New York State
Active Transportation
&
Complete Streets

TRAINING

Active Transportation & Complete Streets

Sponsors

Agenda

TRAINING

Presented by:

UCS Urban Cycling Solutions

Sponsored by:

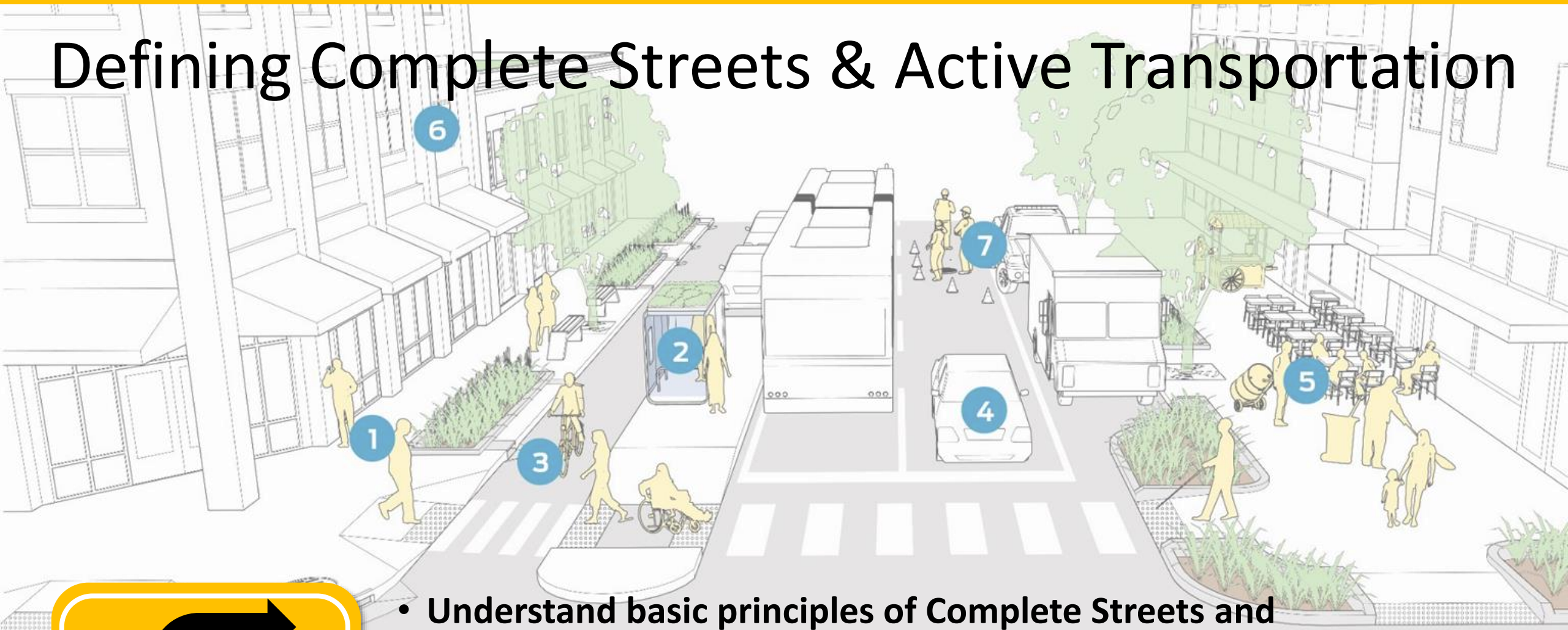
New York State of Opportunity. NYSERDA

New York State Department of Health

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



objectives

- **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."

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

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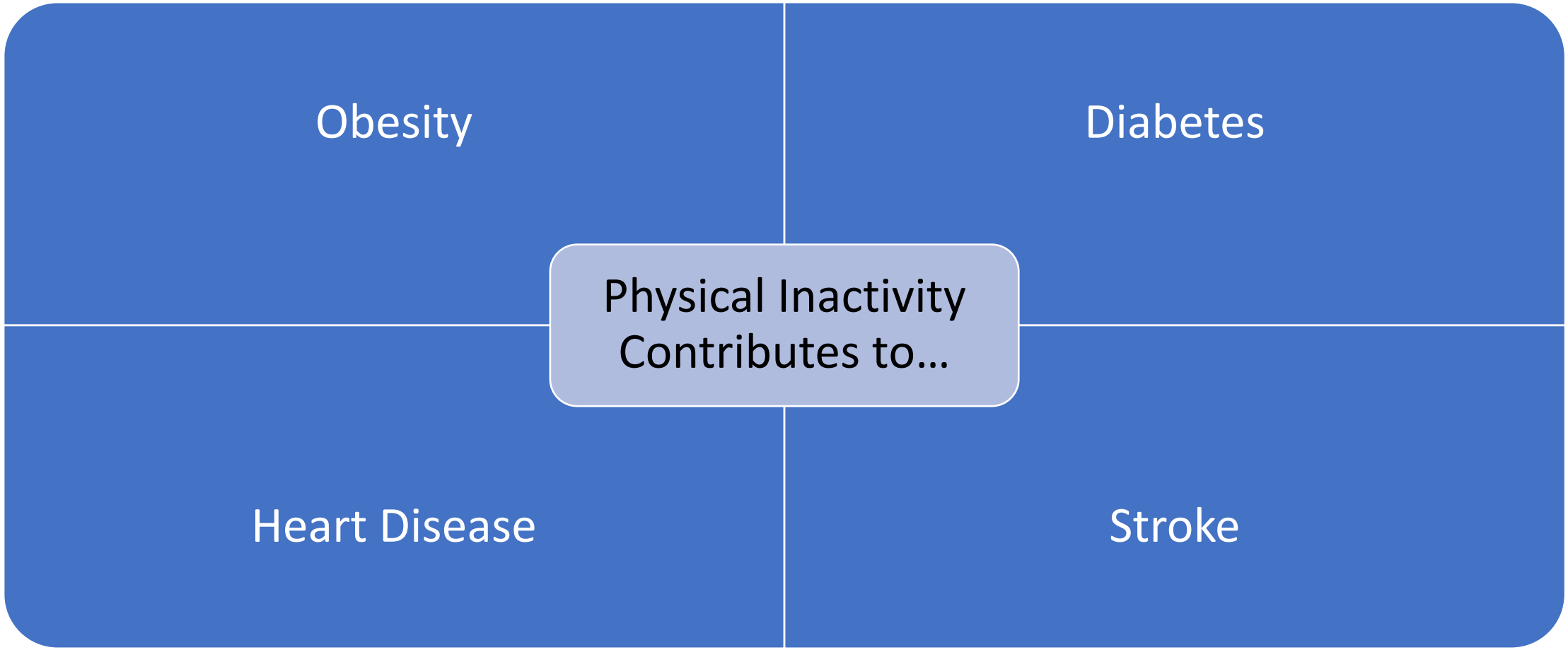

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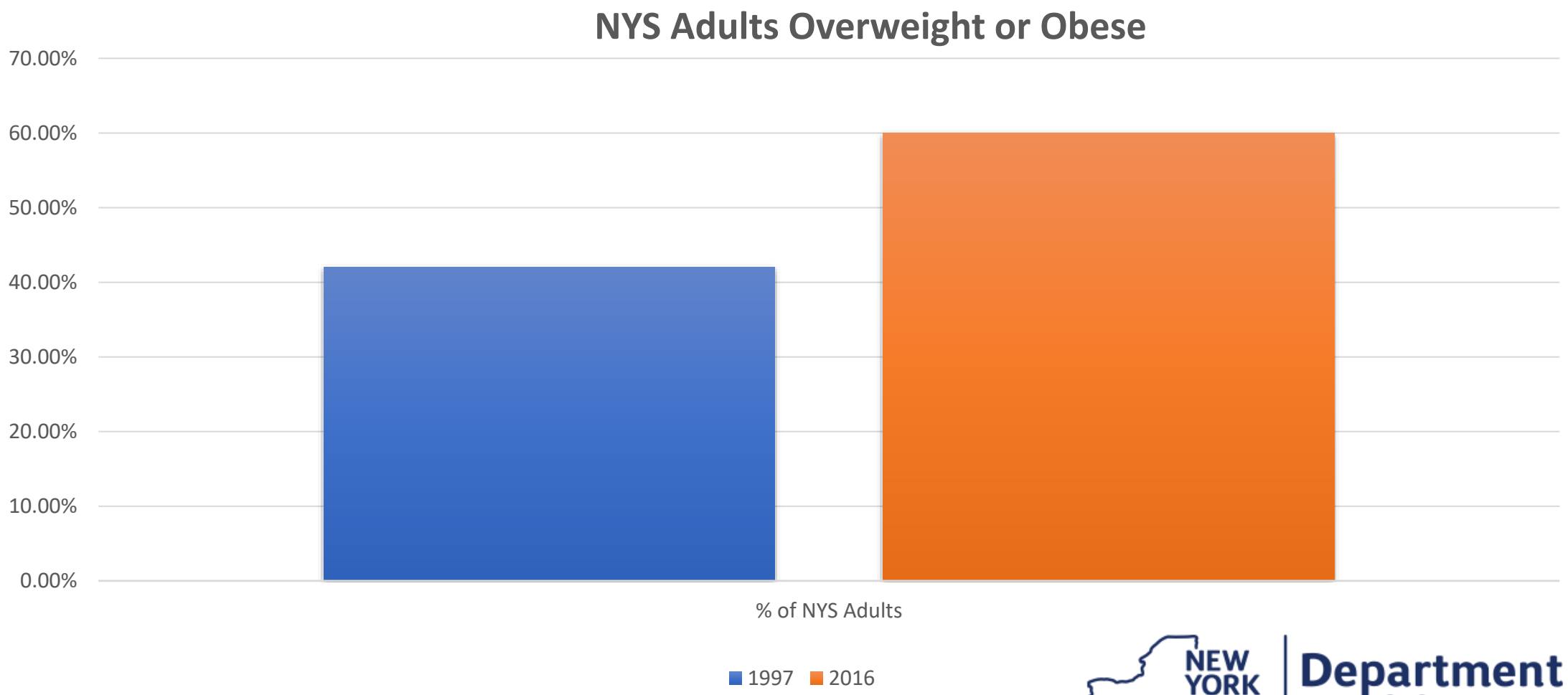

NEW YORK STATE | Department of Health

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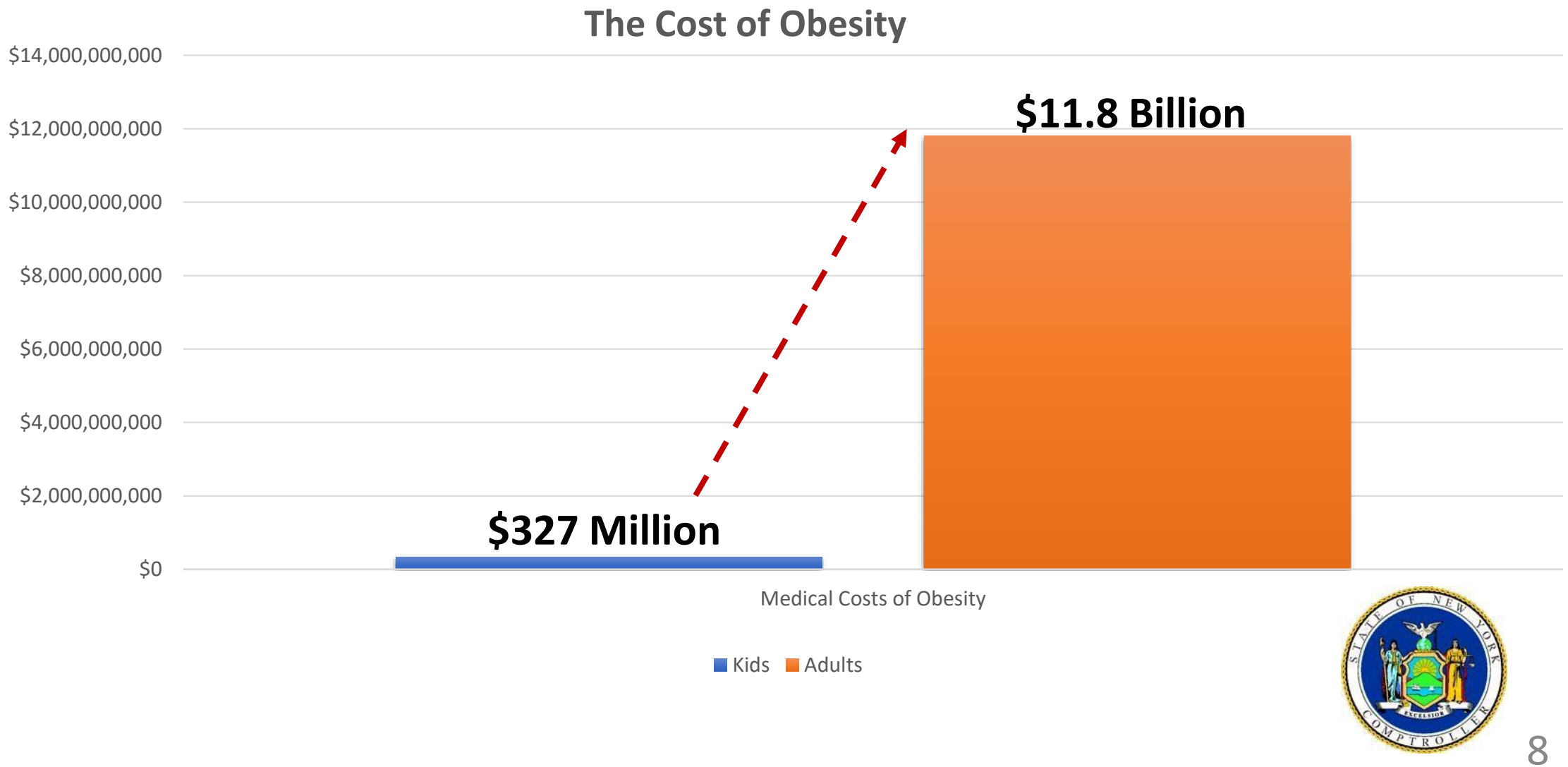
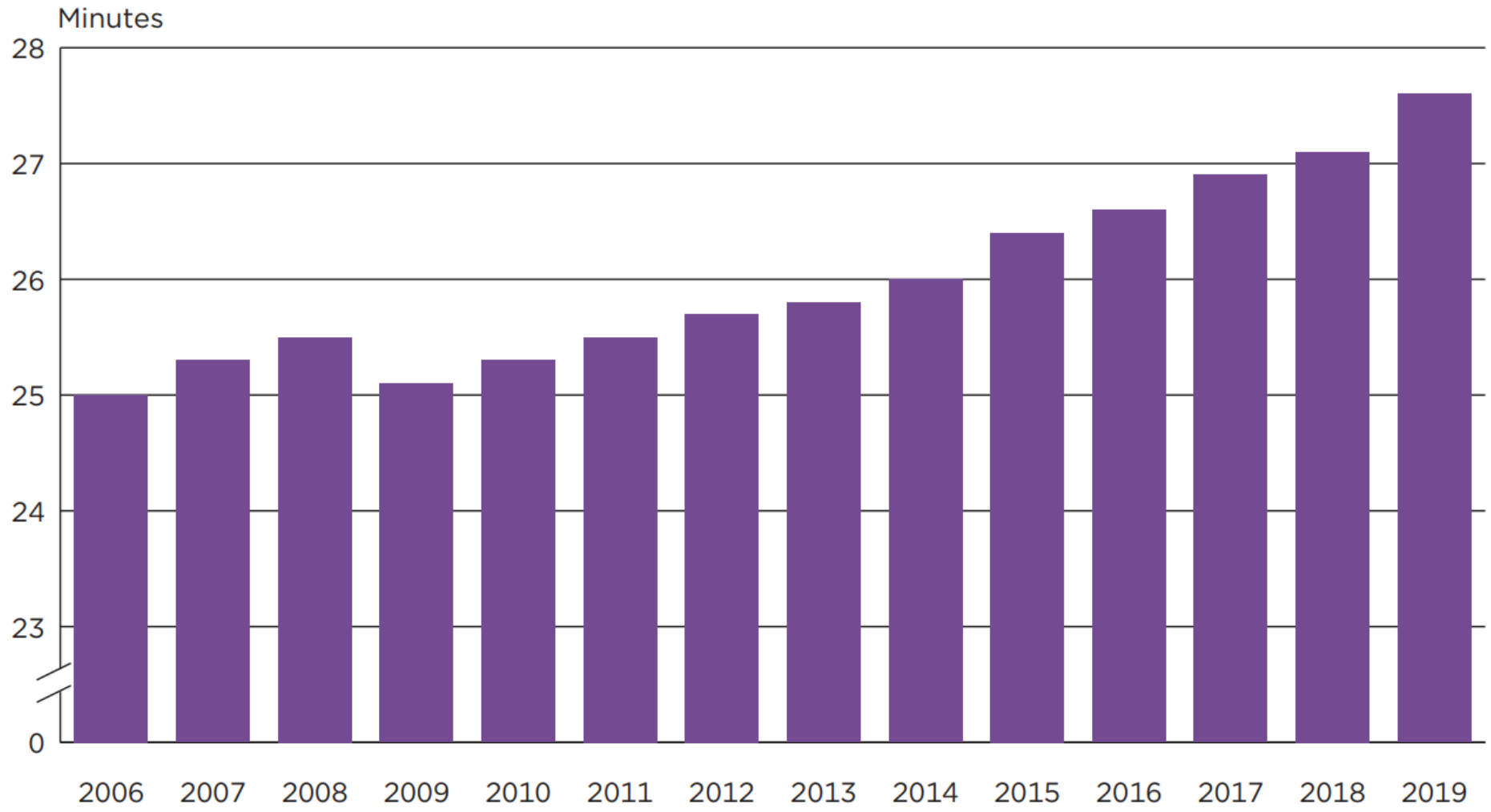


Average Travel Time to Work in the United States: 2006 to 2019

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



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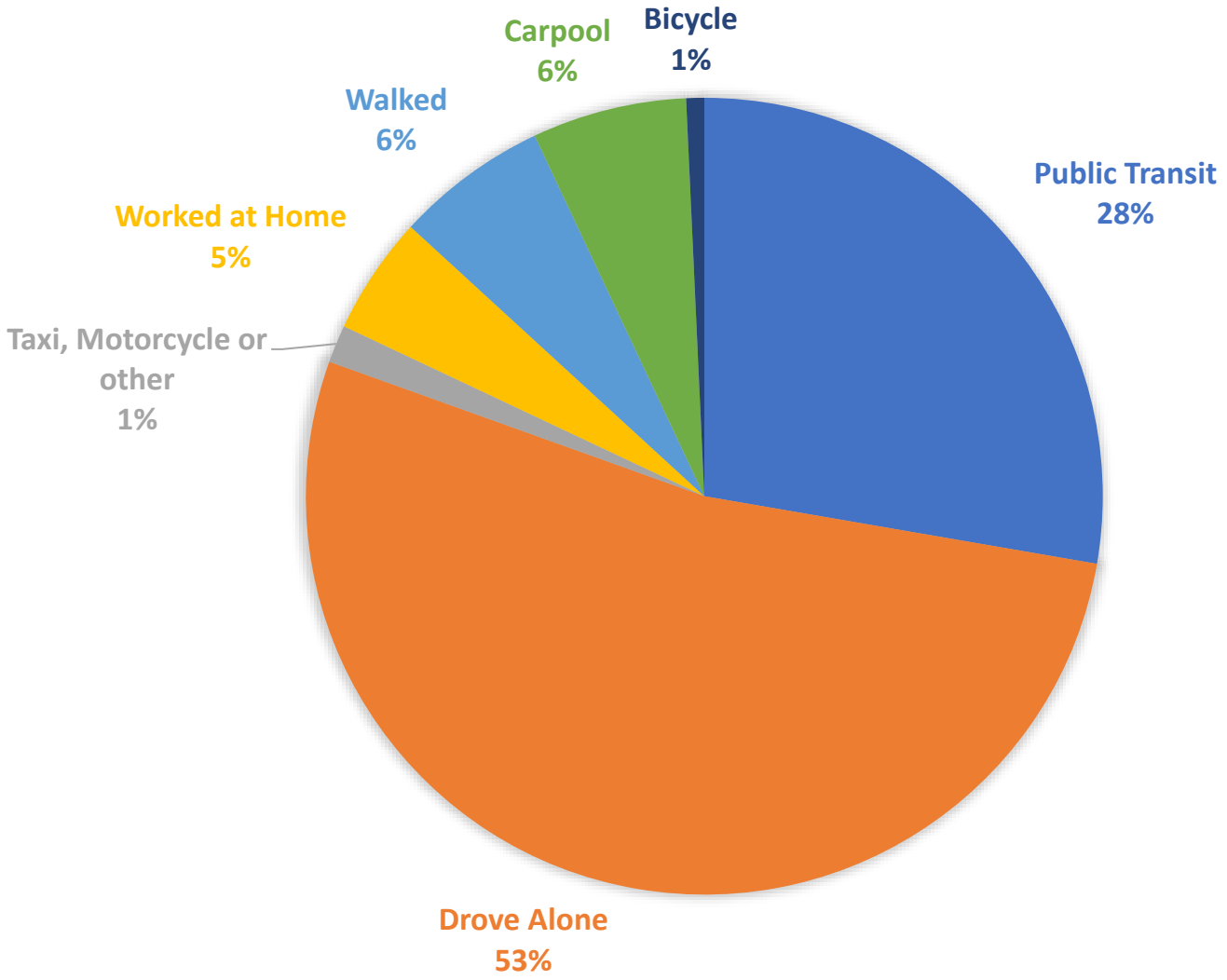
2019 NY STATE MODESHARE



