## SafeRoutes Academy Saferoutesnj.org



#### Taking it to the Streets - Conducting Walkability Audits





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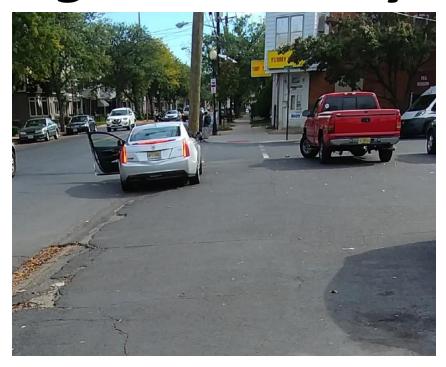
Alan M. Voorhees Transportation Center, Rutgers University

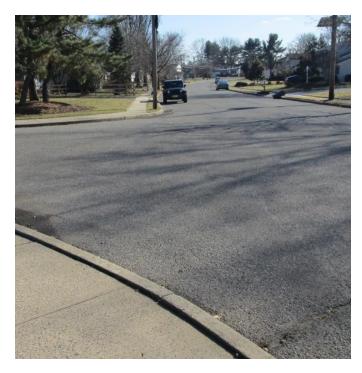


#### Welcome!

### Taking it to the Streets: Conducting Walkability Audits













Edward J. Bloustein School of Planning and Public Policy

Alan M. Voorhees Transportation Center

#### Agenda

- Conducting Walkability Assessment
- Overview of Resources
- Conduct Walk Assessment
- Wrap-up & next steps



### Conducting Walkability and Bikeablity Audits

#### What is an assessment?

Engaging stakeholders in evaluating the walkability and bikeability of an

area or neighborhood.





#### Tips & Tools for Audits

#### Gather a group

- Work with partners to recruit volunteers
- Not just adults!

#### **Be Prepared**

- Plan and map the route
- Prepare an Introduction/Training
  - Identify roles/responsibilities
  - o Identify what to look for
  - Demonstrate how to take pictures
- Be familiar with the area
- Bring supplies to complete the assessment



#### **Tips & Tools for Assessments**

#### Listen

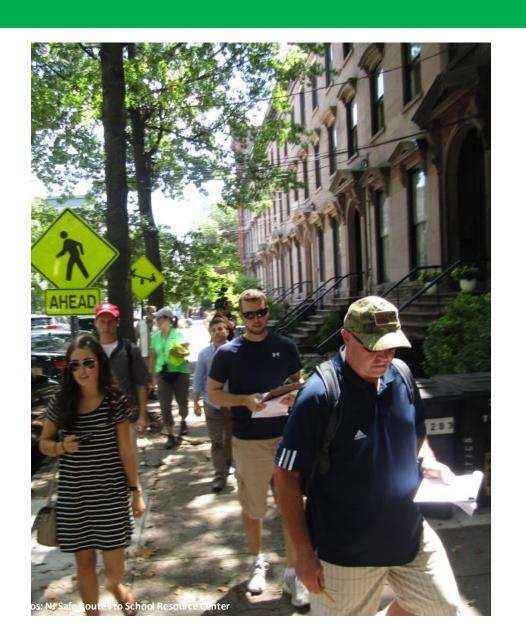
Everyone's input is important

#### Have a back-up plan

Know what you can finish later if you get cut short

#### Conduct a group debrief

- Discuss conditions good and bad
- Discuss potential improvements
- Develop a list of priorities



#### Take Effective Pictures

- Take many pictures!
- Avoid close-ups make sure the scope of the problem can be seen and the issue can be easily identified
- Try to add some scale to your pictures
- Have a photographer work with a note taker record where each picture is being taken









#### How comfortable is it for walking/biking?

#### Walkability & Bikeability:

✓ Is it *accessible*?

- ✓ Is it **welcoming**?
- ✓ Is it *convenient*?

✓ Is it *safe*?



