, fire, and emergency services will not have access ...

We don't have the money for this...

Businesses will lose customers if we take away parking...

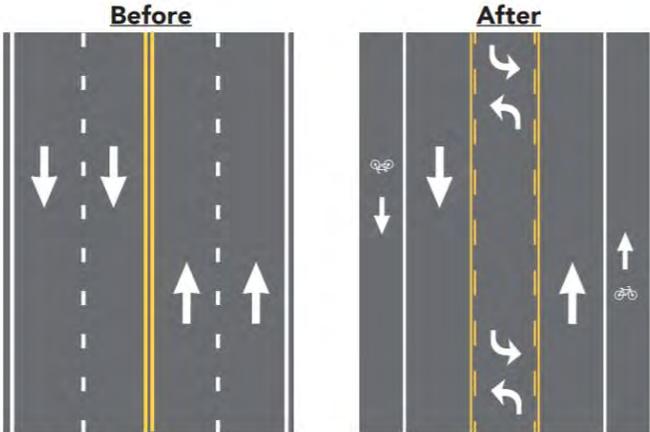
Studies show the opposite is true: more walkable and bikeable communities increase commercial activity and business satisfaction



Police, fire, and emergency services will not have access

FALSE: A Road Diet design opens a more predictable and practical path for emergency responders.

...also, Complete Streets projects reduce crashes, and the overall demand for emergency services.



Two travel lanes are removed to reallocate space for a TWLWL and bicycle lanes.



A fire truck struggling to find a path.

An easily navigable two-way left-turn lane.

We don't have the
money for this...

If planned properly, complete street improvements can be no/low cost, and folded into other projects like routine street millings or utility projects.



It just won't work
here, our
community is too
unique...

It's the unique elements in
each community which make
Complete Streets projects
special!



Funding Complete Streets - Federal

Better Utilizing Investments to Leverage Development (BUILD) Grant

- Formerly known as Transportation Investment Generating Economic Recovery (TIGER) Grant
- Extremely Competitive
- Multi-modal, multi-jurisdictional projects
- Open to ANY Public Entity (unlike most USDOT funds)



Increased emphasis
on projects located
in rural areas



\$1.5 billion ready for
projects with a significant
local or regional impact



Apply by
July 19, 2018



U.S. Department of Transportation

Follow us @USDOT

Funding Complete Streets - Federal

**NYS Congestion
Mitigation and Air
Quality Program
(CMAQ)**

**Safe Routes to
School Program
(SRTS)**

**Statewide
Transportation
Improvement
Program**

**Surface
Transportation
Block Grant (STBG)**

Funding Complete Streets - State

Consolidated Local Street and Highway Improvement Program (CHIPS)