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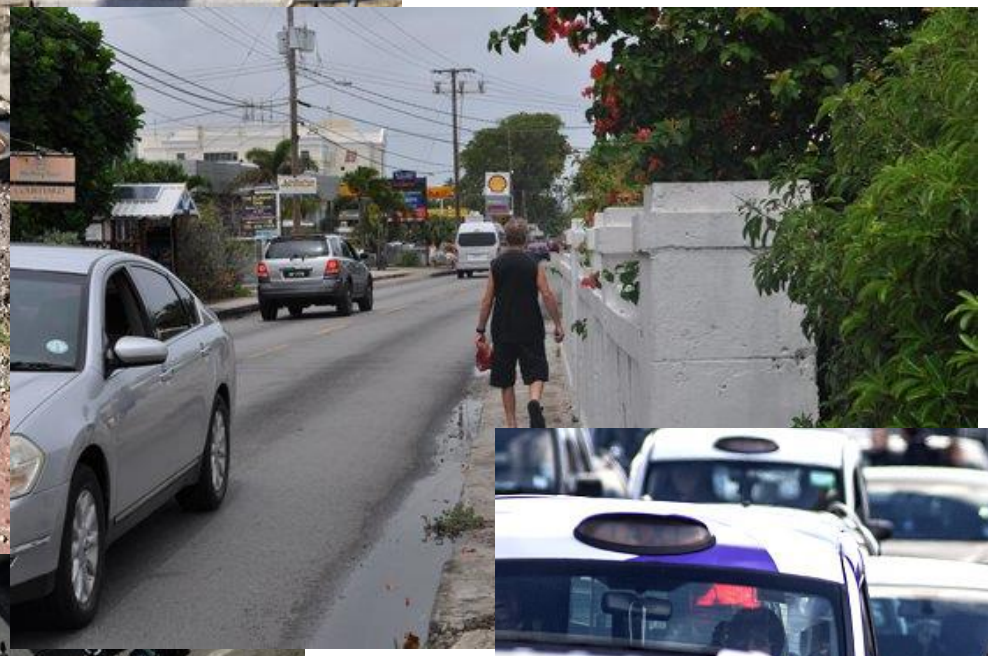
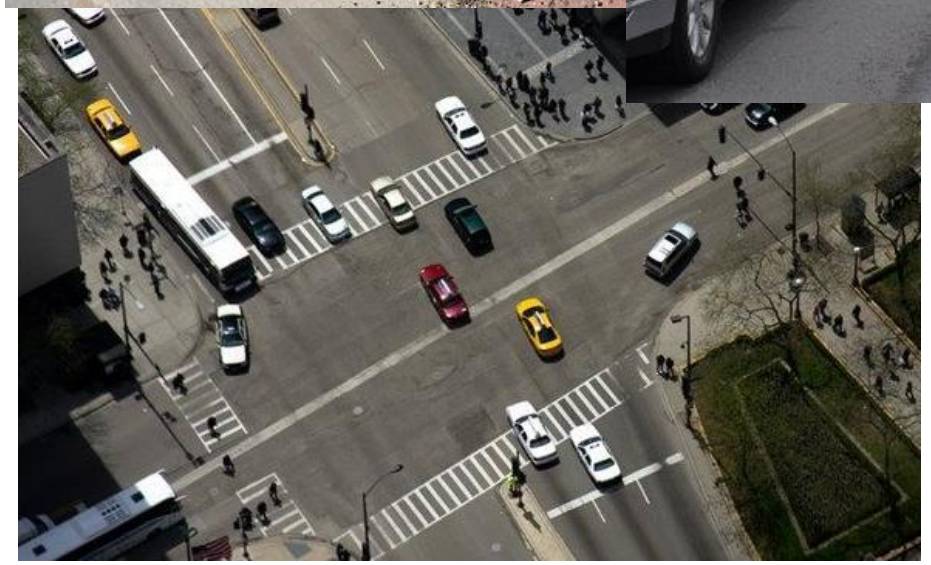
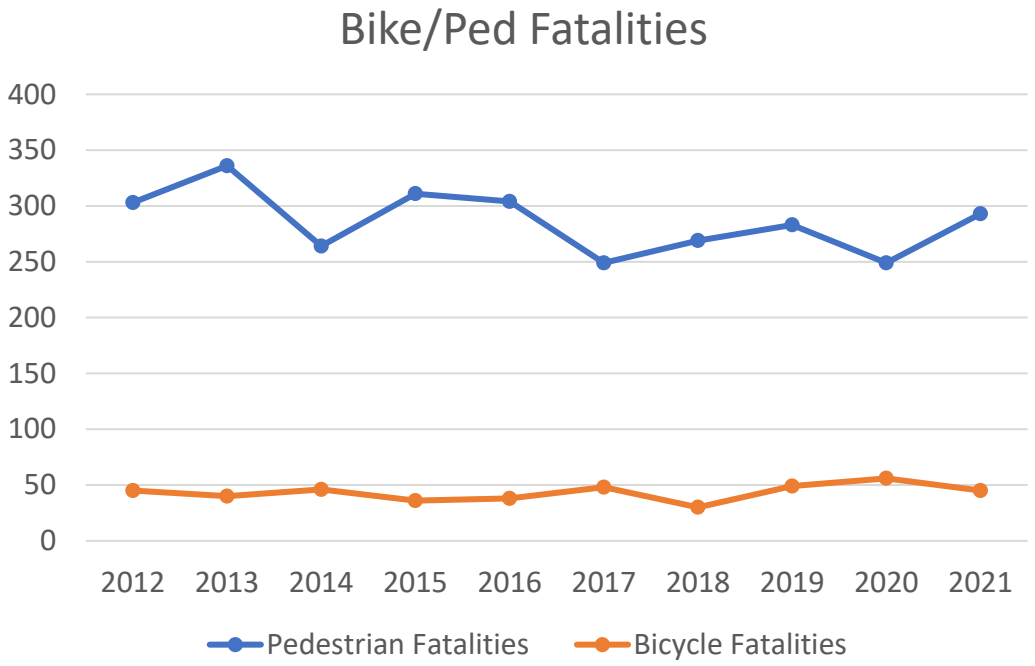
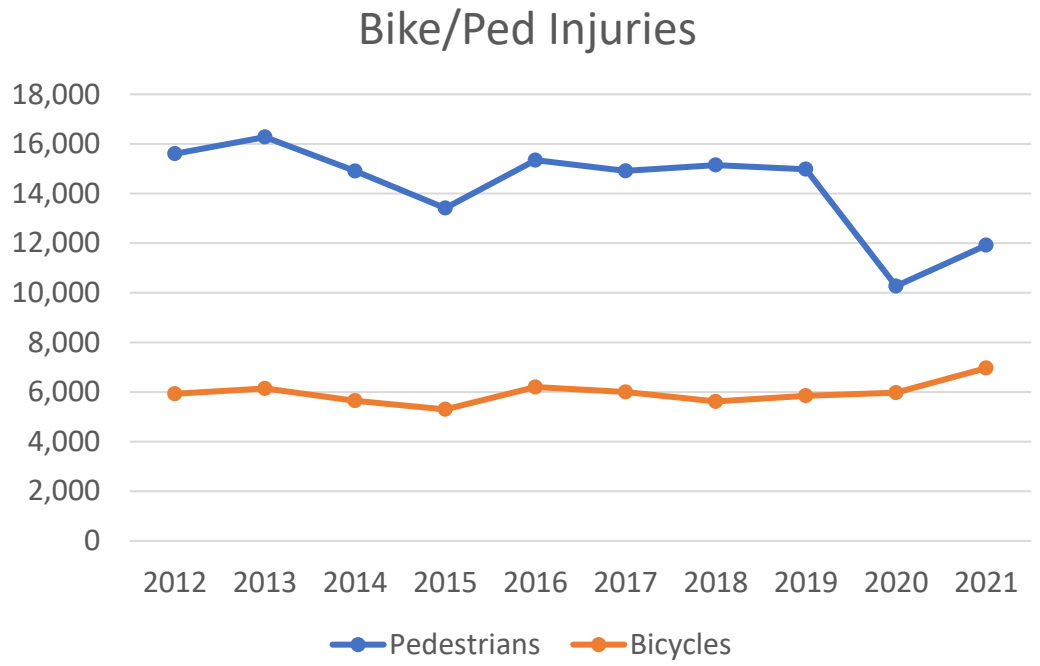




NYS Traffic Safety Data





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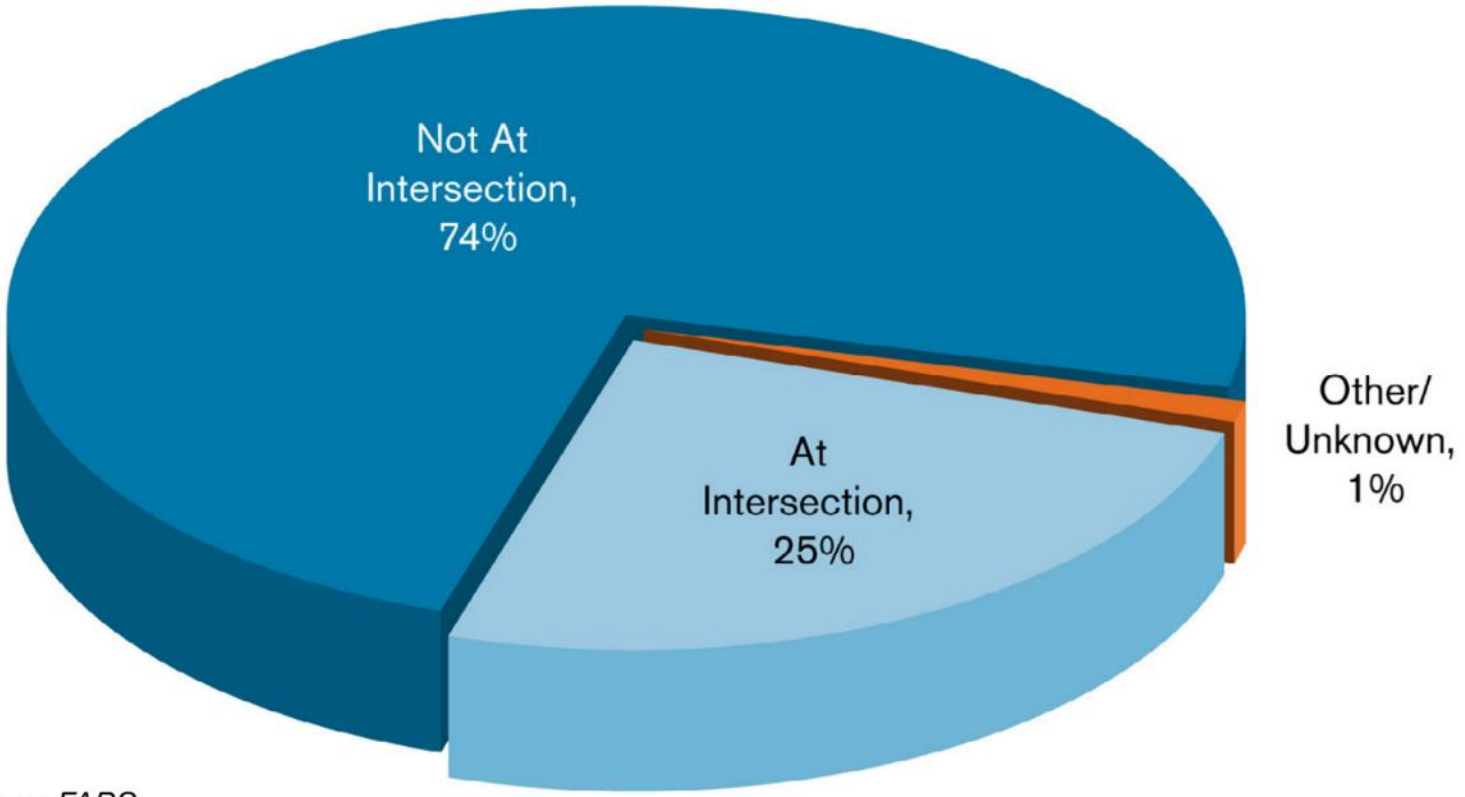
Where are pedestrian fatalities taking place?

Figure 11 **Pedestrian Fatality Locations, 2019**



Source: FARS

Q:

What are
“Complete Streets”?

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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

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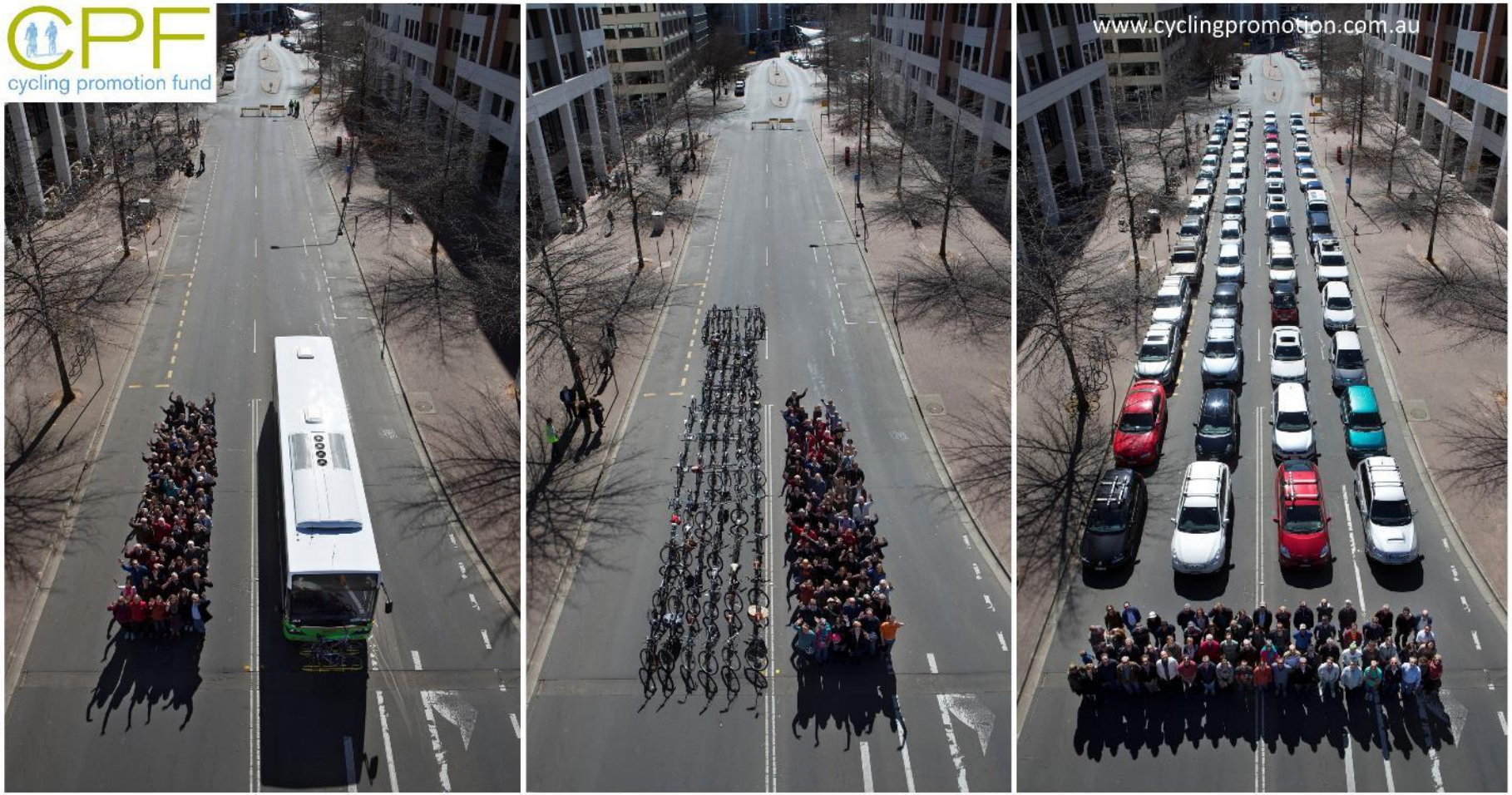
Maximizing Efficiency & Space



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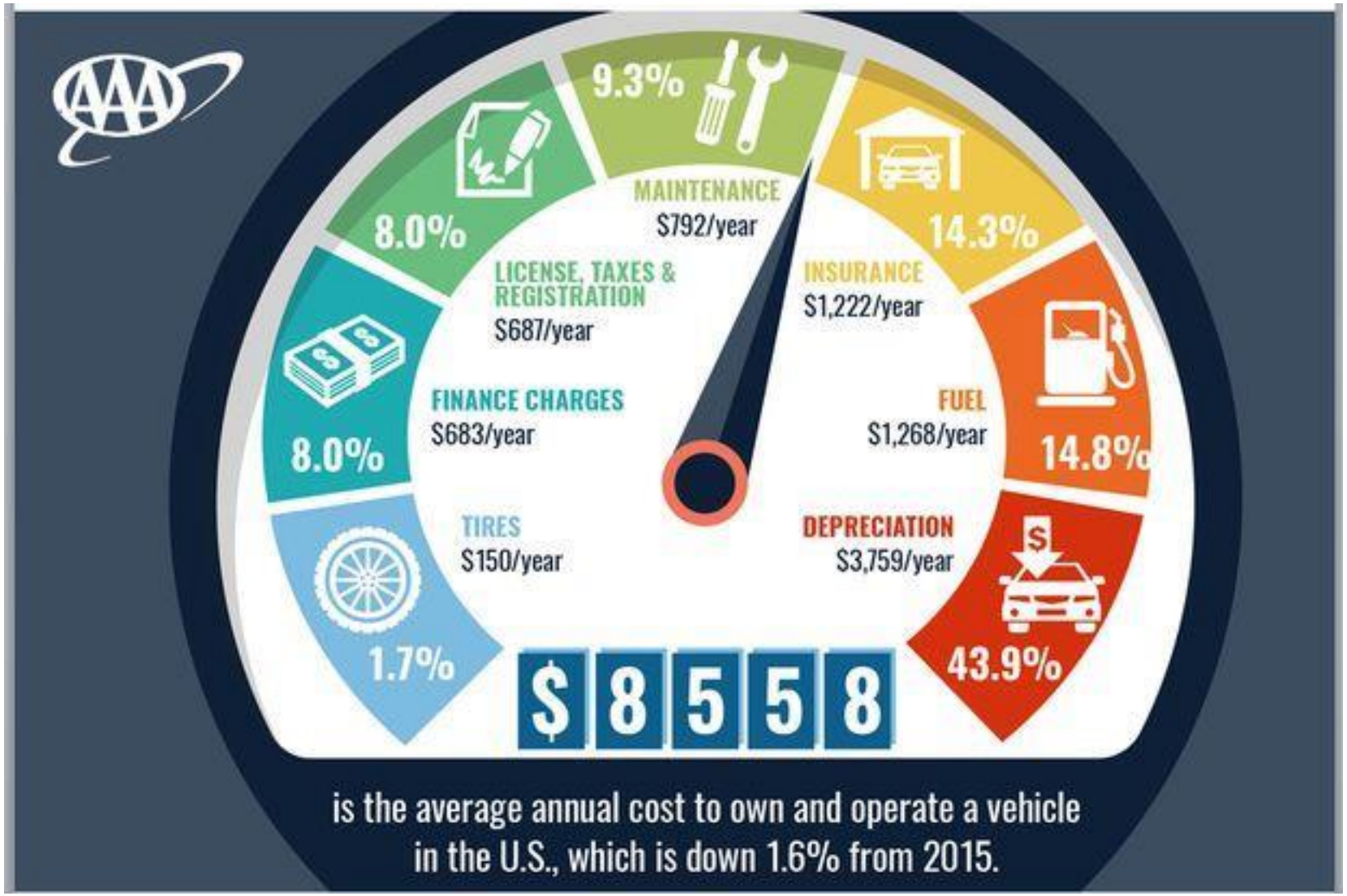
What causes climate change?

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

Equity


9.3%
MAINTENANCE
$792/year
8.0%
LICENSE, TAXES & REGISTRATION
$687/year
14.3%
INSURANCE
$1,222/year
8.0%
FINANCE CHARGES
$683/year
FUEL
$1,268/year
14.8%
TIRES
$150/year
DEPRECIATION
$3,759/year
1.7%
43.9%
$8558
is the average annual cost to own and operate a vehicle
in the U.S., which is down 1.6% from 2015.