### Streets for All People





**Pedestrians** 









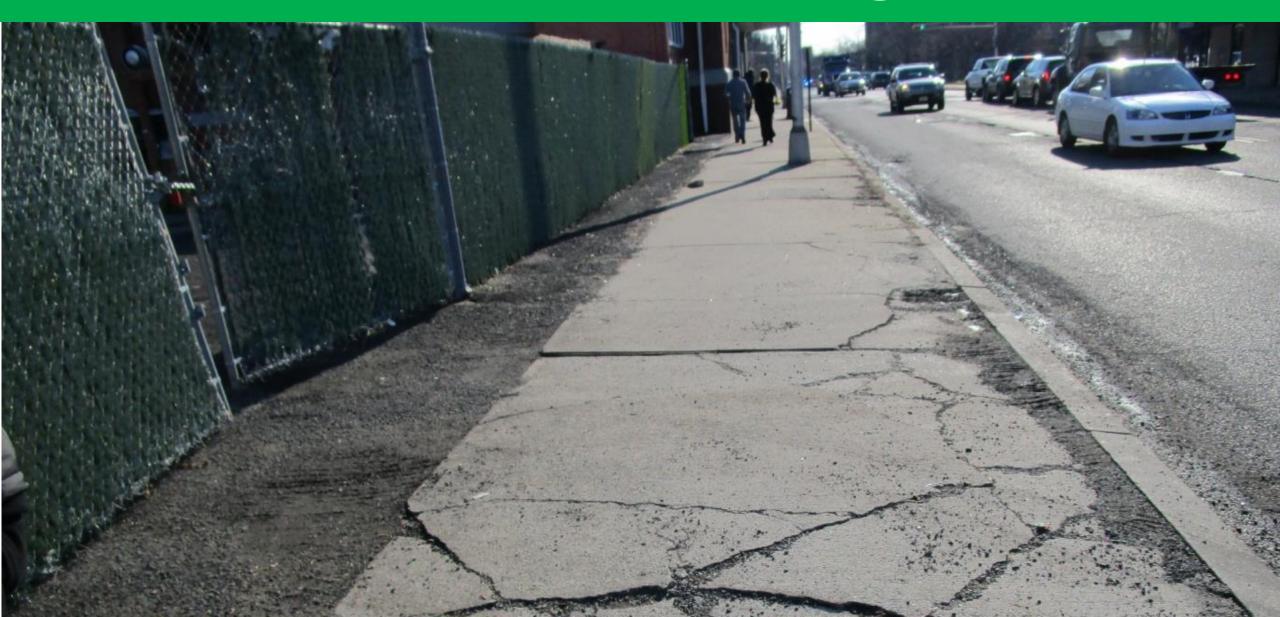
Cyclists



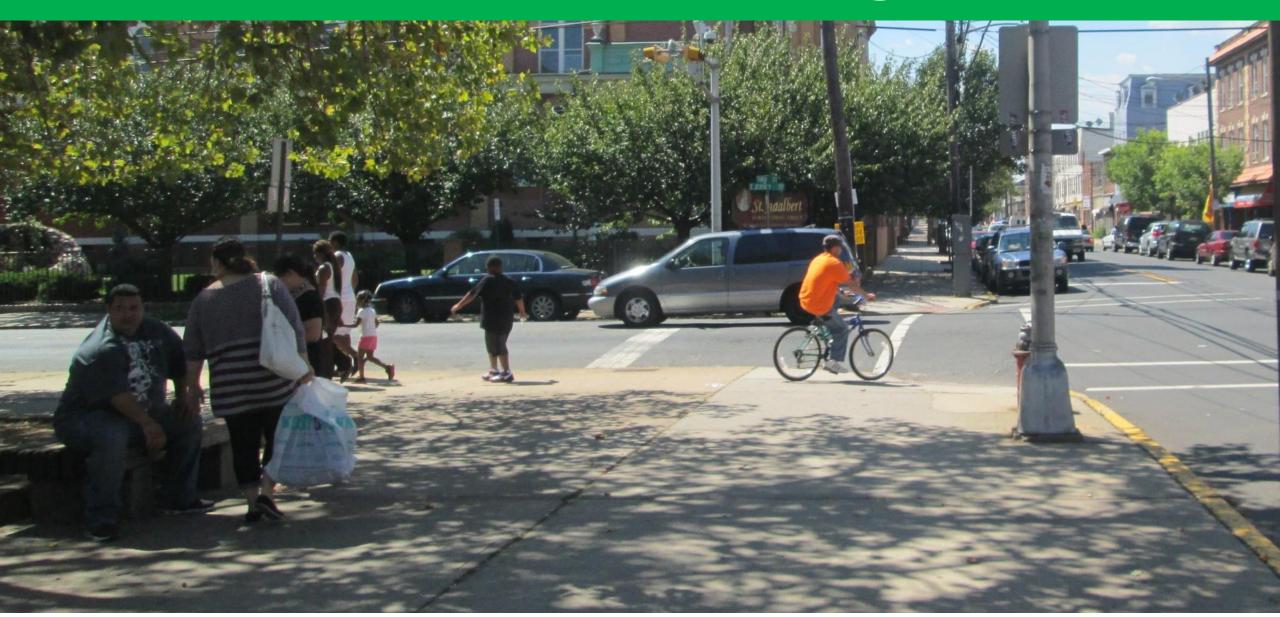




### Is this welcoming?



### Is this welcoming?



#### Pedestrian Safety

Is the surface smooth?

Are there any other infrastructure issues?



### Accessibility



#### Crosswalk Ramps

Should face crosswalk

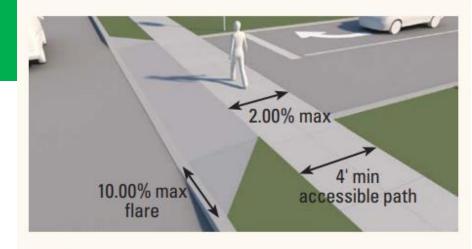
- Can't be too steep
- Smooth transition at bottom
- Truncated domes for the blind

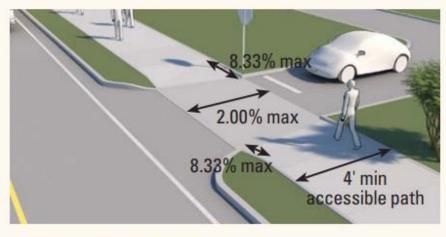