New York State Main Street Program

Local Waterfront Revitalization Program



Funding Complete Streets – Foundations



Rails-to-trails Conservancy

- Doppelt Family Trail Development Fund



People for Bikes

- Community Grants for design and construction

Local Sponsors

- Healthcare providers; nonprofit groups; philanthropy

Funding Complete Streets – Private Sources



Property Owners



Businesses



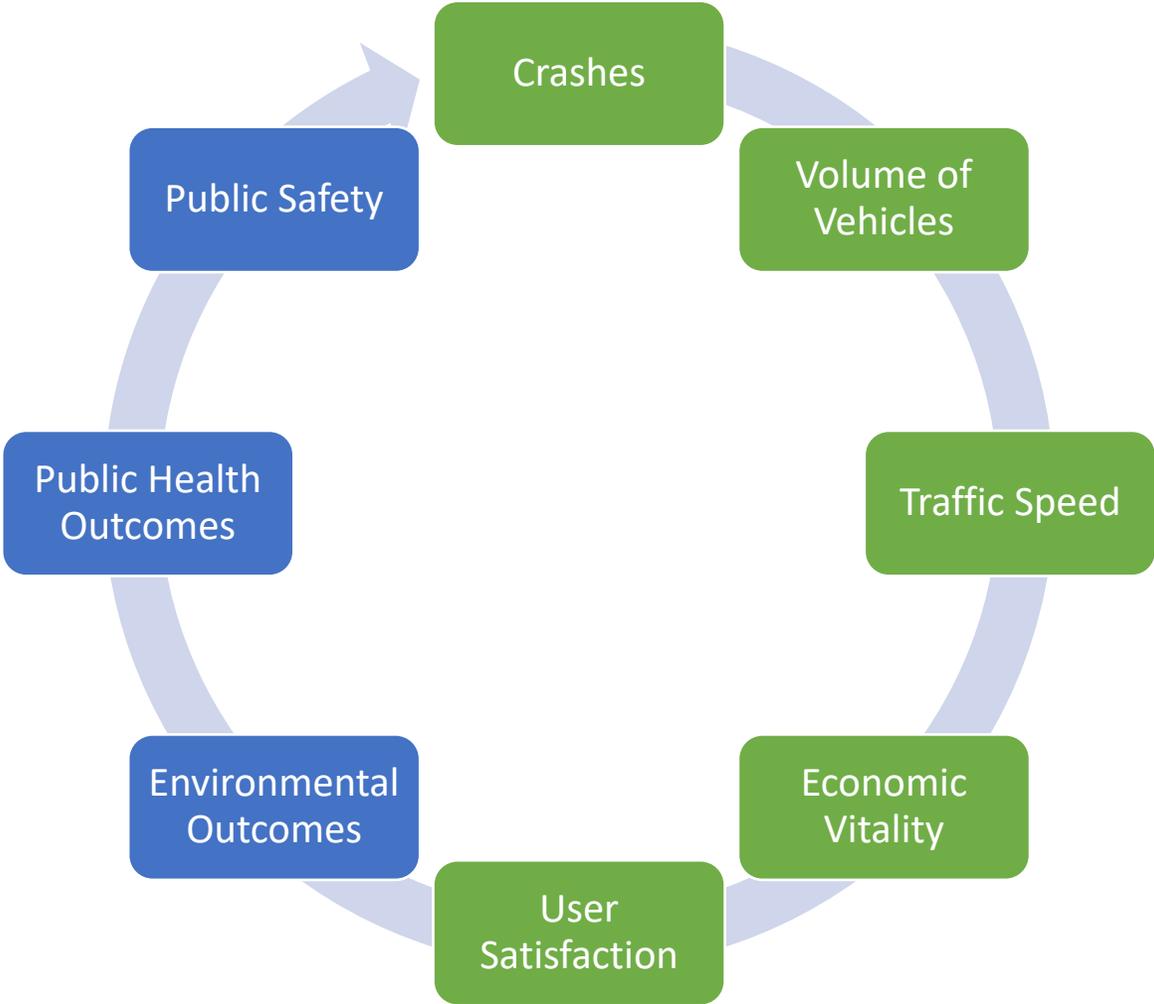
Developers

Evaluating Success



- **Identify Complete Streets outcomes**
- **Discuss methodologies for data collection around biking and walking**
- **Introduce national frameworks for bicycle- and pedestrian-friendly community recognition**

What Do We Measure?