Placemaking

Freight Mobility

Complete Streets in Action

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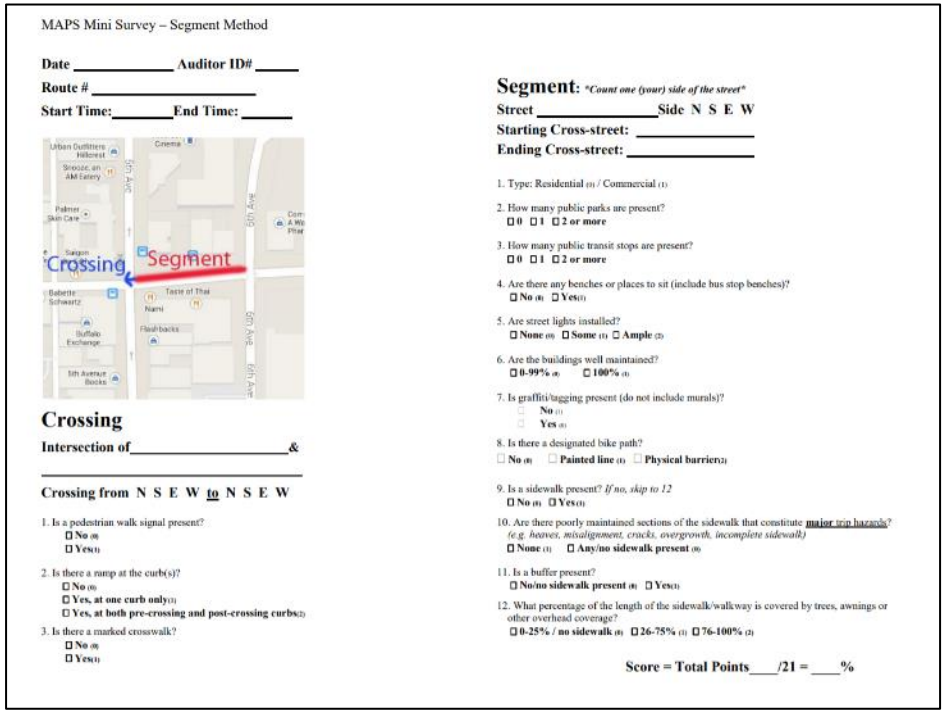
Tools

ACTIVE LIVING RESEARCH
Promoting activity-friendly communities



MAPS Mini Survey – Segment Method

Date _____ Auditor ID# ____
Route # _____
Start Time:_____End Time: _____

Crossing
Intersection of_____&
_____
Crossing from N S E W to N S E W

1. Is a pedestrian walk signal present?
   ☐ No (0)
   ☐ Yes(1)
2. Is there a ramp at the curb(s)?
   ☐ No (0)
   ☐ Yes, at one curb only(1)
   ☐ Yes, at both pre-crossing and post-crossing curbs(2)
3. Is there a marked crosswalk?
   ☐ No (0)
   ☐ Yes(1)

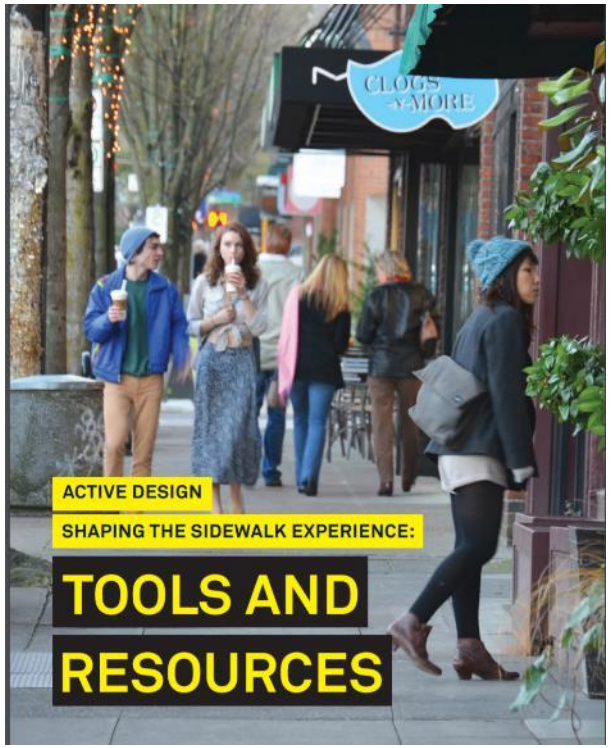
Segment: **Count one (your) side of the street**
Street _____Side N S E W
Starting Cross-street: _____
Ending Cross-street: _____

1. Type: Residential (0) / Commercial (1)
2. How many public parks are present?
   ☐ 0 ☐ 1 ☐ 2 or more
3. How many public transit stops are present?
   ☐ 0 ☐ 1 ☐ 2 or more
4. Are there any benches or places to sit (include bus stop benches)?
   ☐ No (0) ☐ Yes(1)
5. Are street lights installed?
   ☐ None (0) ☐ Some (1) ☐ Ample (2)
6. Are the buildings well maintained?
   ☐ 0-99% (0) ☐ 100% (1)
7. Is graffiti/tagging present (do not include murals)?
   ☐ No (1)
   ☐ Yes (0)
8. Is there a designated bike path?
   ☐ No (0) ☐ Painted line (1) ☐ Physical barrier(2)
9. Is a sidewalk present? *If no, skip to 12*
   ☐ No (0) ☐ Yes(1)
10. Are there poorly maintained sections of the sidewalk that constitute major trip hazards? *(e.g. heaves, misalignment, cracks, overgrowth, incomplete sidewalk)*
    ☐ None (1) ☐ Any/no sidewalk present (0)
11. Is a buffer present?
    ☐ No/no sidewalk present (0) ☐ Yes(1)
12. What percentage of the length of the sidewalk/walkway is covered by trees, awnings or other overhead coverage?
    ☐ 0-25% / no sidewalk (0) ☐ 26-75% (1) ☐ 76-100% (2)

Score = Total Points____/21 = ____%

MAPS (Microscale Audit of Pedestrian Streetscapes) Mini Audit Tool

NYC



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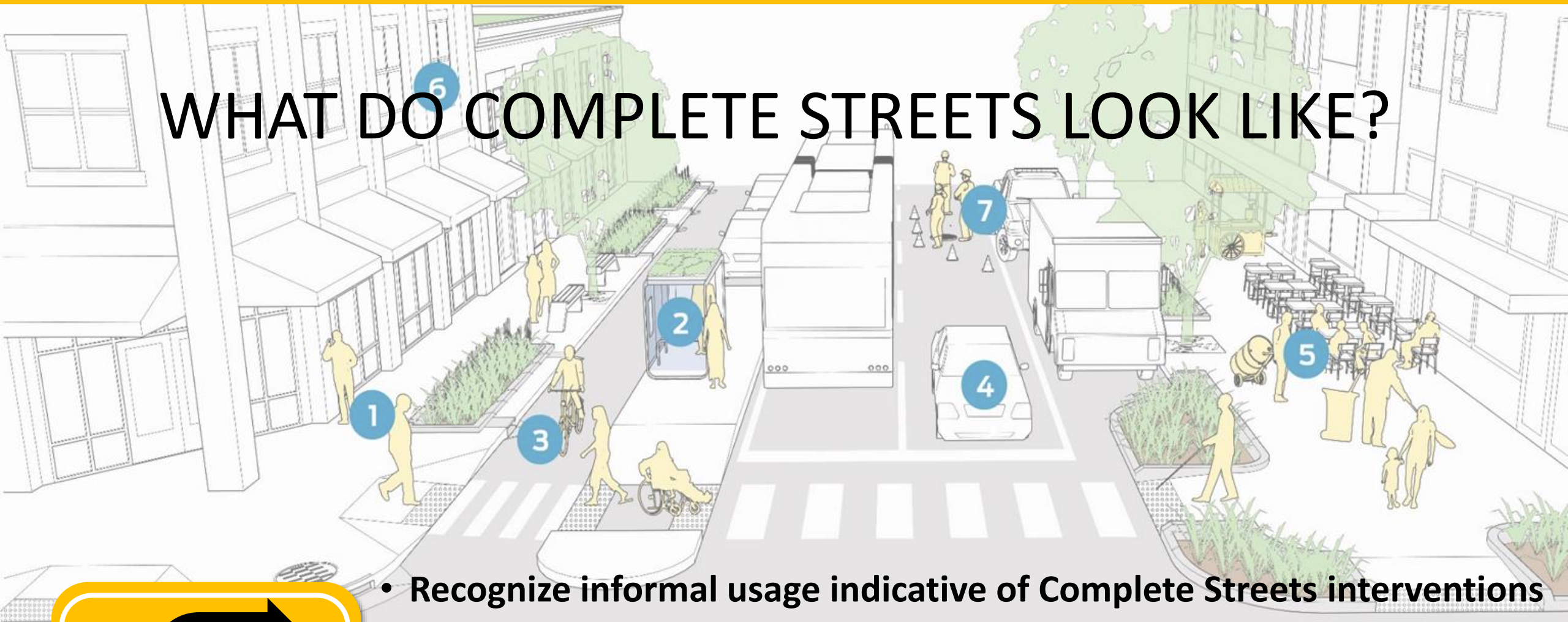
WHAT DO COMPLETE STREETS LOOK LIKE?



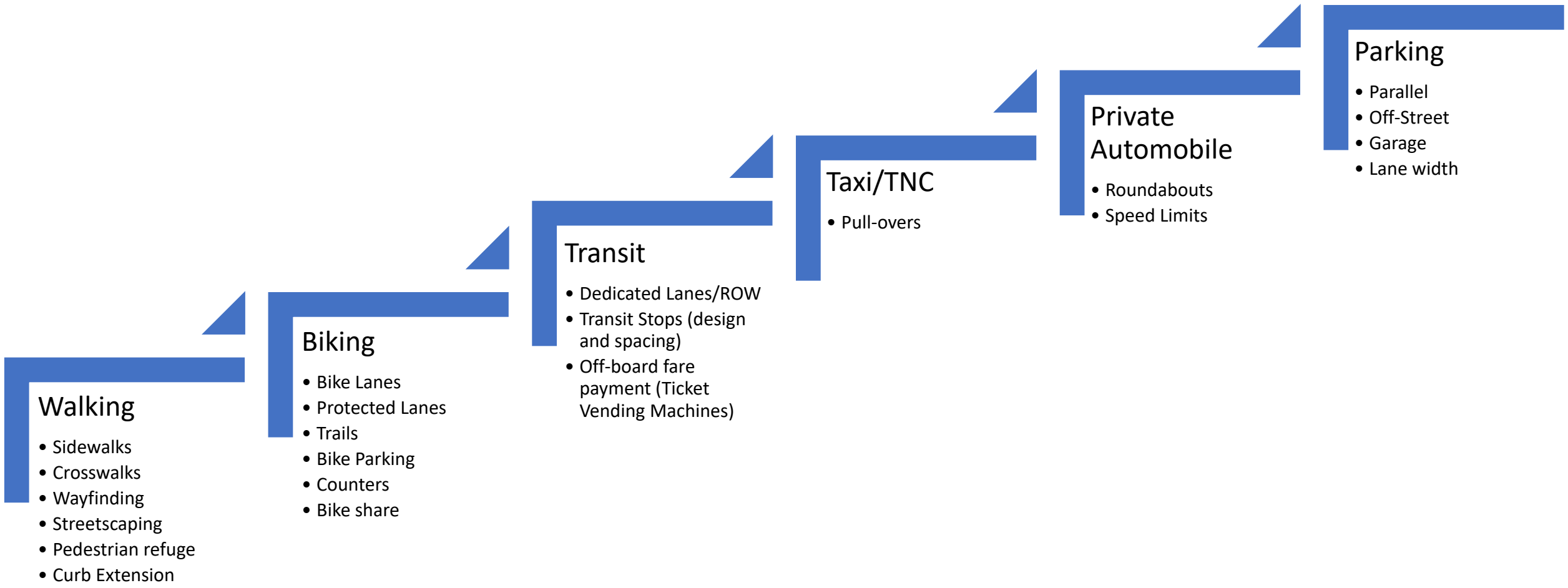
objectives

- 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…



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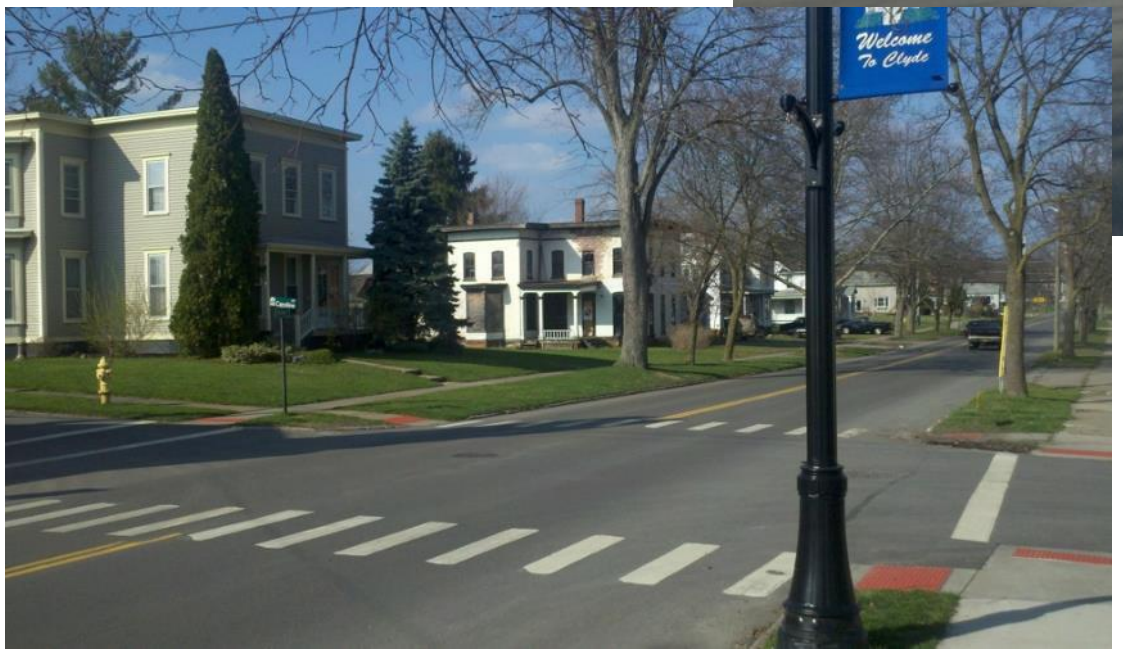
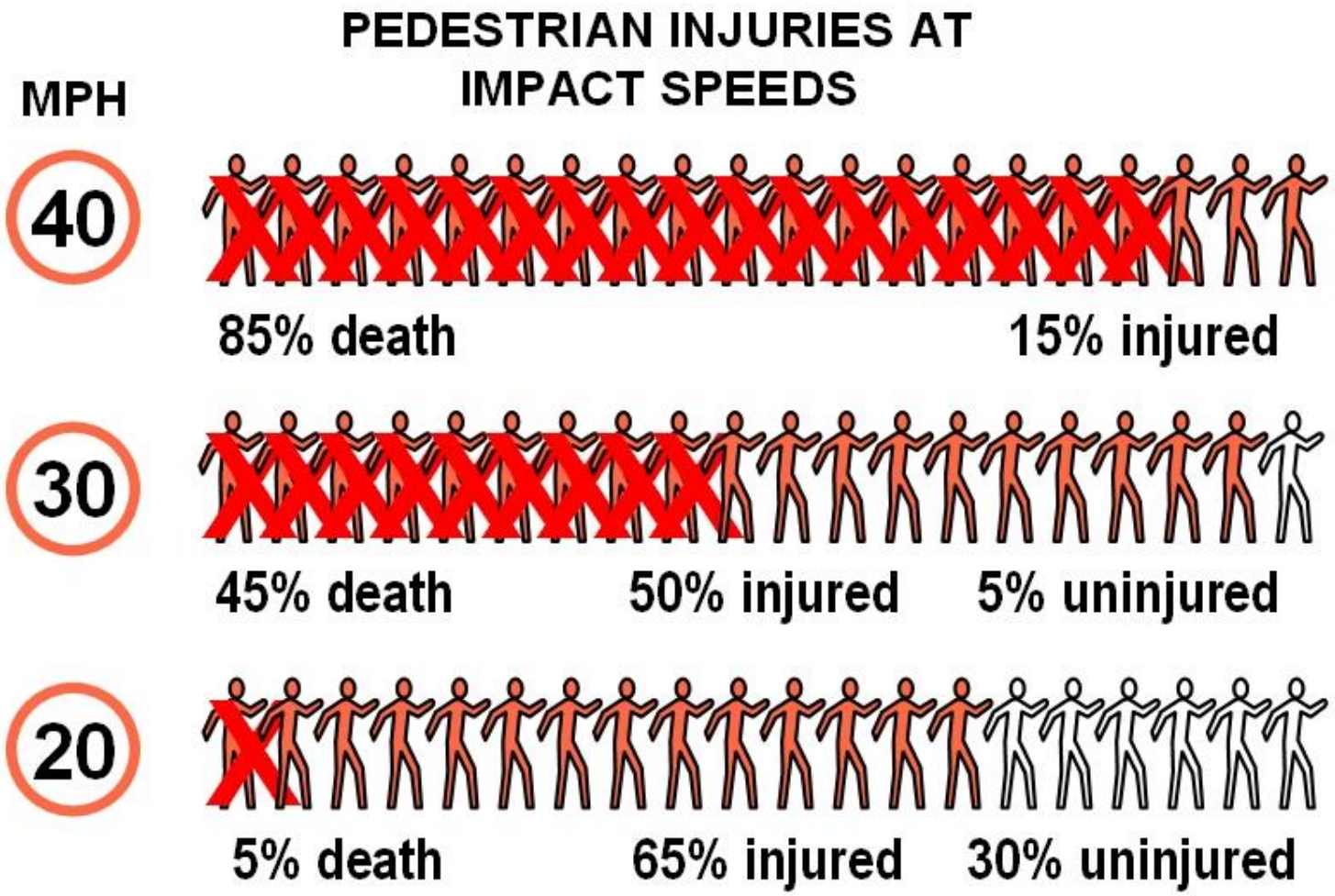
Correct design invites correct use!