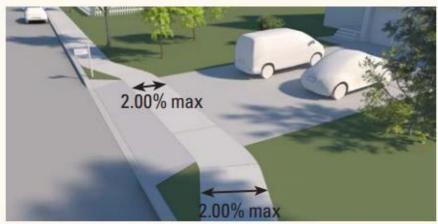
#### Driveways

- Steep grades and cross slopes at driveways are dangerous
- Provide as level a surface as possible

Sidewalks should NOT stop at driveways







### Does this seem okay?



If driveways and curb ramps aren't done right, sidewalks can't be used

### Improper Placement/Obstructions



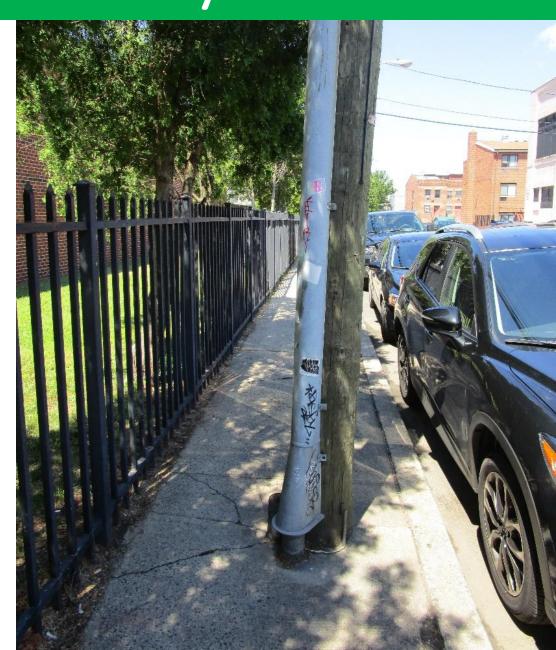
#### Pedestrian Accessibility

#### Public Right-of-Way Accessibility Guidelines

- Width: Federal minimum was 36"
- NEW 48" min, exclusive of curb
- Wider is always better!