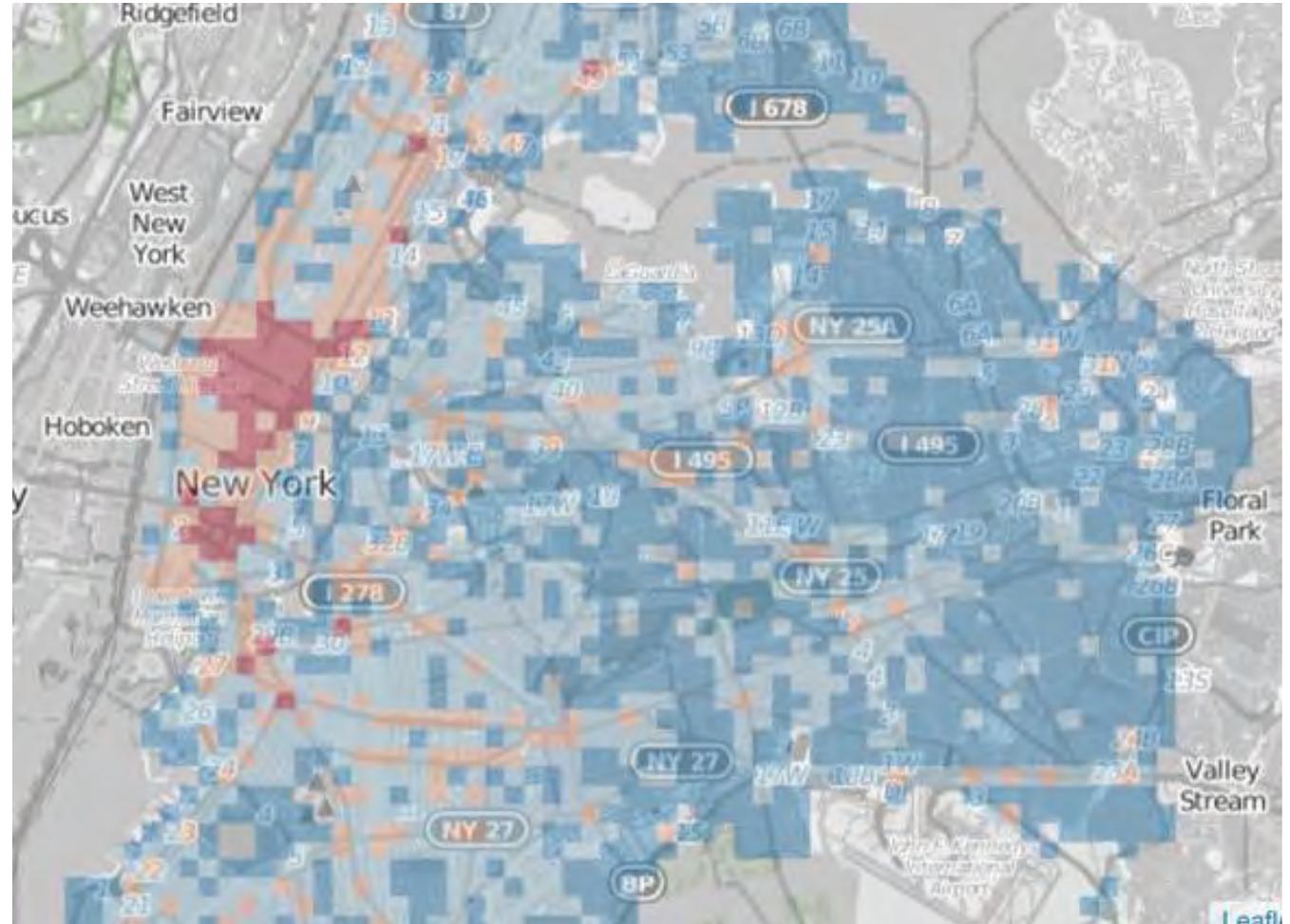
How to Develop a Strong Dataset

1. Prioritize outcomes that are important to your community
2. Determine methodology
3. Establish a baseline
4. Set a regular schedule for evaluation



Traffic Crashes

- Available from local police department
- Different types of traffic accidents:
 - Car to car
 - Car to bike
 - Car to pedestrian
 - Bike to bike
 - Bike to pedestrian



Traffic Volume

- Ways to measure traffic volume:
 - # of cars/bikes/pedestrians on street
 - Vehicle Turning Counts (intersections)
- Methods:
 - Manual Counts
 - Automatic Counts
 - Pneumatic Road Tube and Recorder
 - Video Analytics
 - Permanent Counters