“Road Diet”

Slowing Down Traffic



Narrow Lanes Reduce Speed

“Road Diet”

Protected Bike Lanes

Good Old Fashioned Bike Lane

Shared Routes

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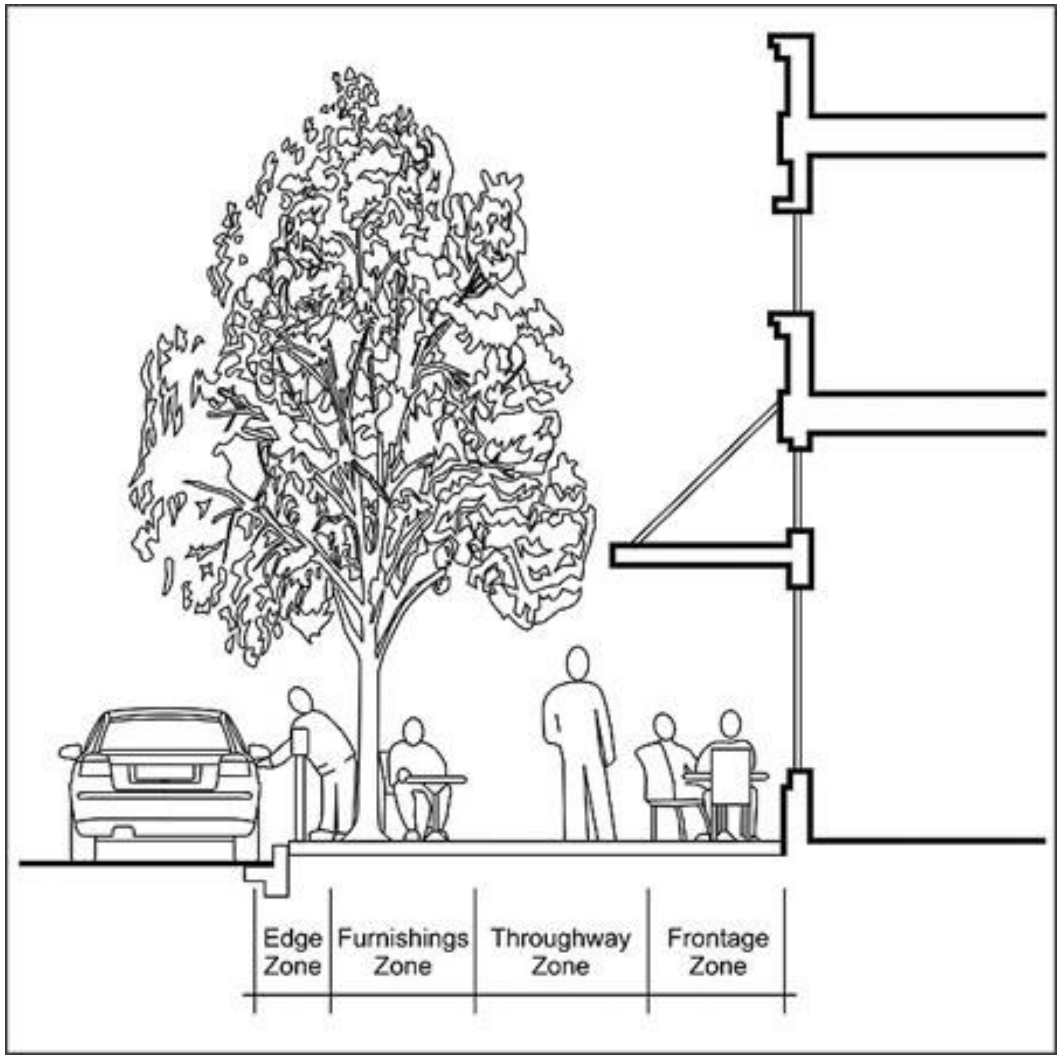
Sidewalks - Urban



Sidewalks - Rural

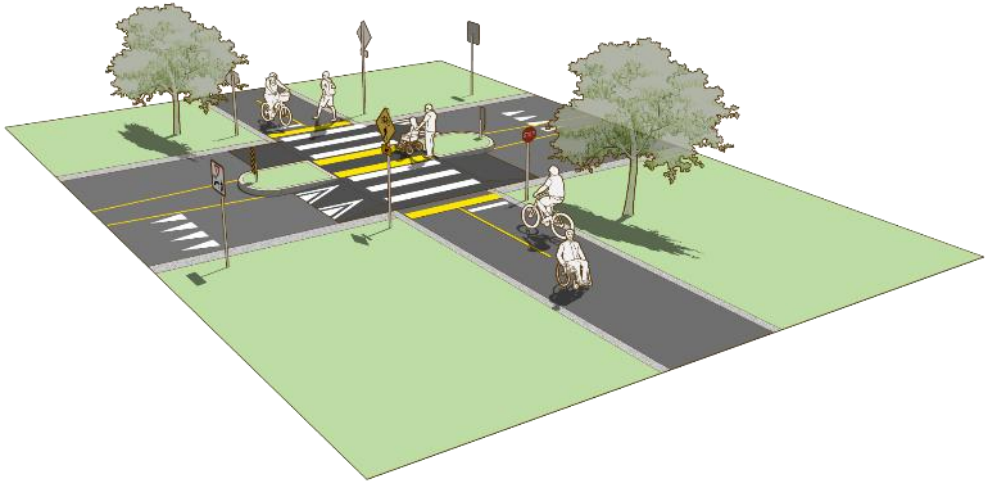
Edge Zone

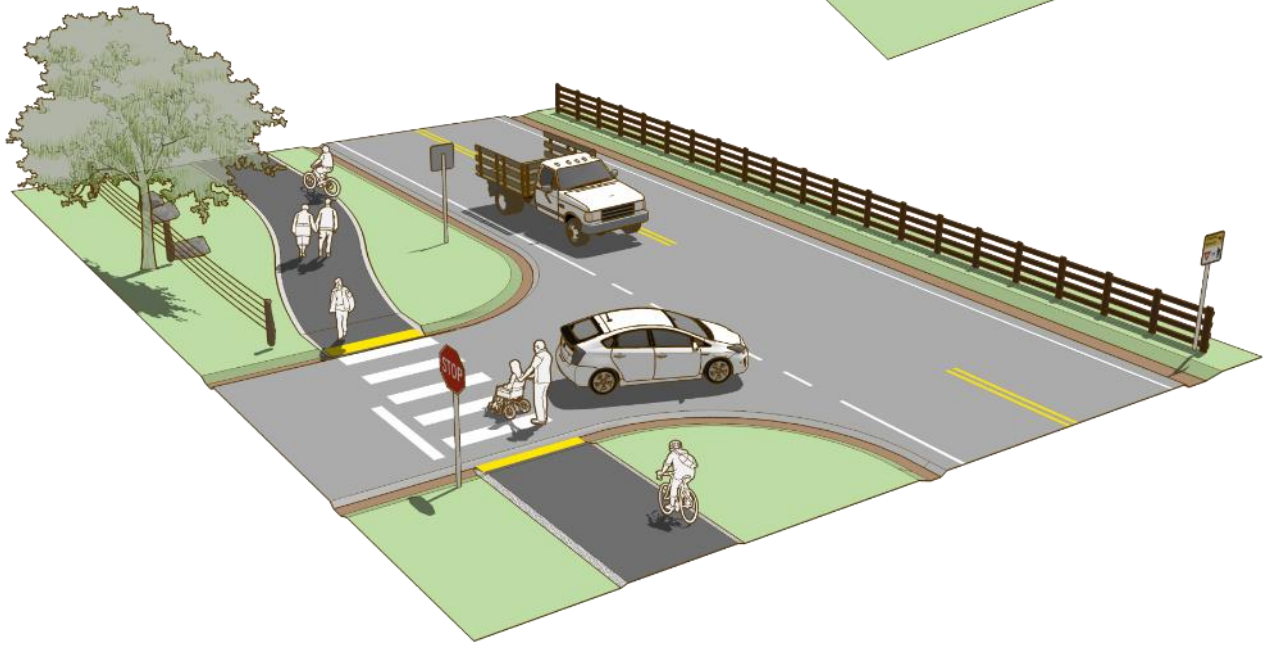
Curb/Planter Zone

Frontage Zone

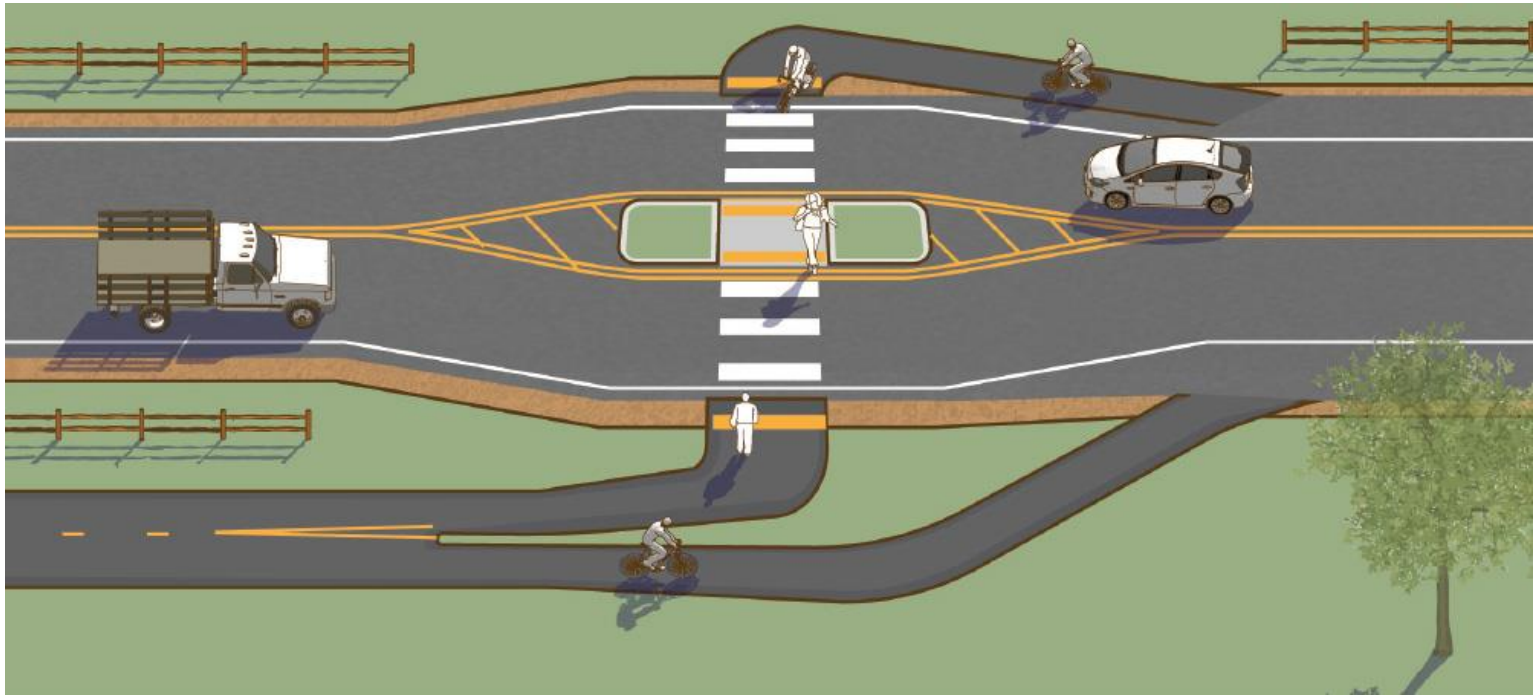
Throughway Zone

Shared Use Sidewalks / Sidepaths

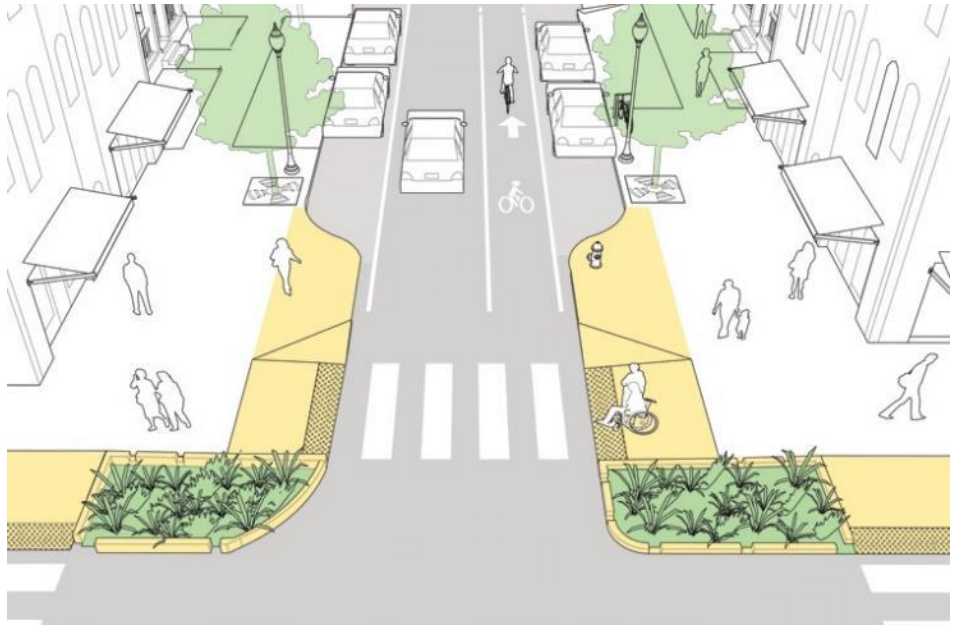


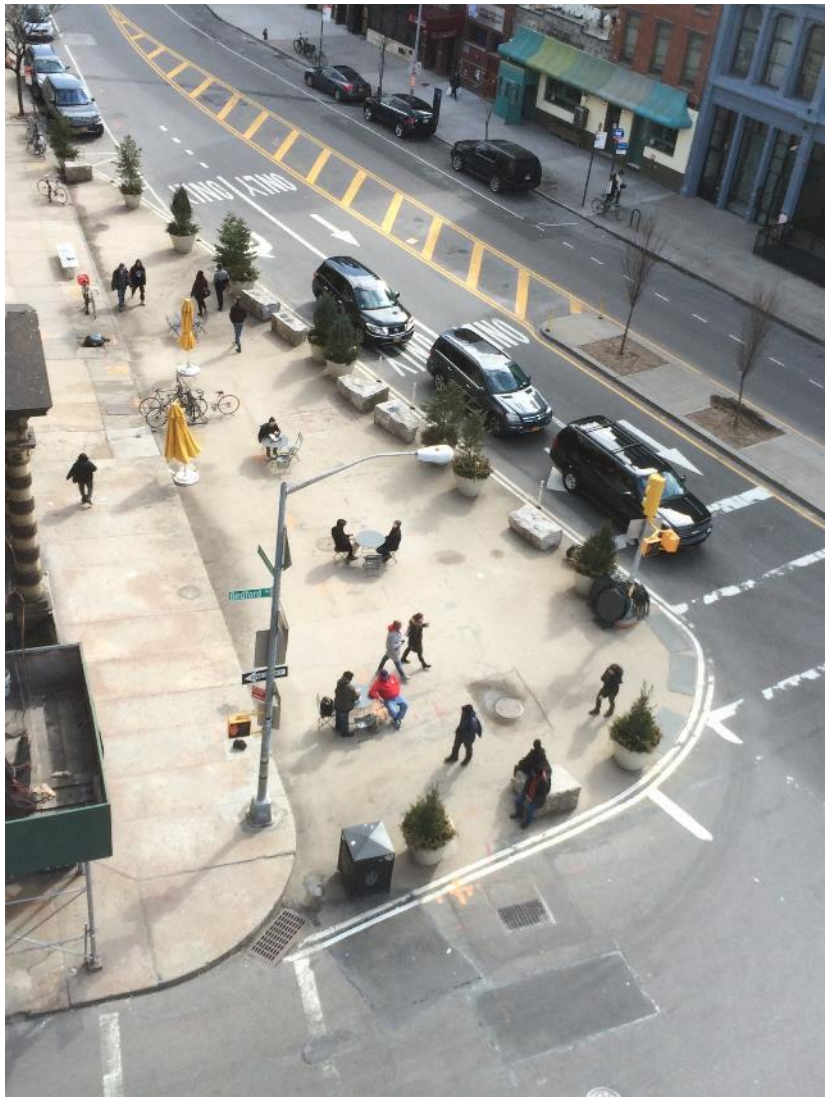


Transition Points w/Separated Facilities



Curb Extensions





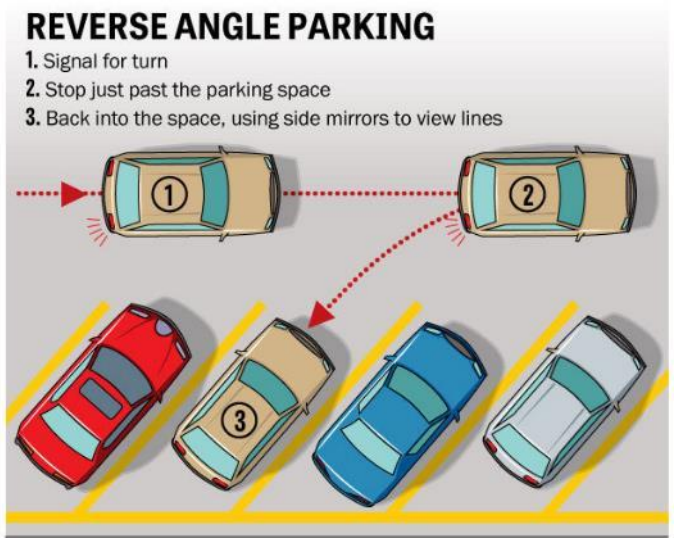
Speed Bumps

Crosswalks

Parking

Parallel Parking

Angled Parking



Bike Parking

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Bike Corral

ADA Accessibility

Streetscaping & Public Art

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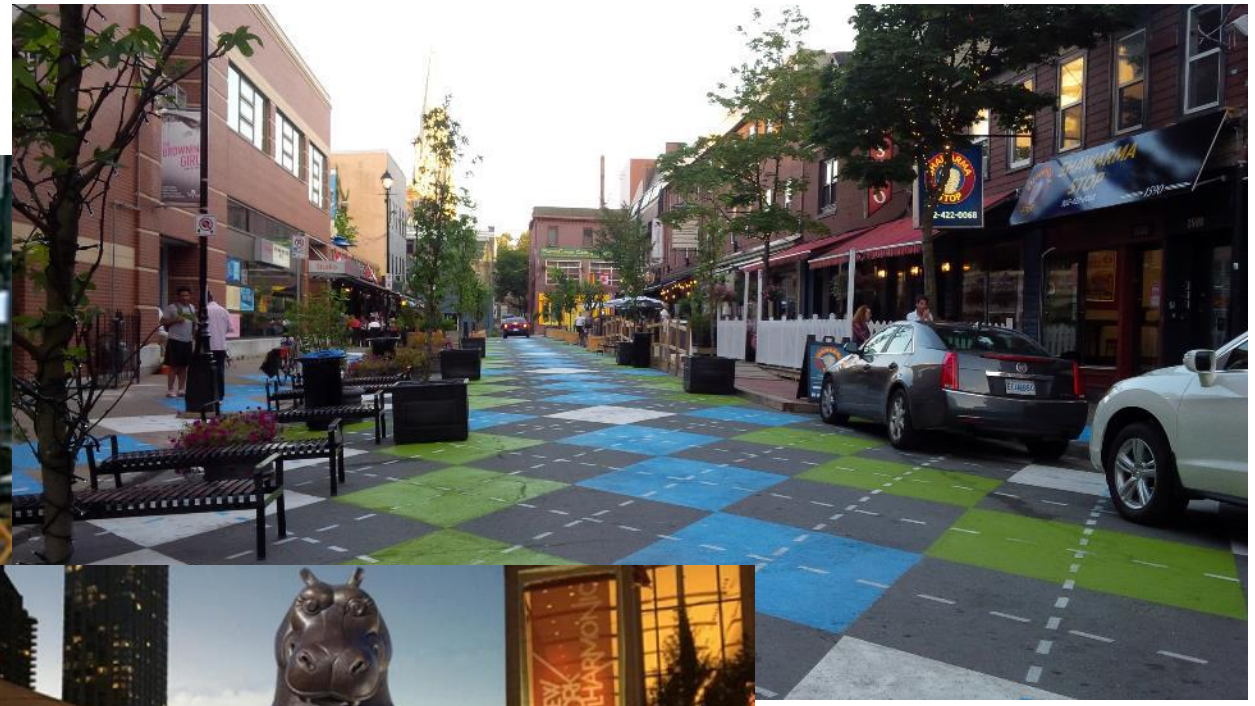

Case Study in Creativity

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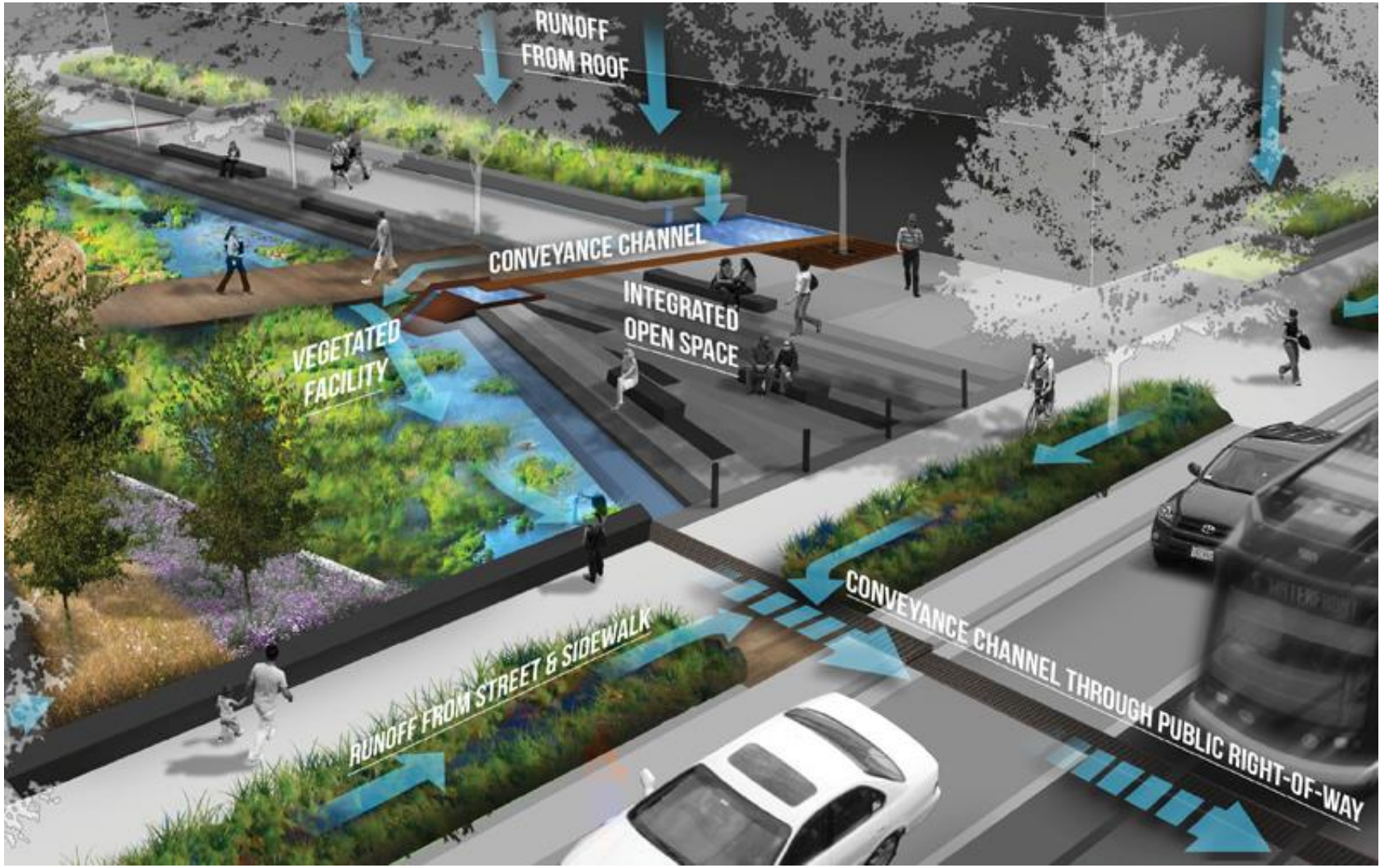
City of Rochester, NY