#### • Be careful with:

- Vertical obstructions
- Protruding objects
- Slope



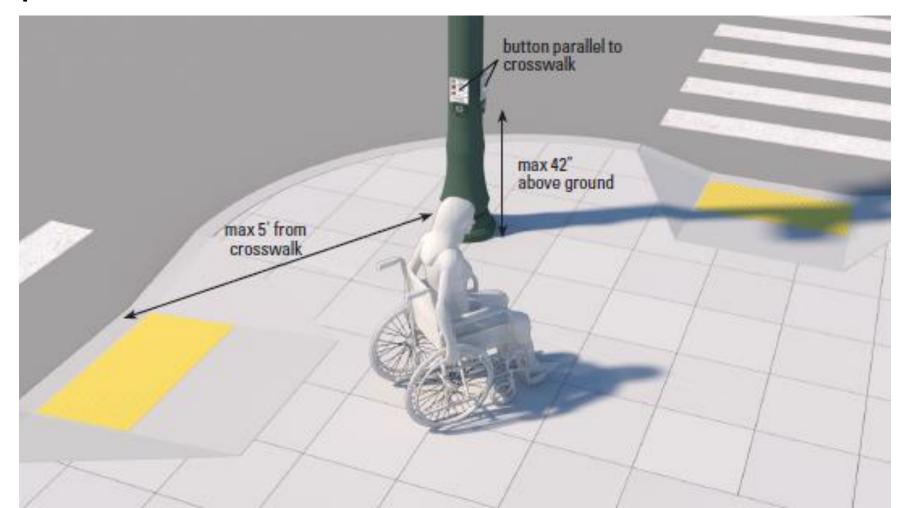
## Countdown Signals/ ADA Push Buttons/ Increased Crossing Time



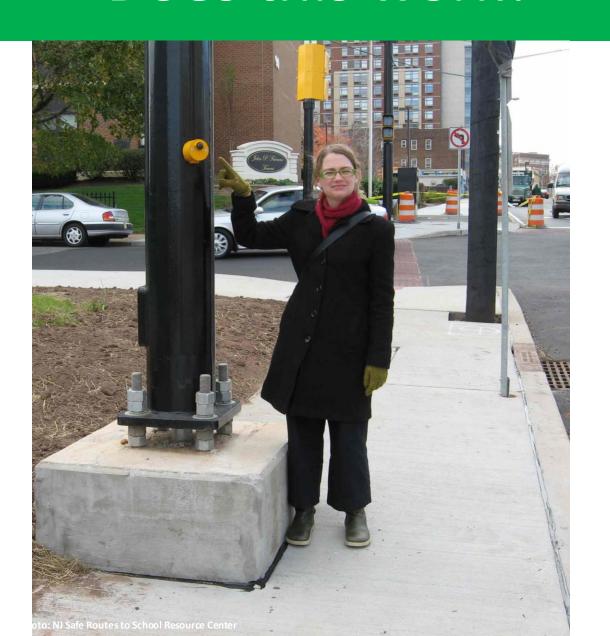


#### **Push Buttons**

- Must be within 5 feet of the extended crosswalk line
- Must be parallel with crosswalk



#### Does this work?



### Crosswalk Visibility

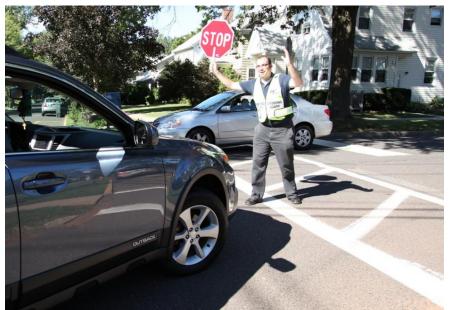


### Do Drivers Behave Safely?

Do driveways cause issues?

Is there aggressive or careless behavior?





### Bikeable for everyone!





On road, on the sidewalk, on paths

### On-Road Bicycle Facilities





None Shoulder

### On-Road Bicycle Facilities



**Sharrow** 



Bike Lane

### On-Road Bicycle Facilities

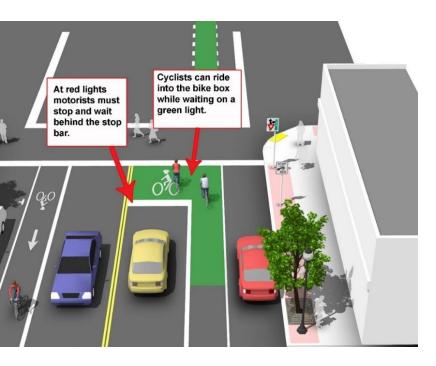




Buffered Bike Lane

Protected Bike Lane

#### Other Bicycle Options







Bicycle box at intersections

Bike Signal

Bike Parking

#### Facilities - What should we be looking for?

Where do facilities start/stop?