Traffic Speed

- Manual Counts
 - Speed gun
- Automatic Count Methods
 - Speed cameras
 - Automated speed signs



Economic Vitality



Commercial Activity

- Sales Tax receipts in businesses fronting Complete Streets improvements



Business Engagement

- Number of visitors in local establishments
- Number of seated pedestrians affronting businesses abutting complete street improvements
- User surveys
- Business surveys



Commercial Vacancies

- Building Permits
- Number of vacant storefronts

Downstream Outcomes

Public Health

- Asthma Rates
- Obesity Rates

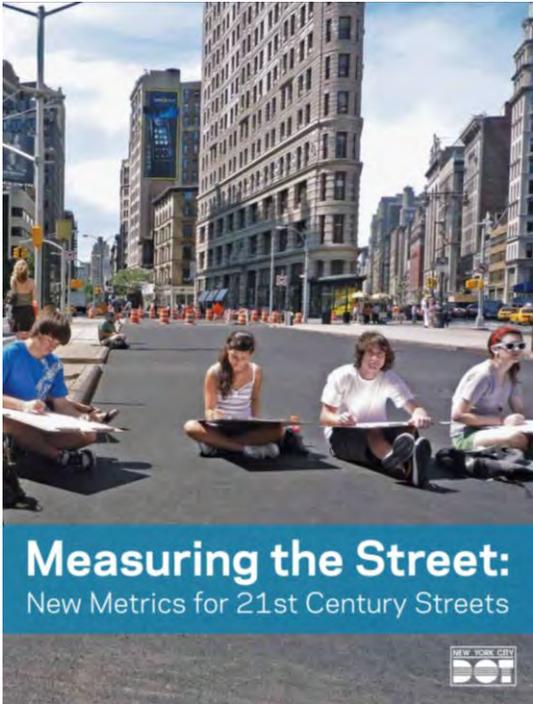
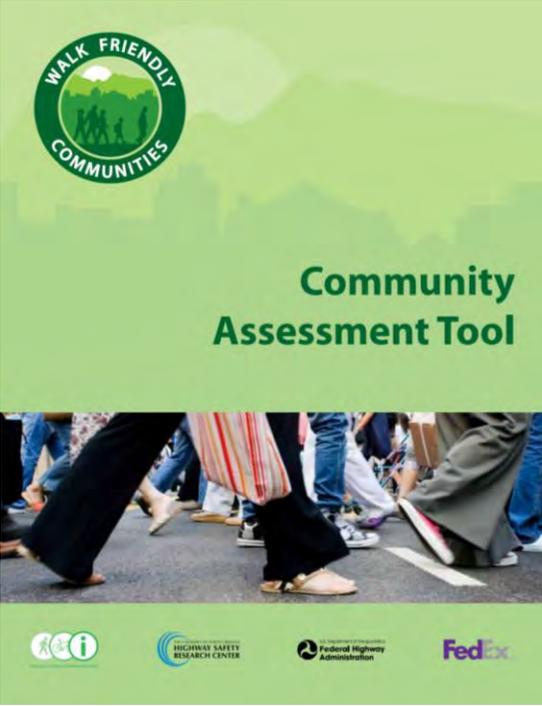
Public Safety

- Perceptions of Safety
- Crime rate

Environmental

- Air quality
- Water Quality

Tools & Resources



- Evaluating the Impact of Complete Streets Initiatives (Go Bike Buffalo & Center for Inclusive Design and Environmental Access)

Review of key takeaways



- Review everything we learned today
- Discuss how these strategies can improve mobility in YOUR community

Active Transportation is any self-propelled, human-powered mode of mobility



Complete Streets are Streets for Everyone!



There are many tools...



There are many tools...