Environmental Considerations



Tools & Resources

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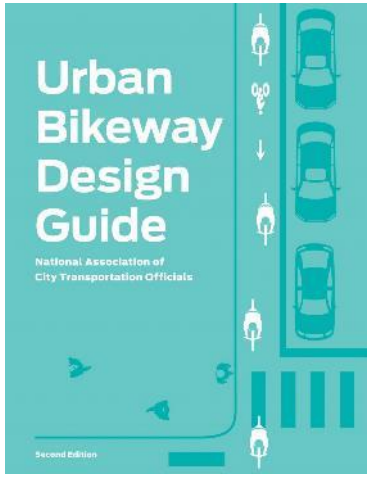
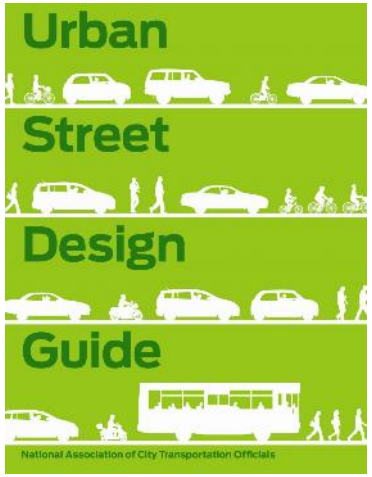
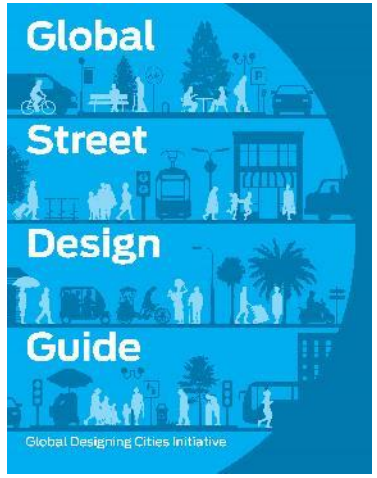
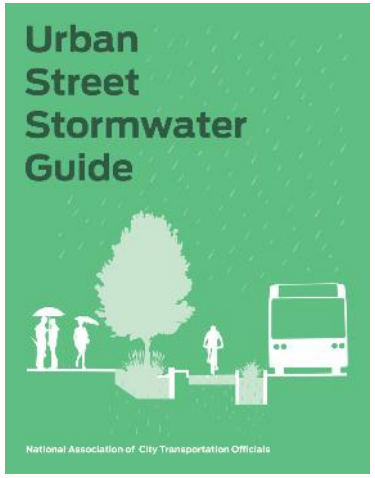
NACTO

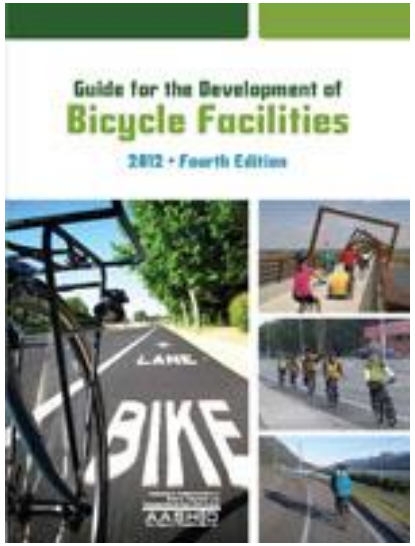




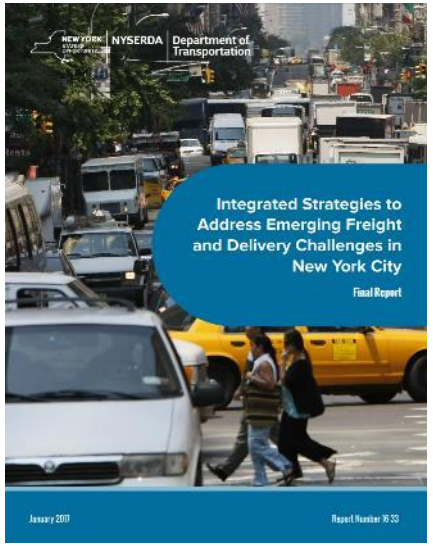




AASHTO
THE VOICE OF TRANSPORTATION

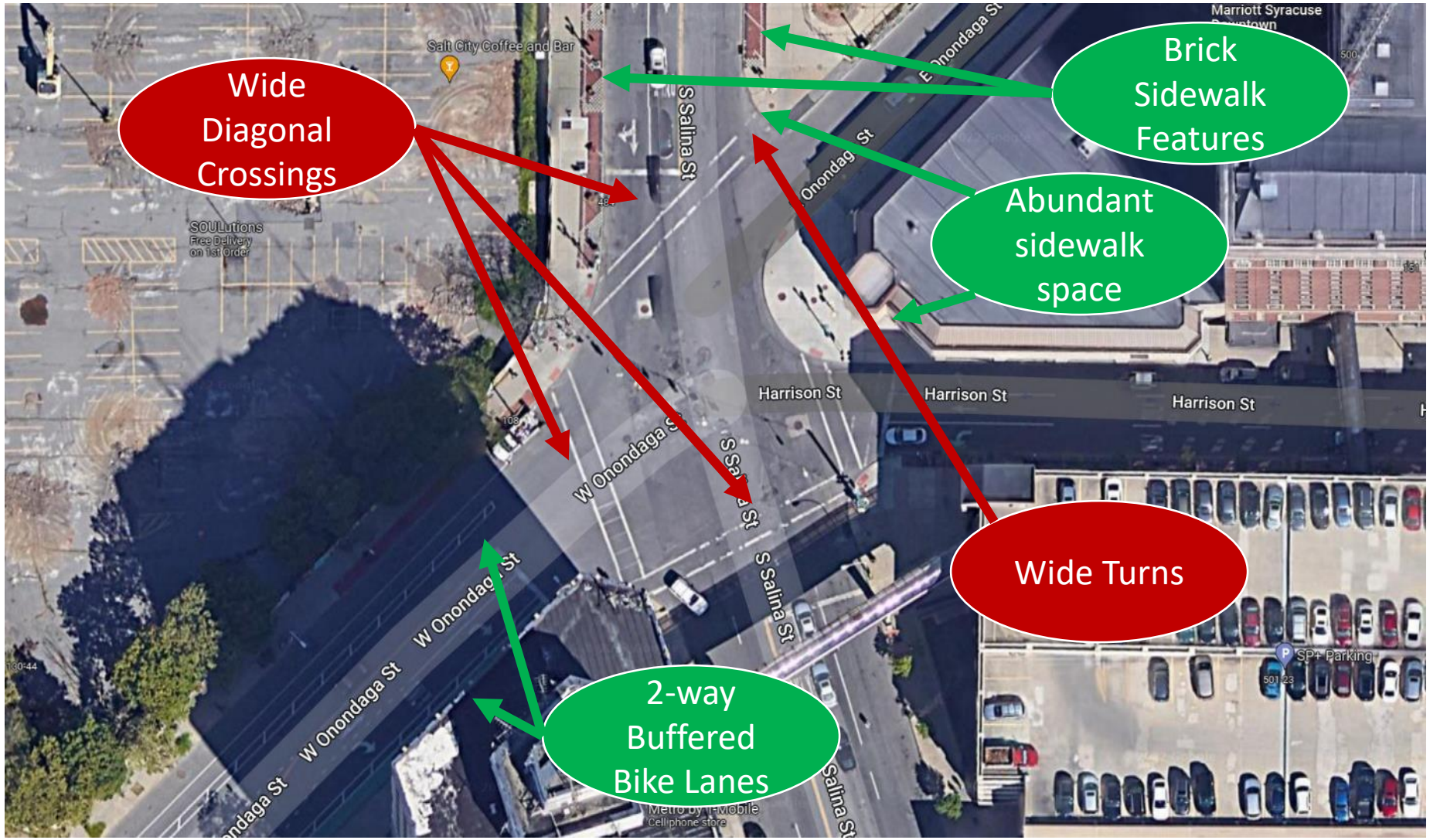


NEW YORK STATE OF OPPORTUNITY. | NYSERDA

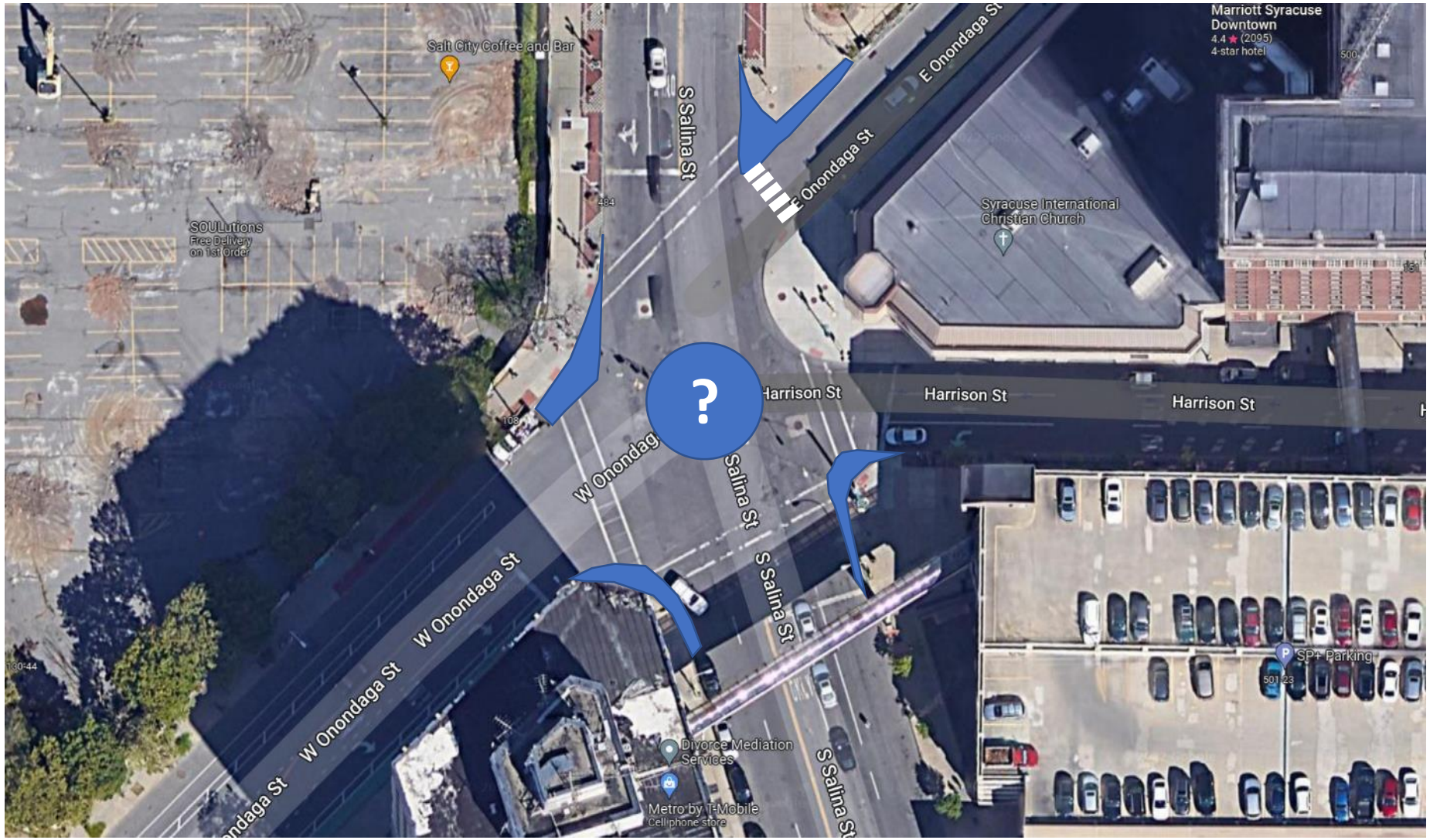


Let’s take a walk!

S Salina St/Harrison St/W Onondaga St



S Salina St/Harrison St/W Onondaga St



S Salina St/Southland Ave

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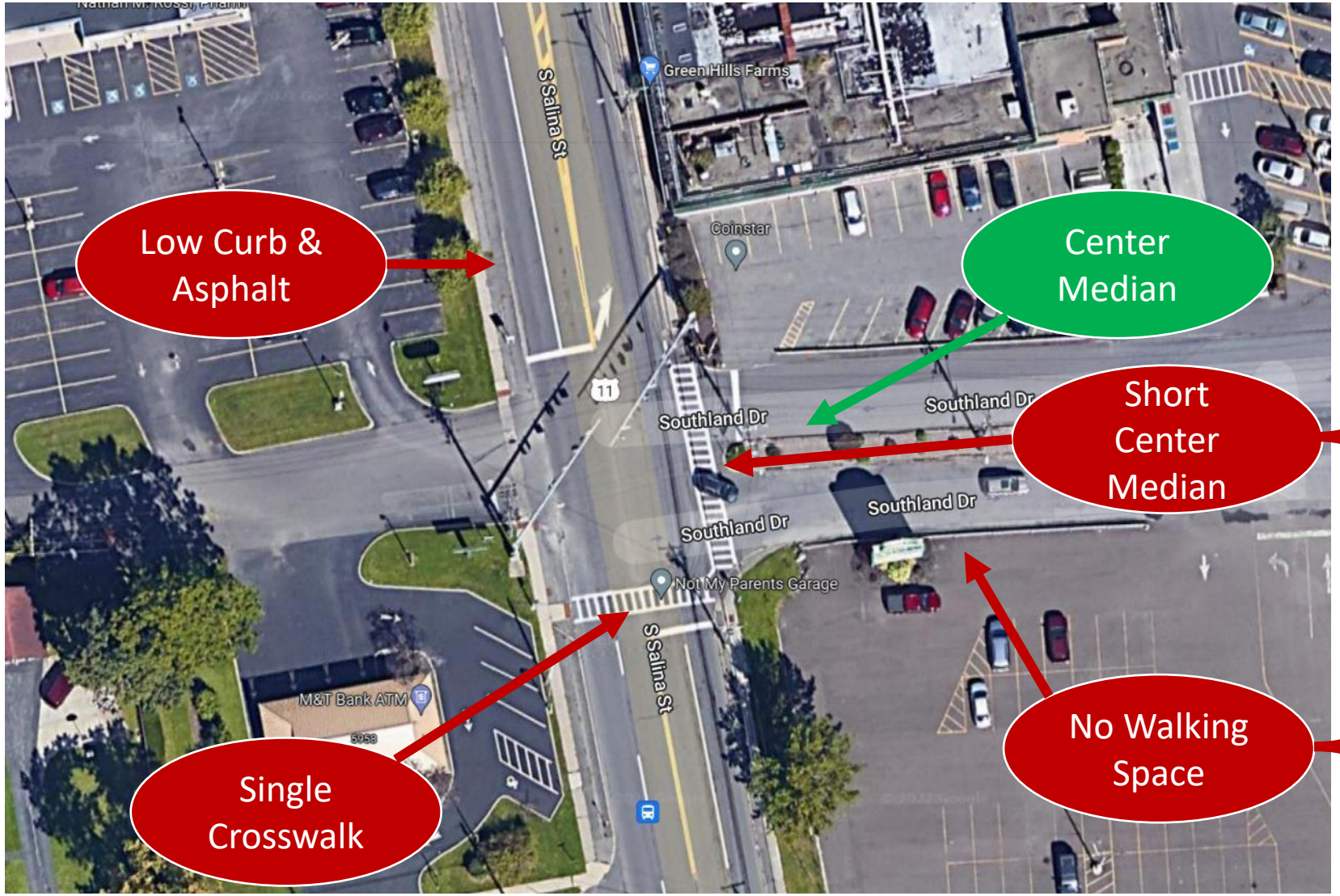
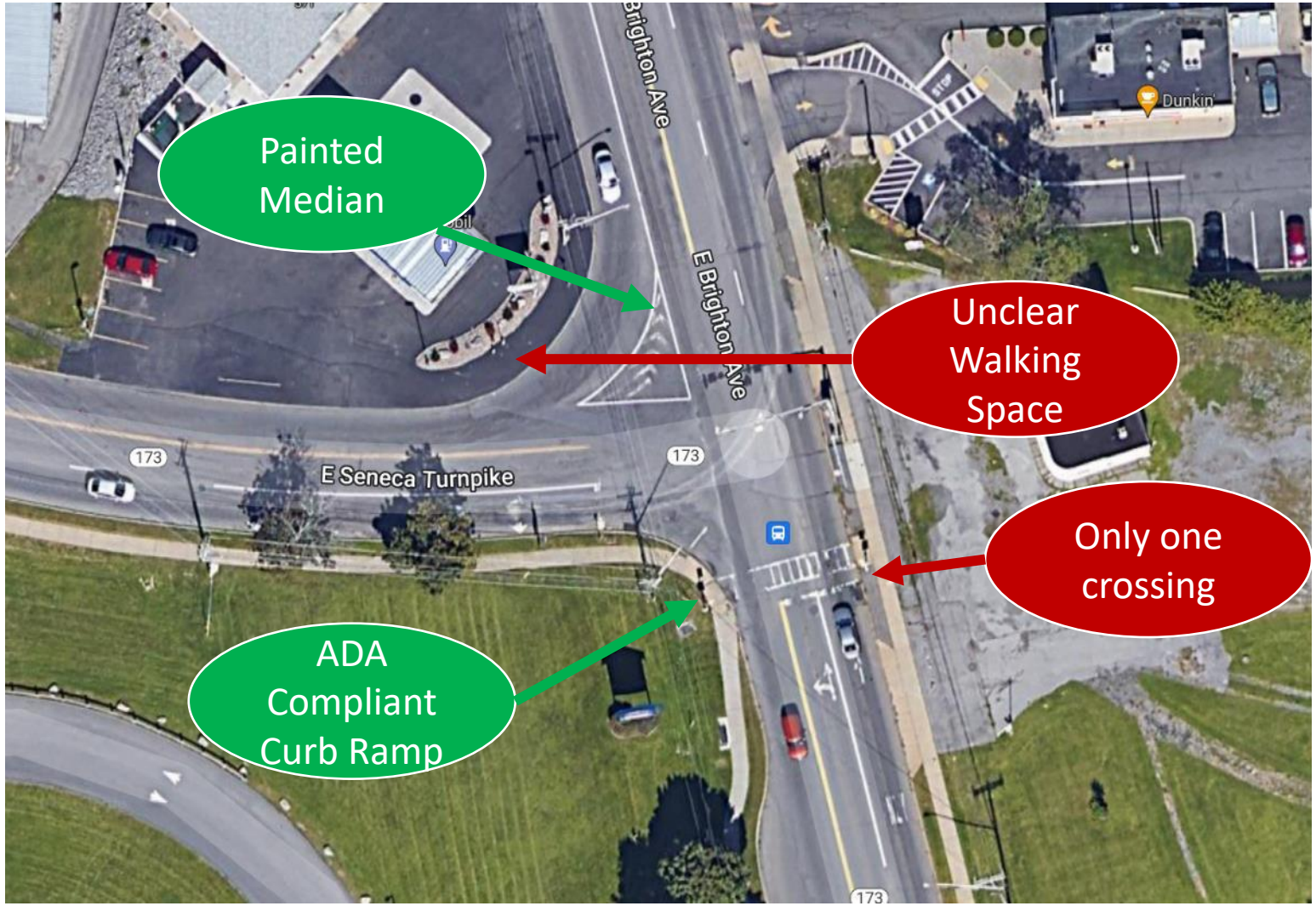
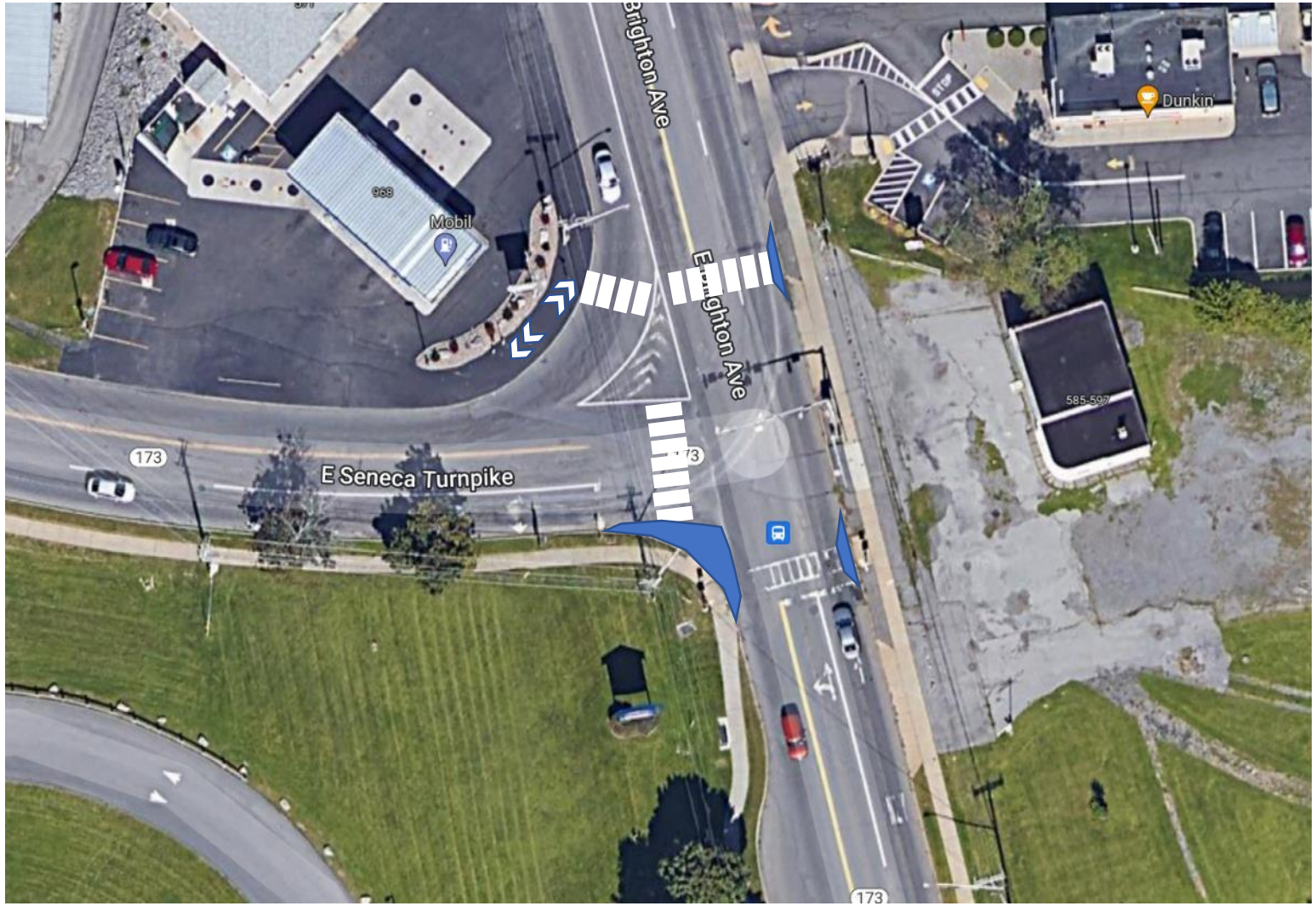


S Salina St/Southland Ave

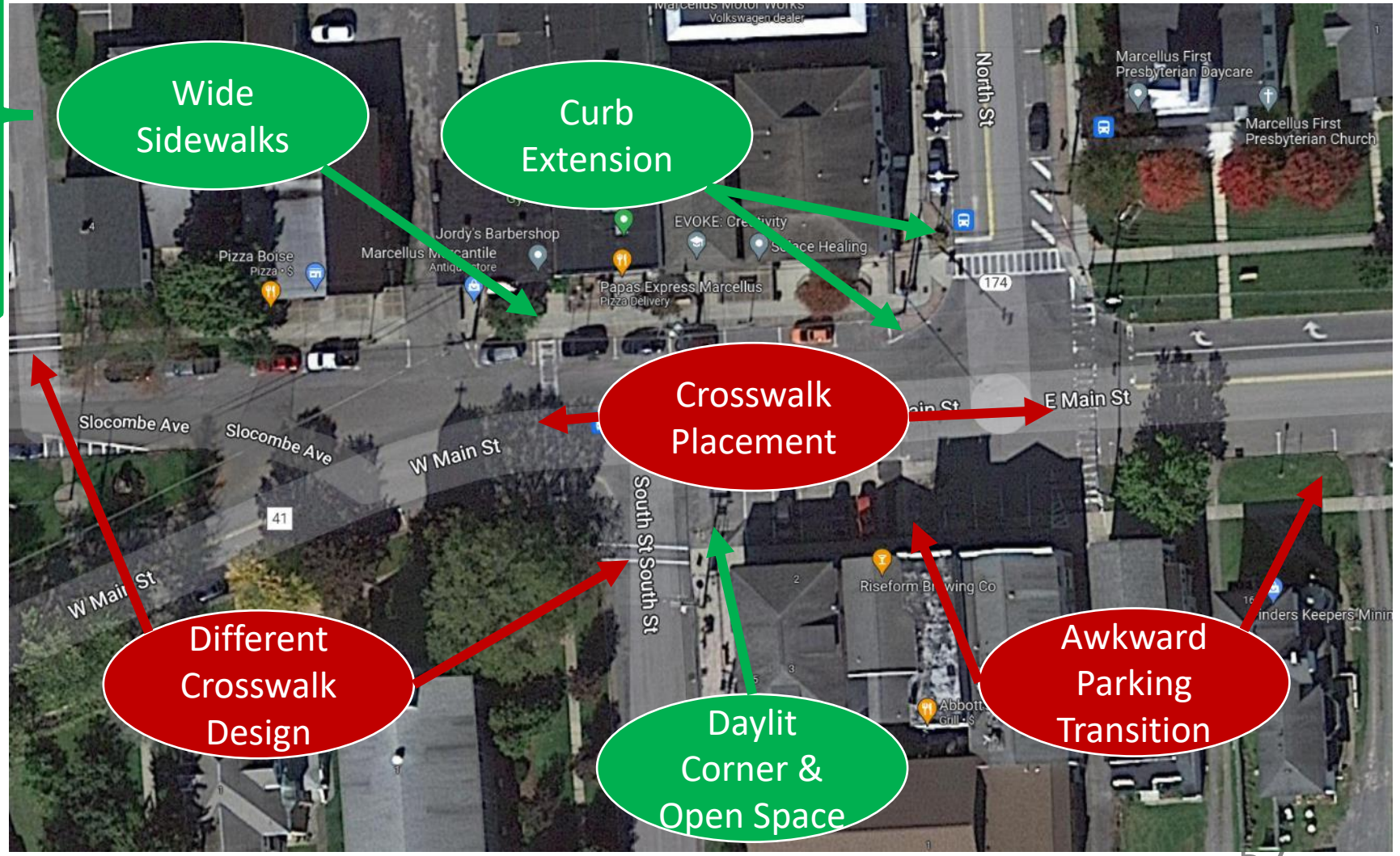
East Brighton Ave/E Seneca Tnpk



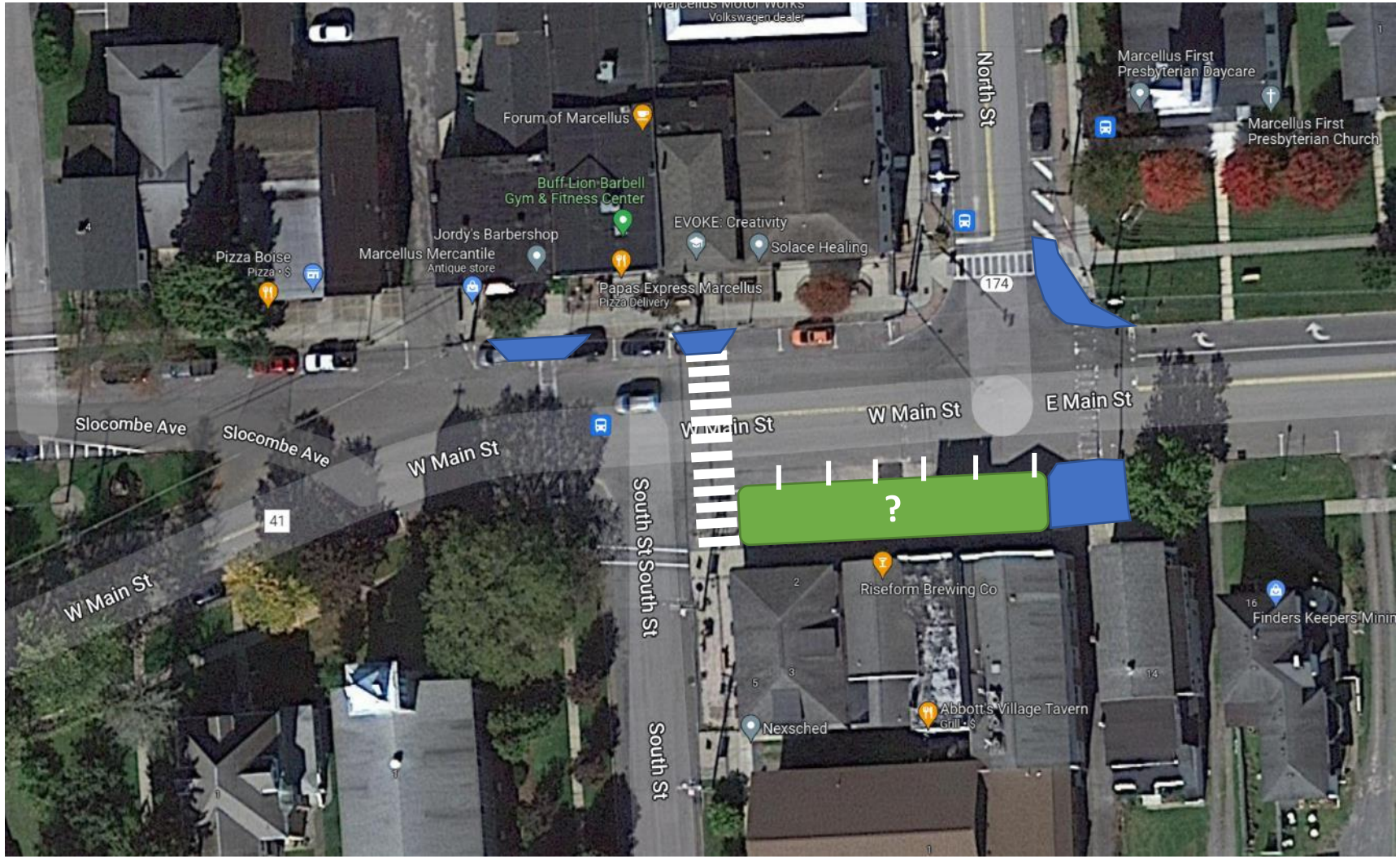
East Brighton Ave/E Seneca Tnpk



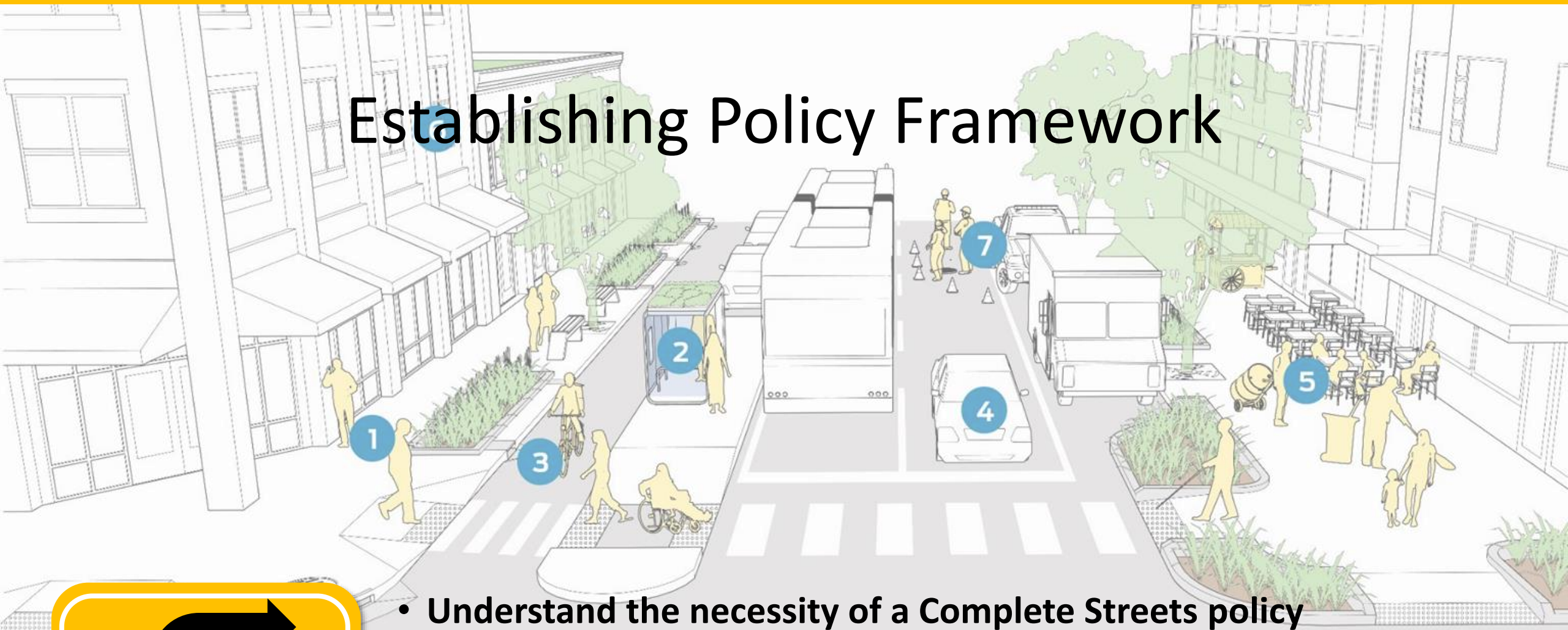
Main St/North St/South St



Main St/North St/South St



Establishing Policy Framework



objectives

- **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**

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								
Minor Arterial								
Major Collector								
Local Road								
NEIGHBORHOOD MIXED USE								
Principal Arterial								
Minor Arterial								
Major Collector								
NEIGHBORHOOD RESIDENTIAL								
Minor Arterial								
Major Collector								
Local Road								
COMMUNITY MIXED USE								
Minor Arterial								
Major Collector								
Local Road								
COMMUNITY COMMERCIAL								
Principal Arterial								
Minor Arterial								
Major Collector								
INDUSTRIAL								
Major Collector								
Local Road								

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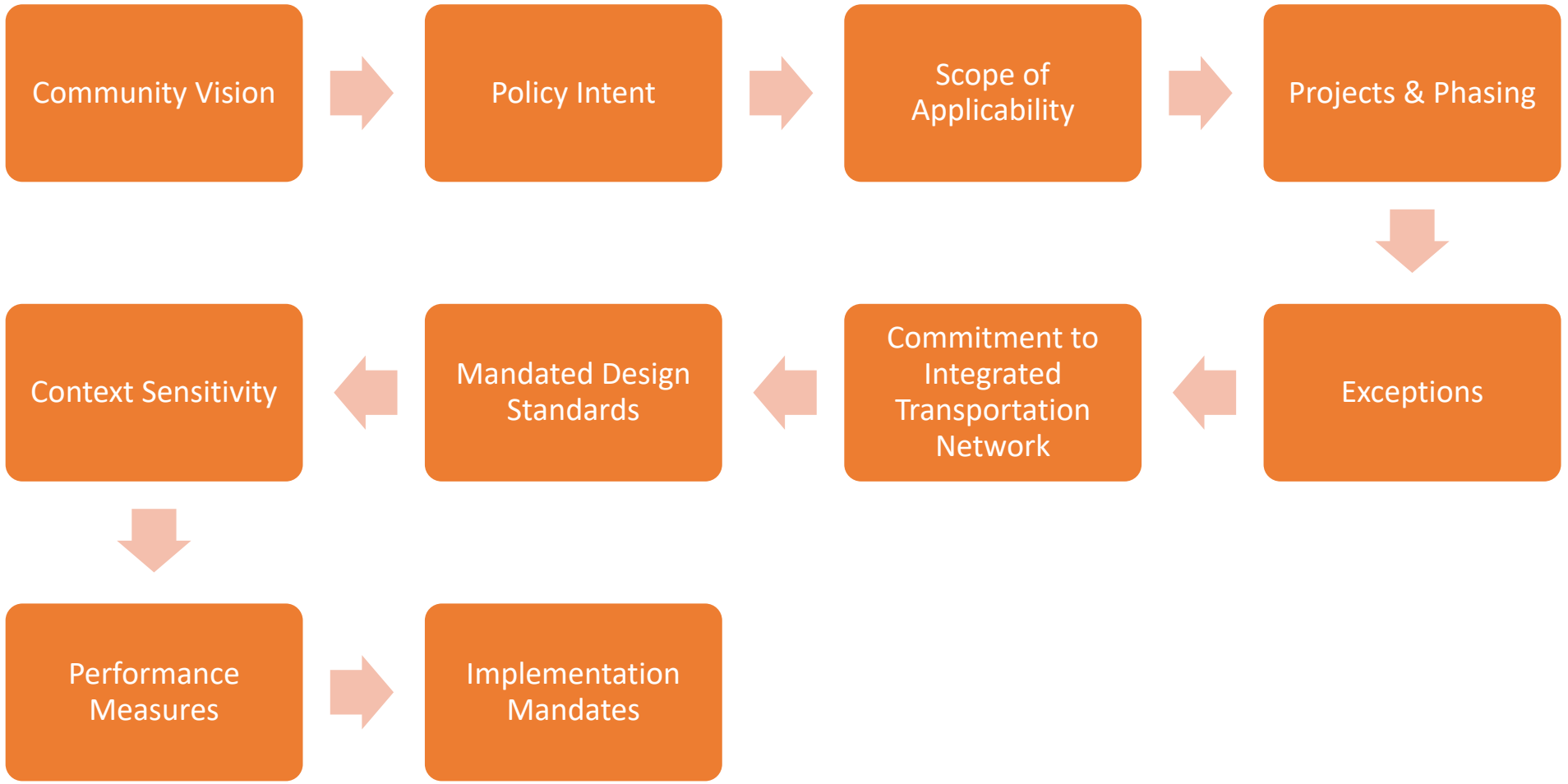
High Priority
Medium Priority
Low Priority

Anatomy of Complete Streets Policy



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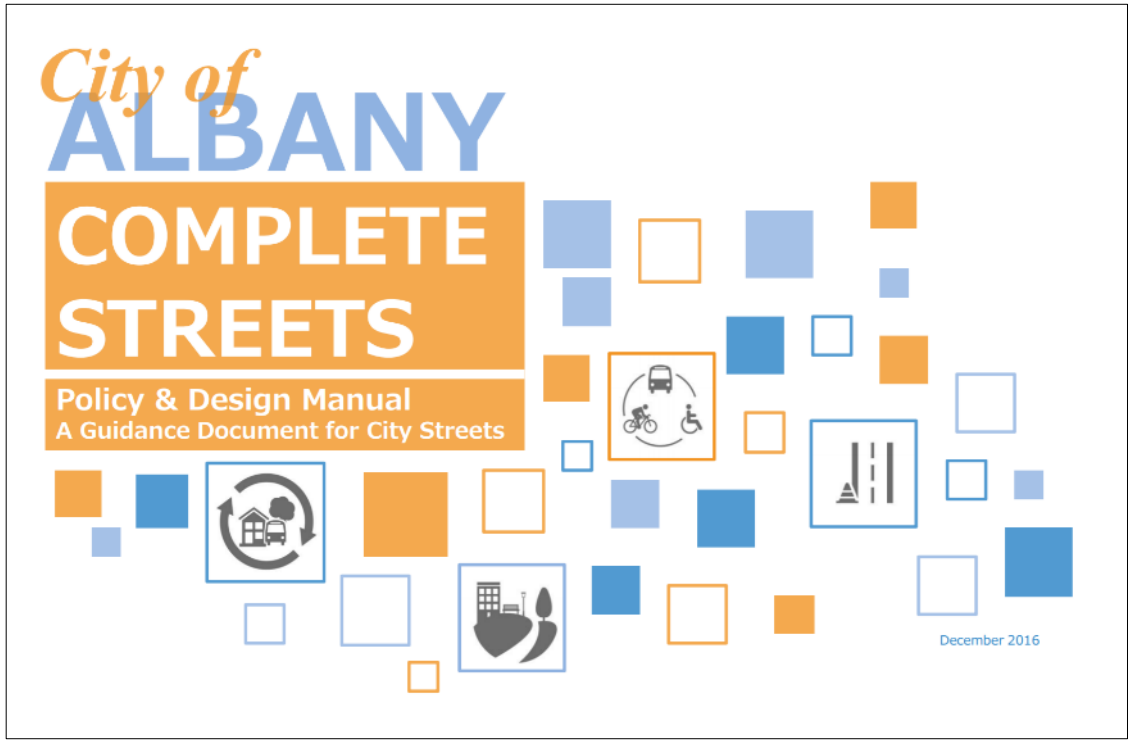
School Zones