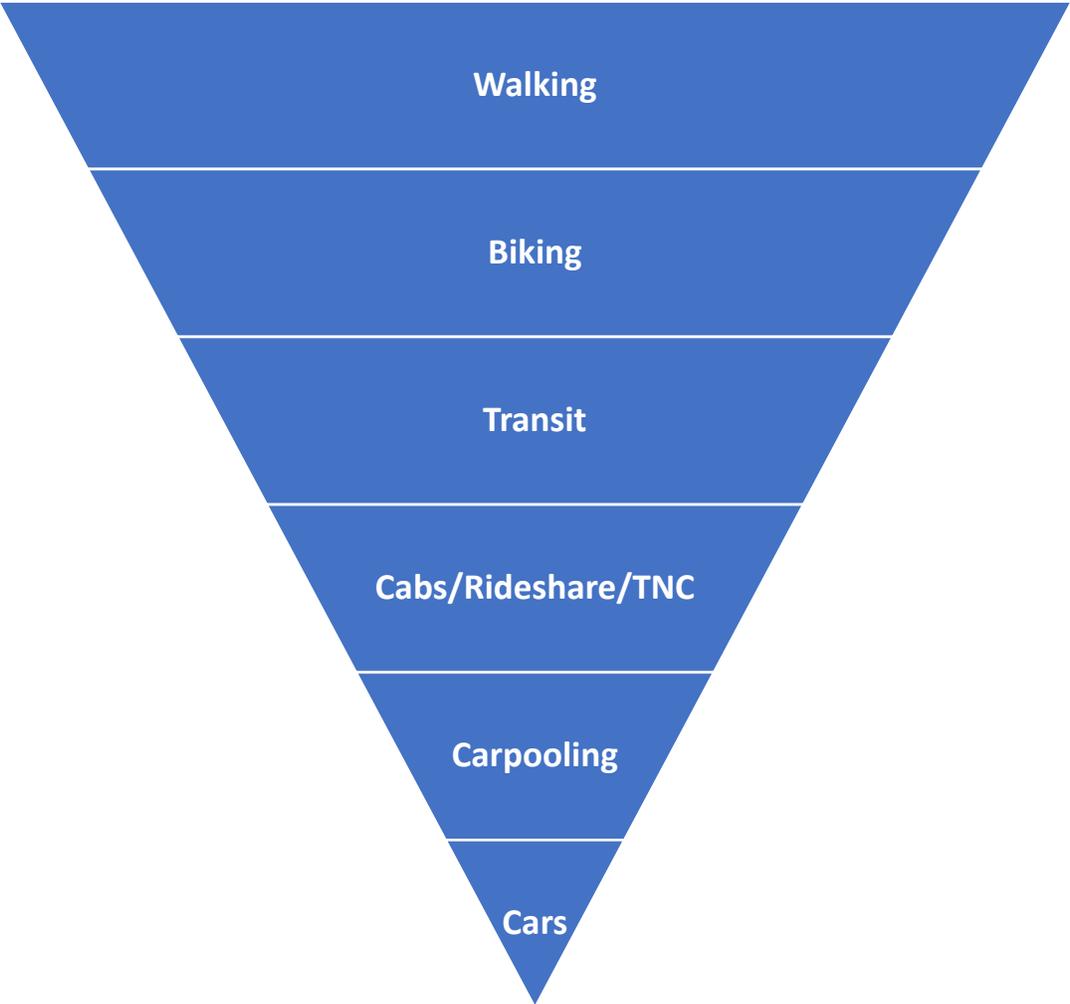
Complete Streets should seek to establish integrated transportation connections between modes...



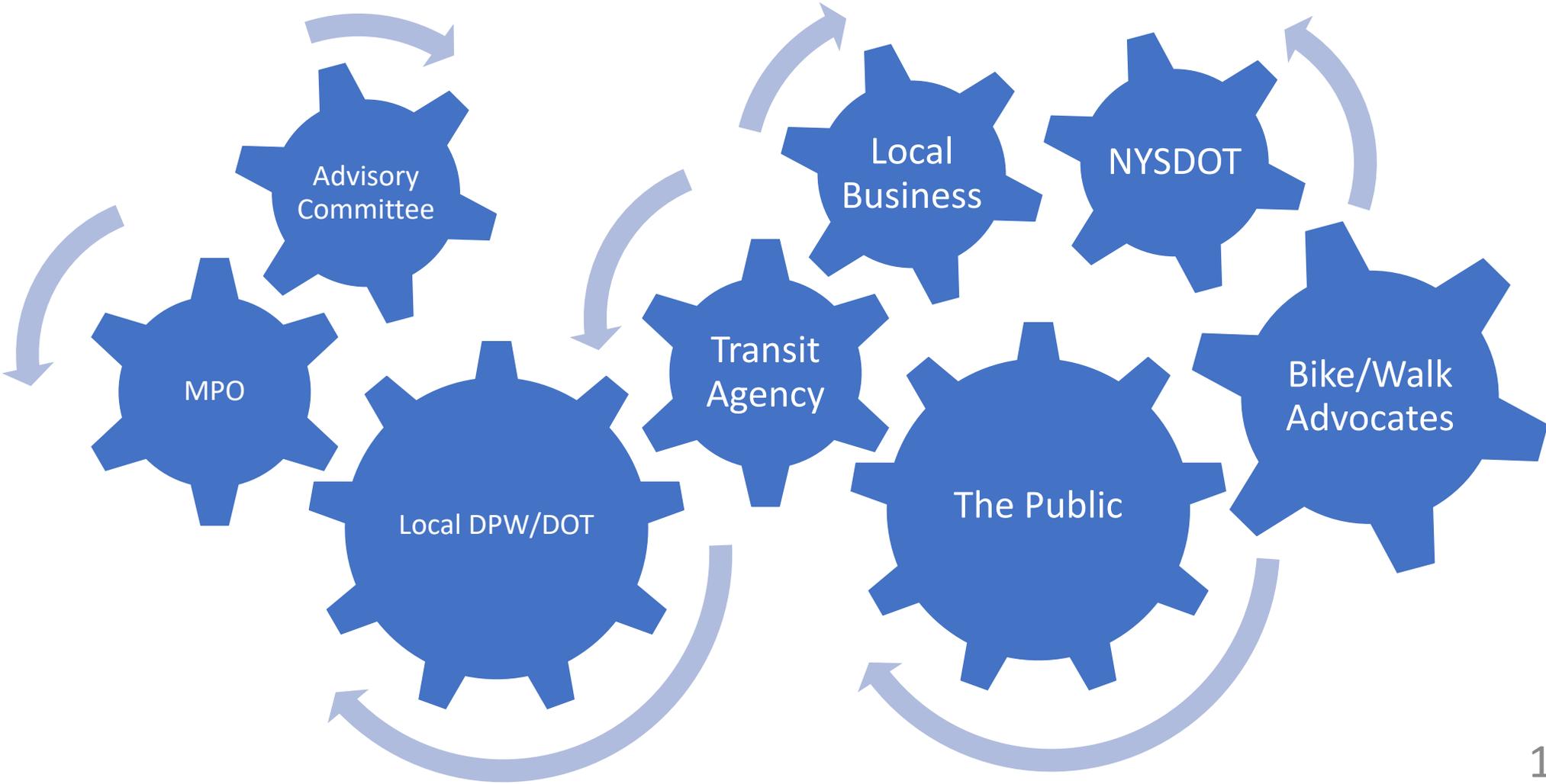
Don't forget about freight mobility...