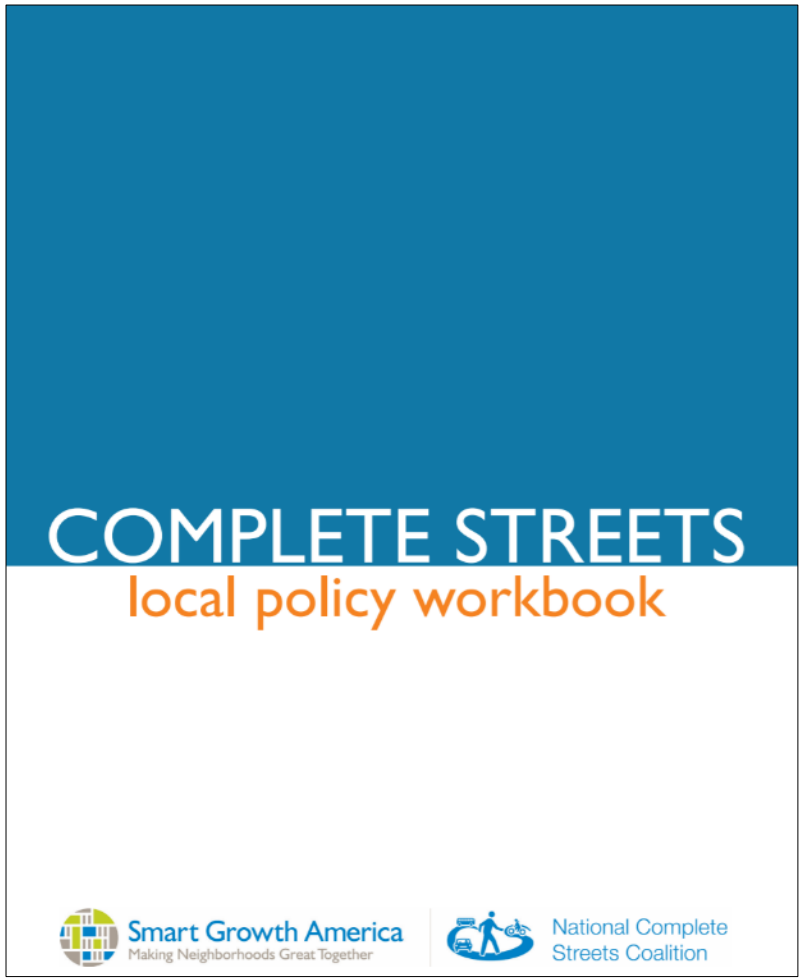
- .25 Miles of roadways passing by a school entrance/exit
- Reduced speed limit
- Specific Hours of Operation with accompanying signage
- Flashing beacons can also be used

NYC Neighborhood Slow Zones

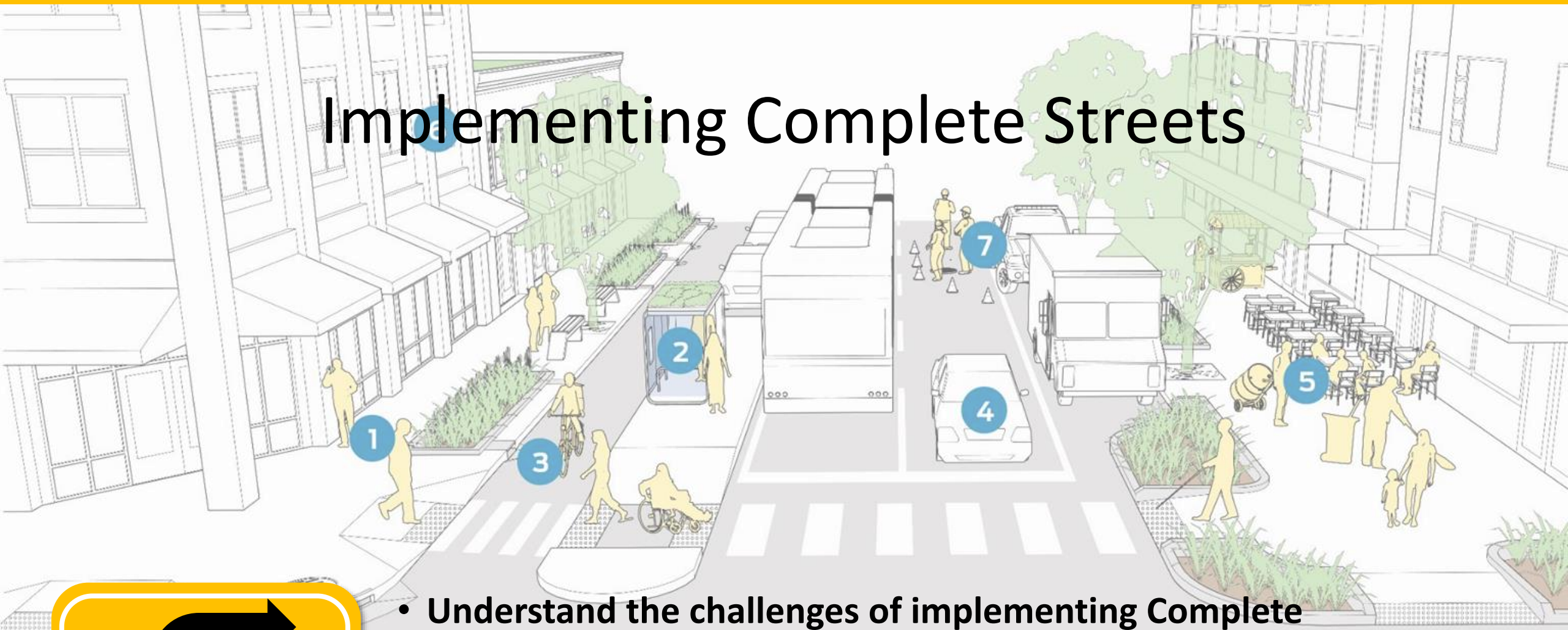
- *Application-based program led by communities*
- *Implemented in small, self-contained areas with local streets*
- *Reduces speed limit to 20MPH*
- *Uses speed bumps, marking and other place-based treatments.*

Tools & Resources





Implementing Complete Streets



objectives

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

Chamber of Commerce/Business Association

Transit Agency

Department of Public works/Transportation

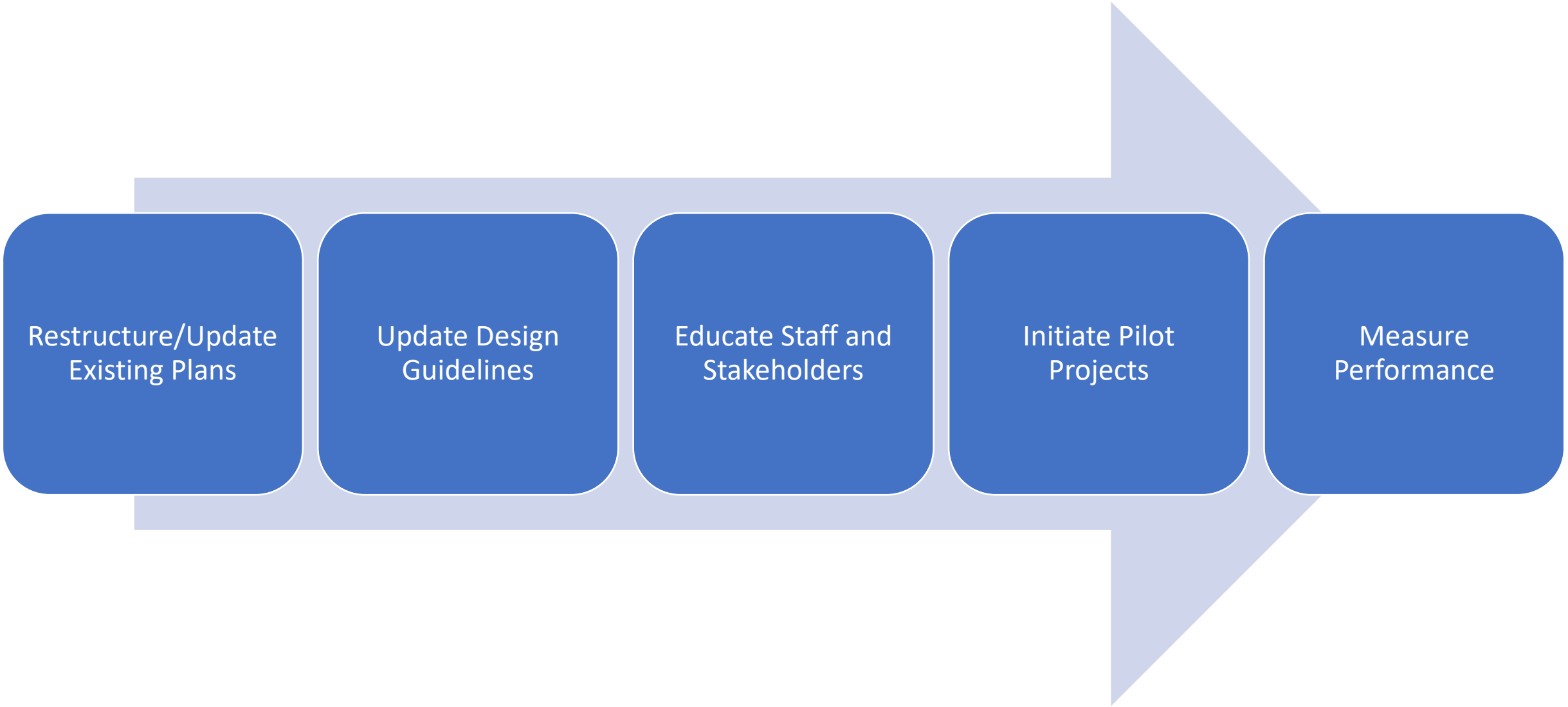
(Maybe State DOT)

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 tax-payer'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…

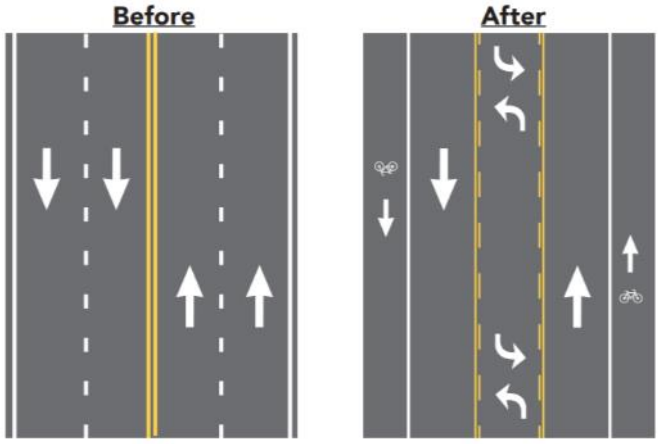
Businesses will lose customers if we take away parking…

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

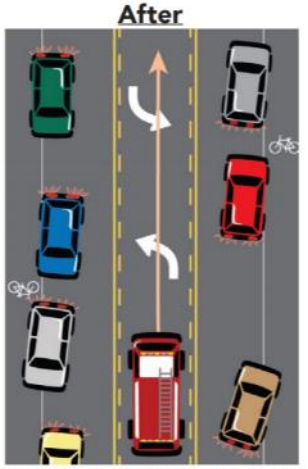
FALSE: A Road Diet design opens a more predictable and practical path for emergency responders.

…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)

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

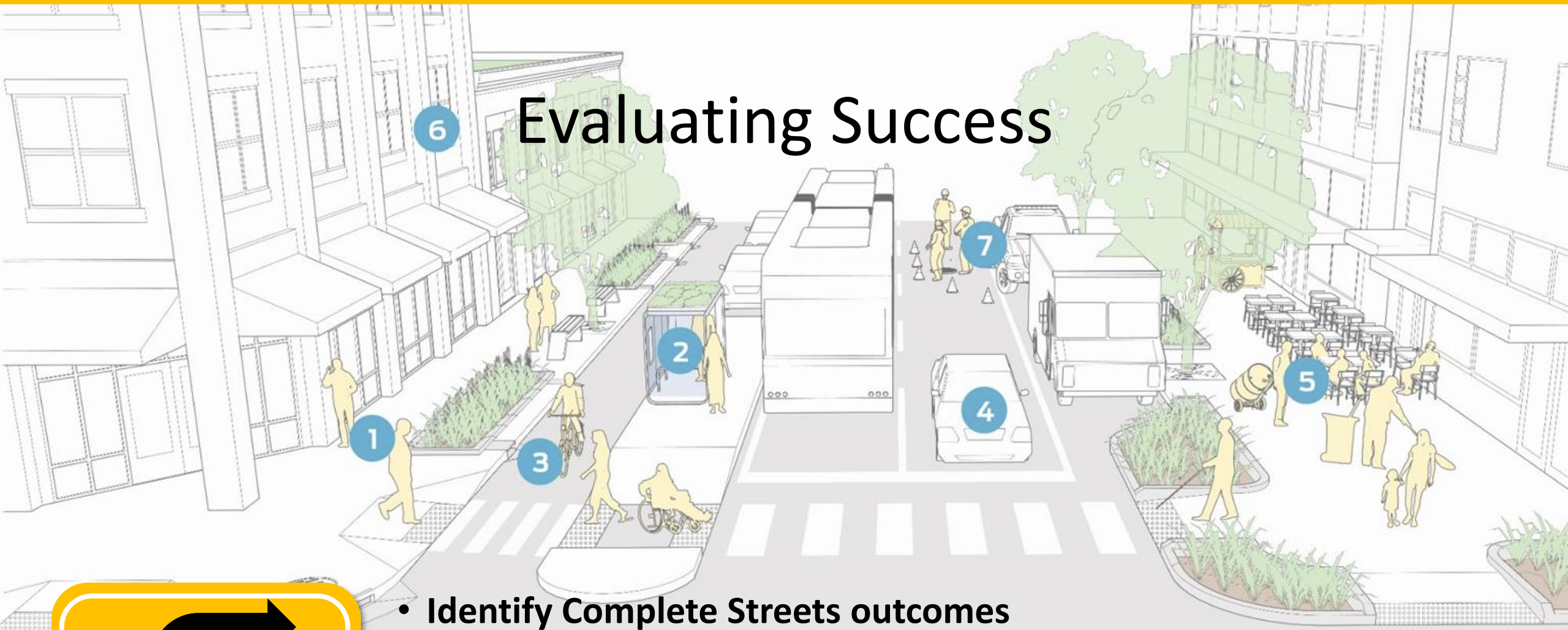
Funding Complete Streets – Private Sources

Property Owners

Businesses

Developers

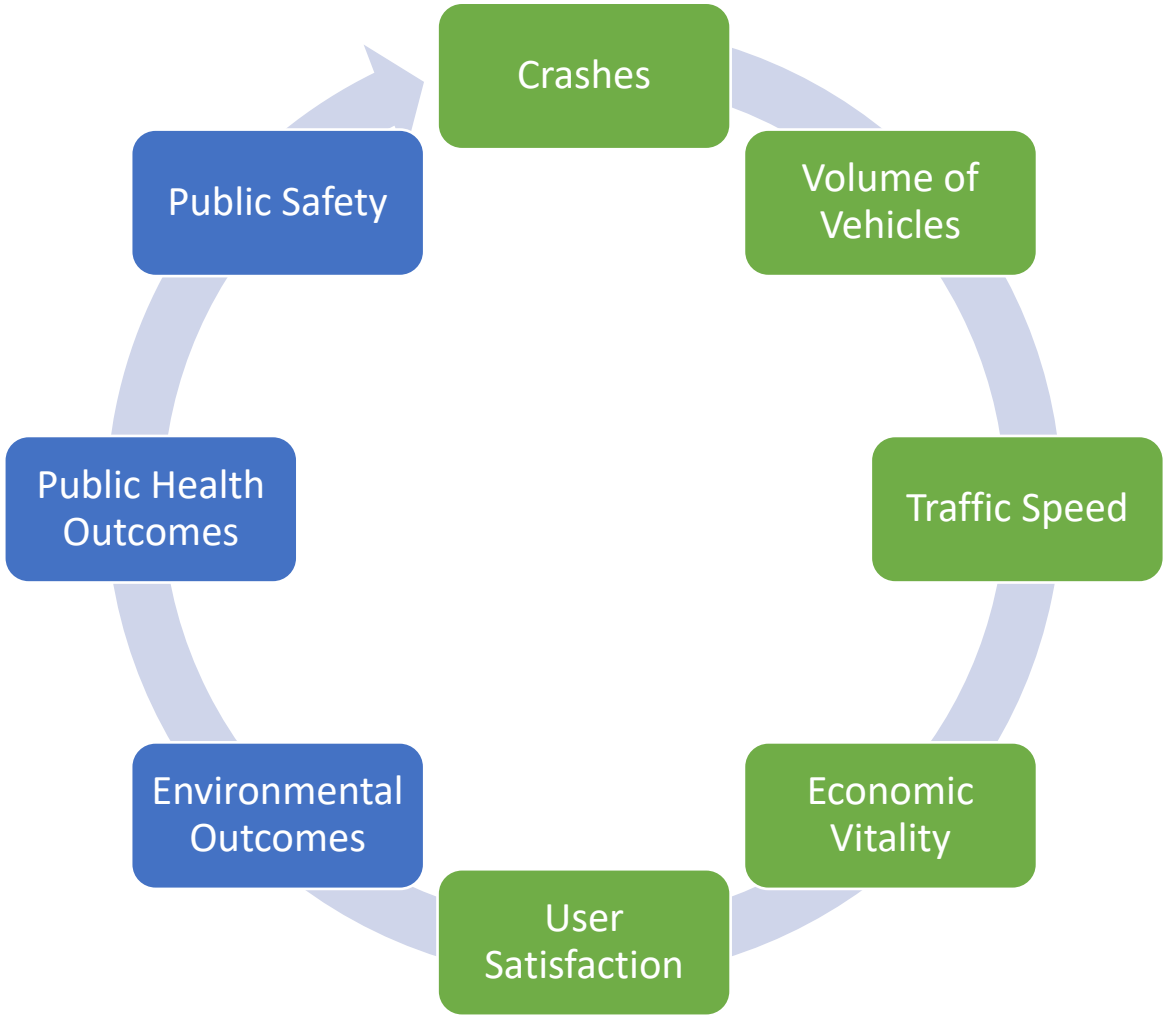
Evaluating Success



objectives

- **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?