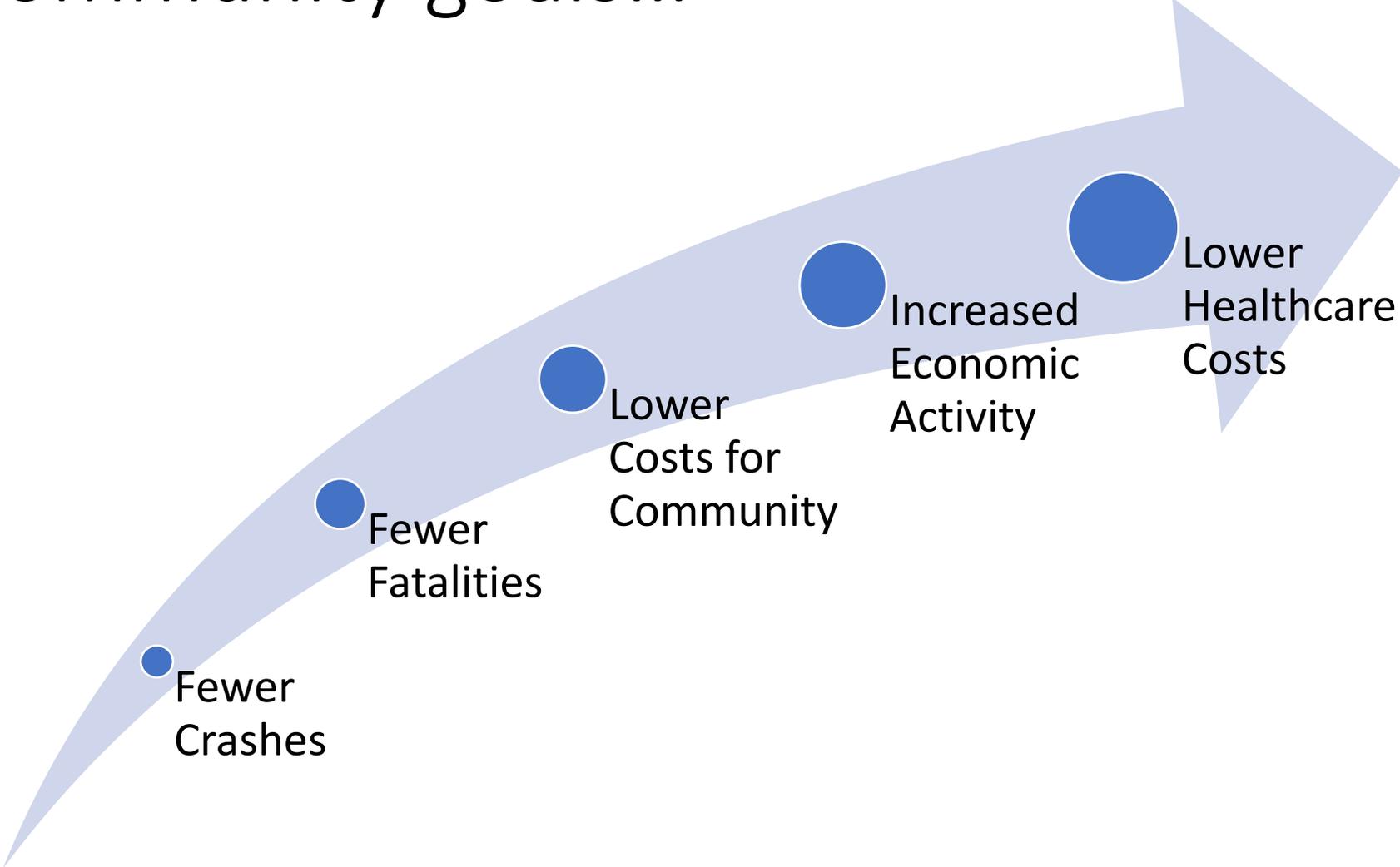
Complete Streets policies set the tone and establish guidelines for future street improvements...



Implementation is complex, but can be streamlined with cooperation and education...



Evaluation is critical to tracking success and setting community goals...



Q:

What questions
do you have?