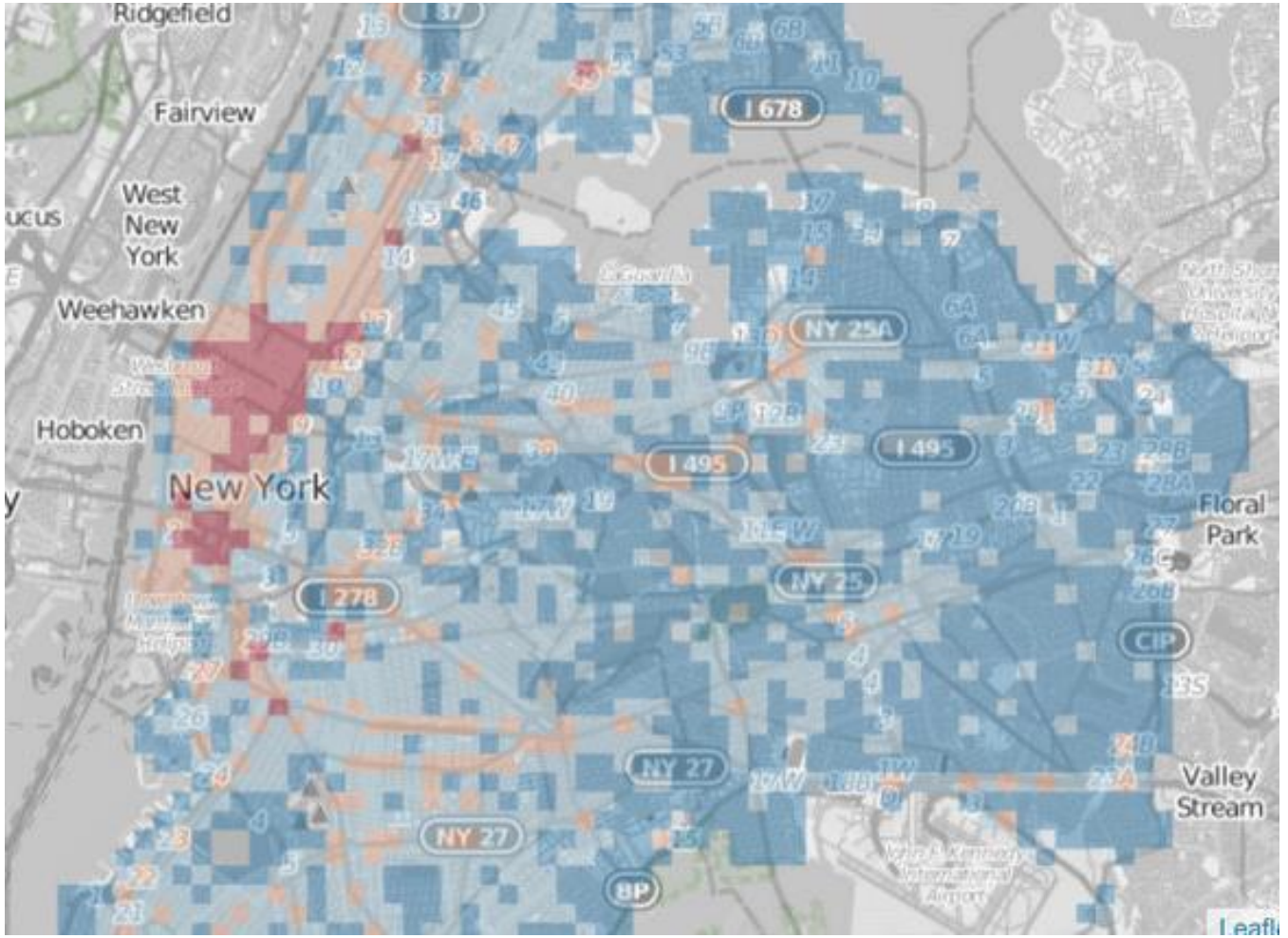


How to Develop a Strong Dataset

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

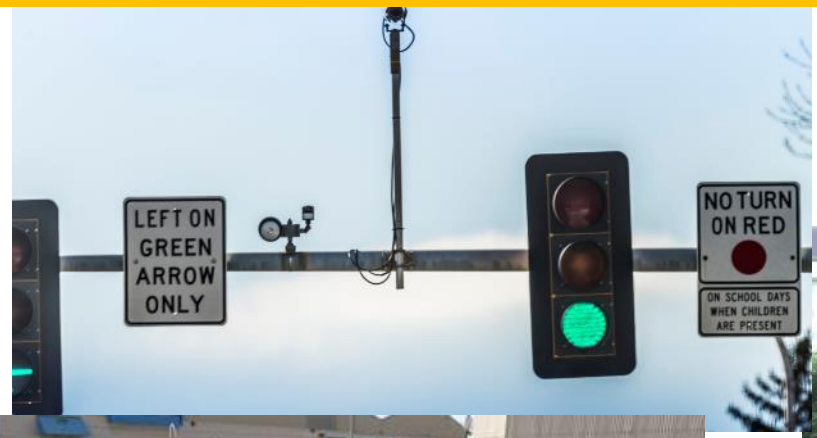
Traffic Crashes

- 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

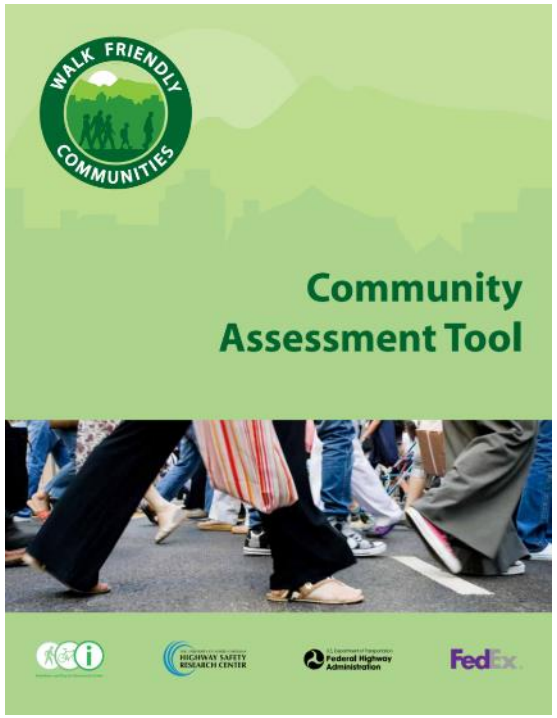
- Building Permits
- Number of vacant storefronts

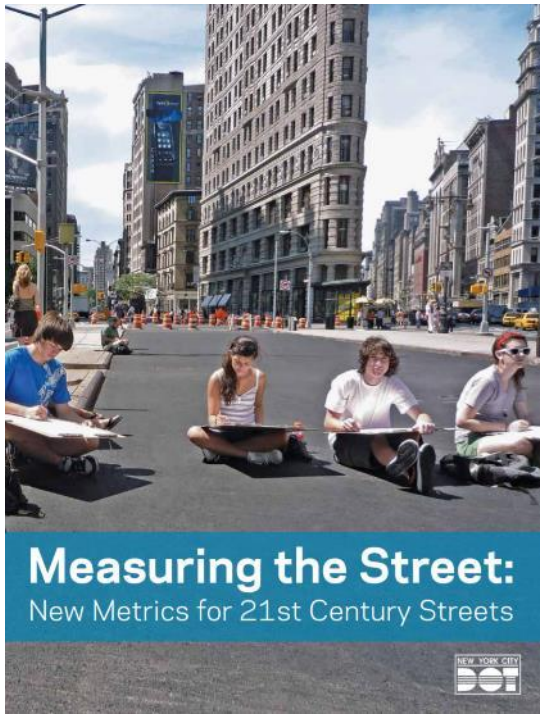
Downstream Outcomes

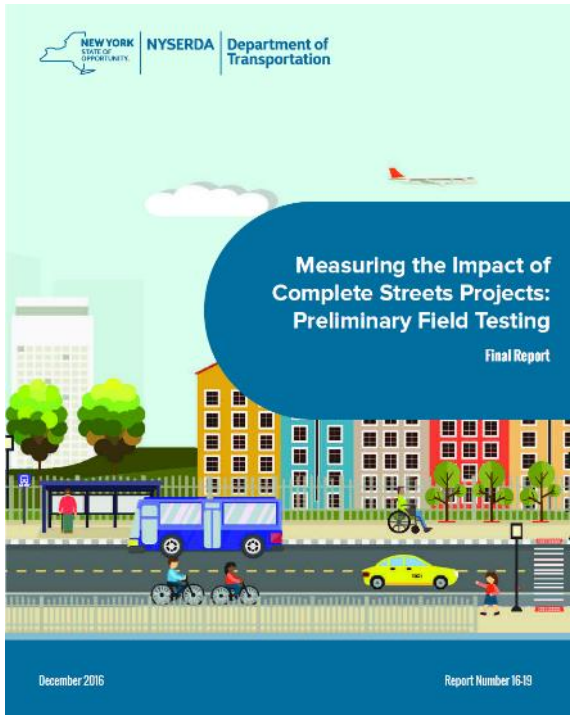
UCS Urban Cycling Solutions

Public Health	Public Safety	Environmental
• Asthma Rates • Obesity Rates	• Perceptions of Safety • Crime rate	• Air quality • Water Quality

Tools & Resources







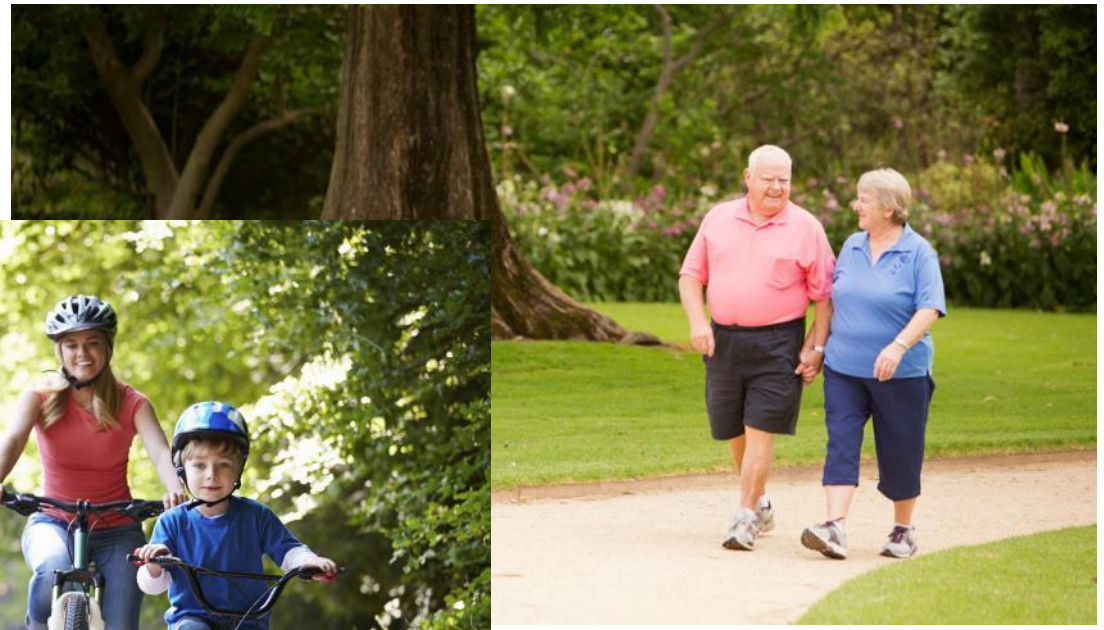
- Evaluating the Impact of Complete Streets Initiatives (Go Bike Buffalo & Center for Inclusive Design and Environmental Access)

Review of key takeaways

objectives

- **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!

UCS URBAN CYCLING SOLUTIONS

There are many tools…

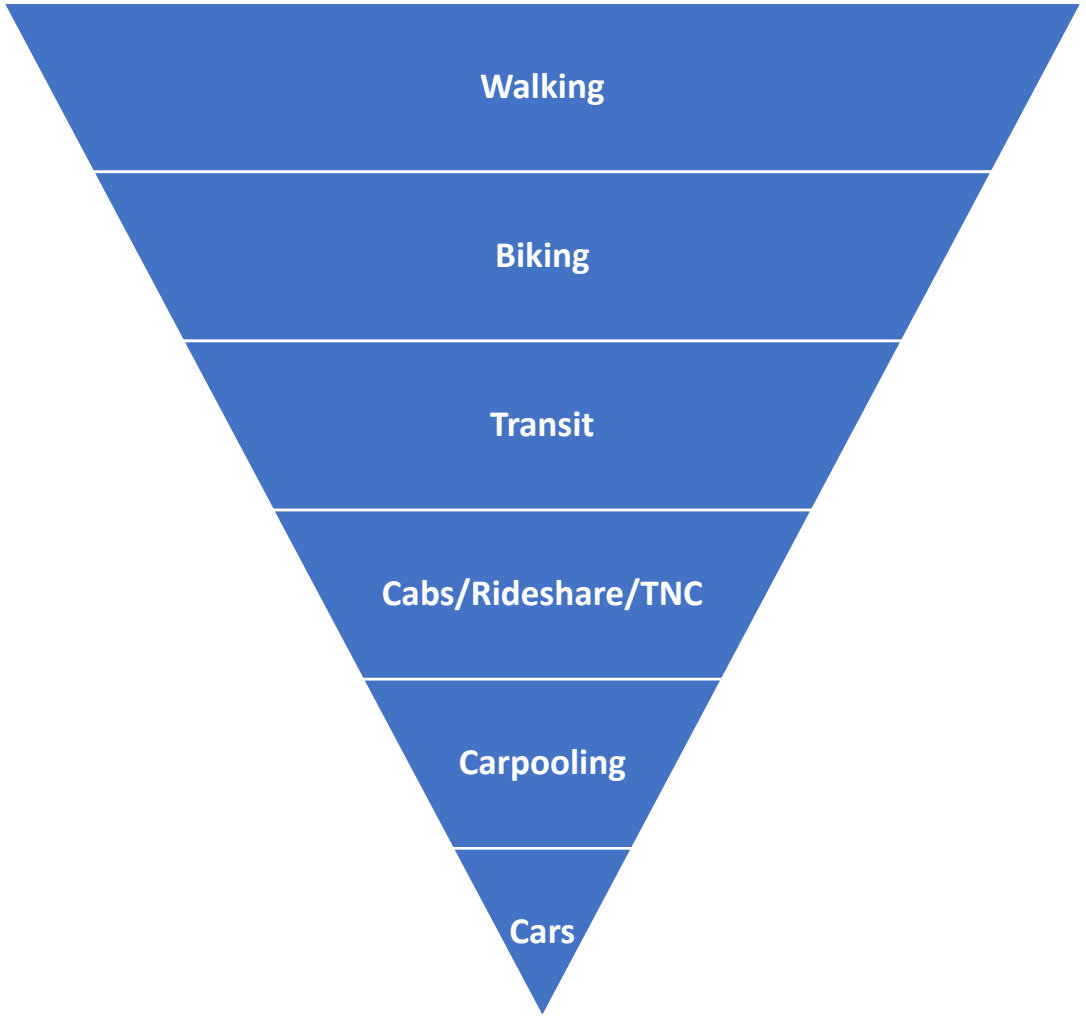
There are many tools…

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

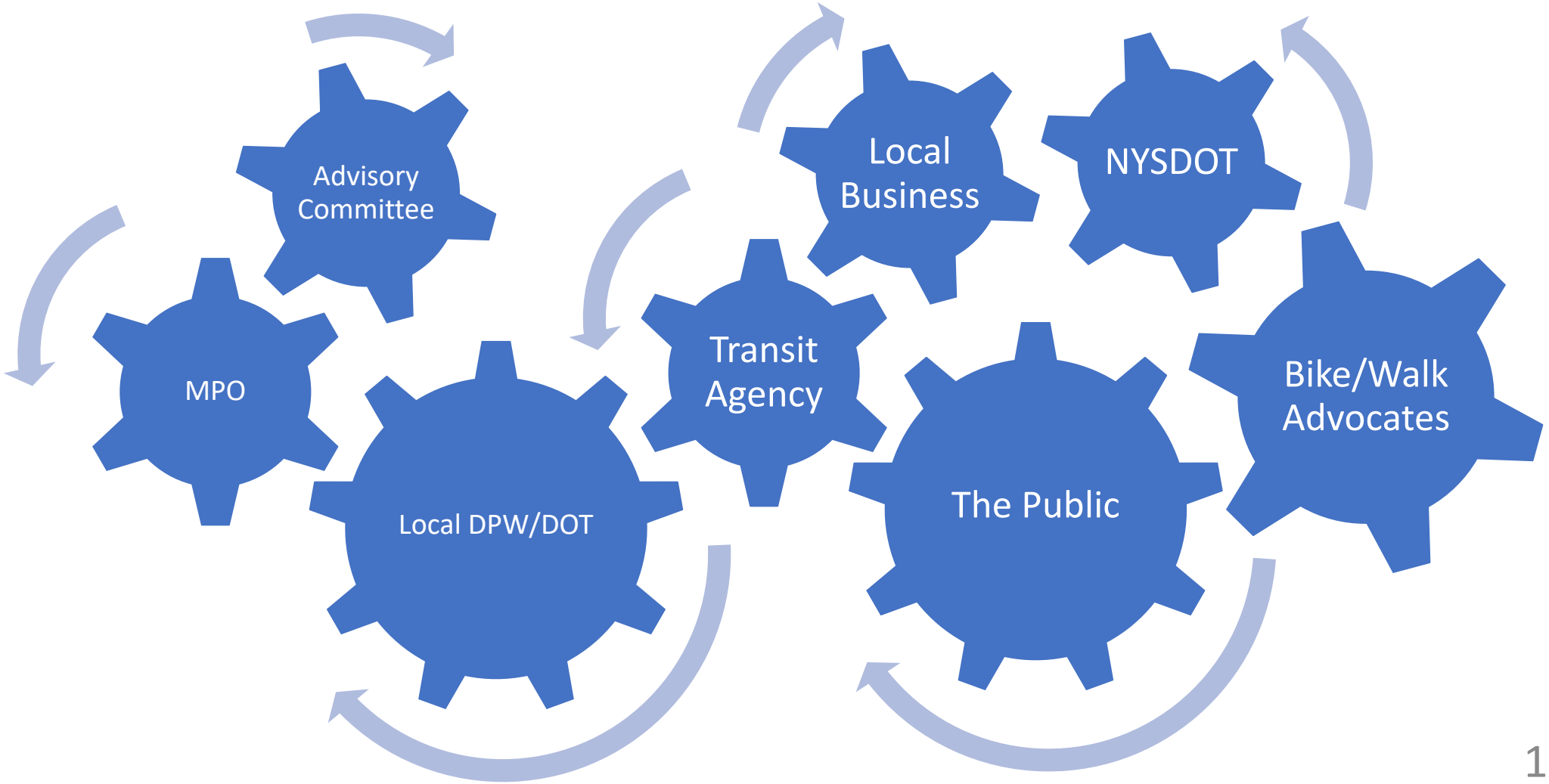
Don’t forget about freight mobility…

UCS URBAN CYCLING SOLUTIONS

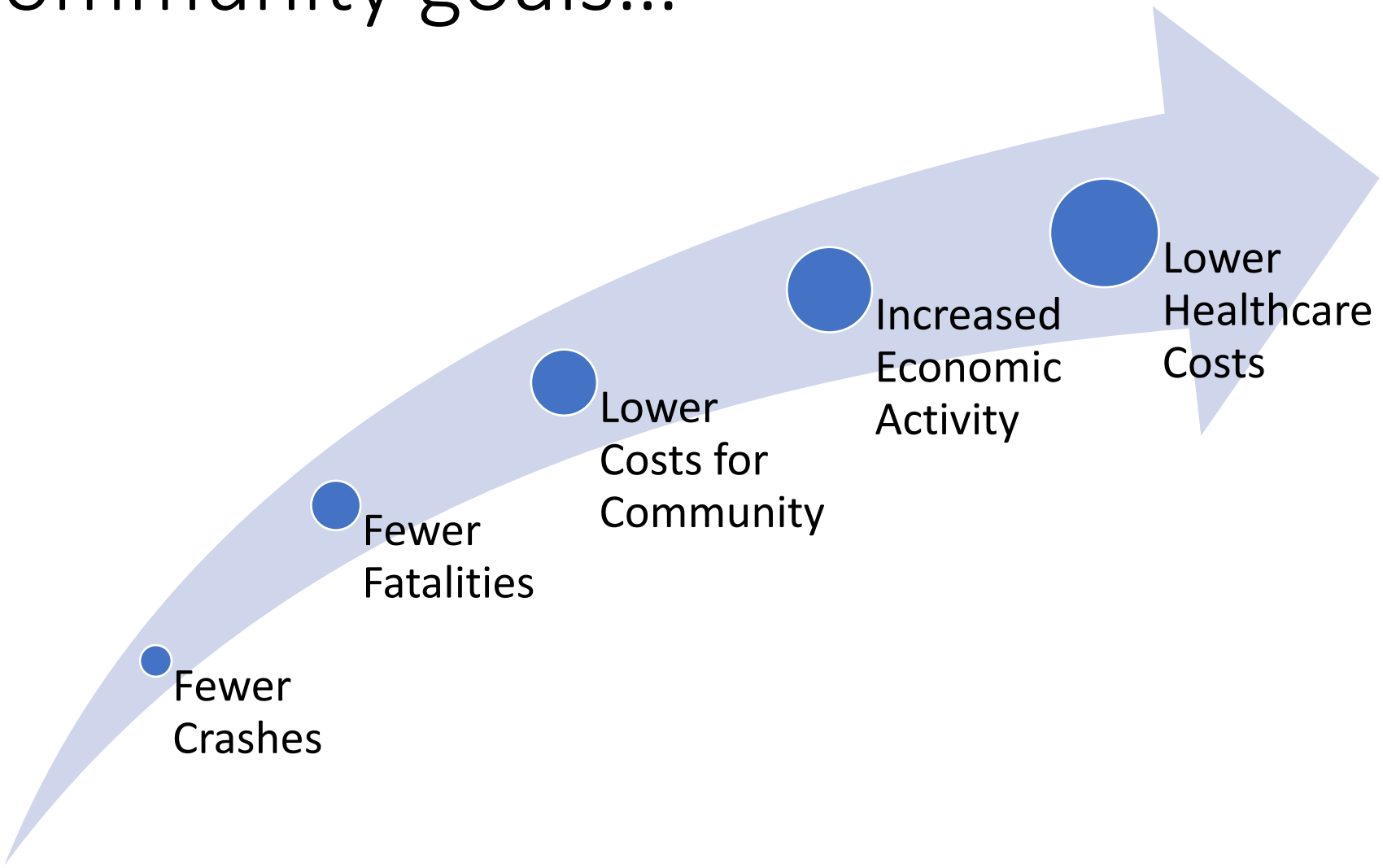
Completes Streets policies set the tone and establish guidelines for future street improvements…



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?