Do facilities go where I want them to?





#### Facilities - What should we be looking for?

Are there any blockages/obstructions?



Do I feel comfortable at crossings?



### Do Drivers Behave Safely?

Are vehicles speeding?





Do drivers pass too close?



### Are there places to park bikes?

Are there bike racks?

Where are the bike racks?
Are they placed well?
Are they in good condition?





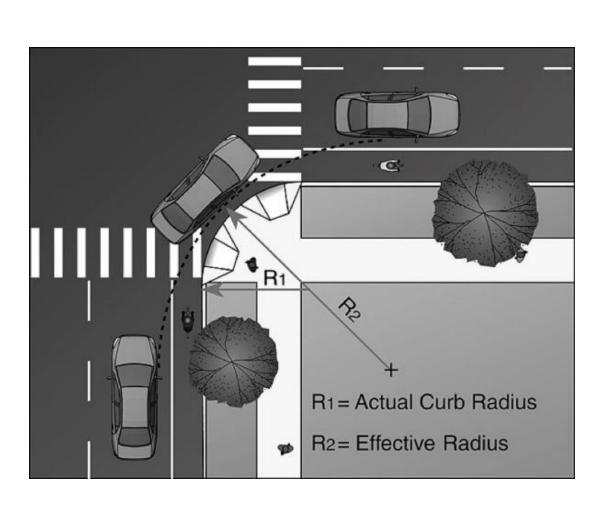


# Tools for Reducing Speeding and Improving Safety

### Tool: Pedestrian Refuge Island



## Tool: Decreased Turning Radii



R 45°

R 30°



R 15°



Tighter corner radii reduce crossing distance and slow turning traffic (Credit: Michele Weisbart)

**Undesirable** 



## Tool: Curb Extensions



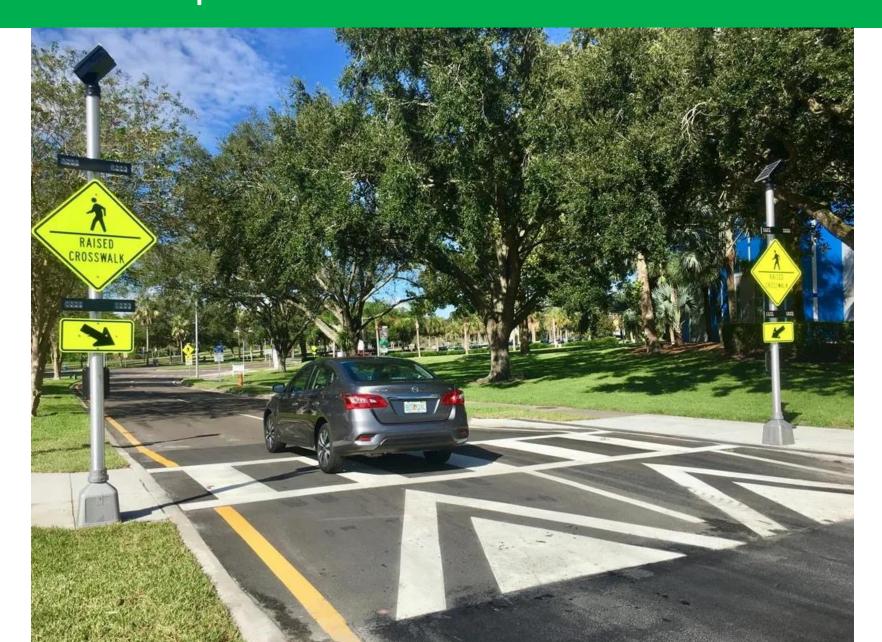
## Tool: Bollards for Clear Sight Lines



## Tool: Vertical Speed Control - Speed Bumps



## Tool: Vertical Speed Control- Raised Crosswalks



#### Tool: Horizontal Speed Control-Neckdowns / Chicanes





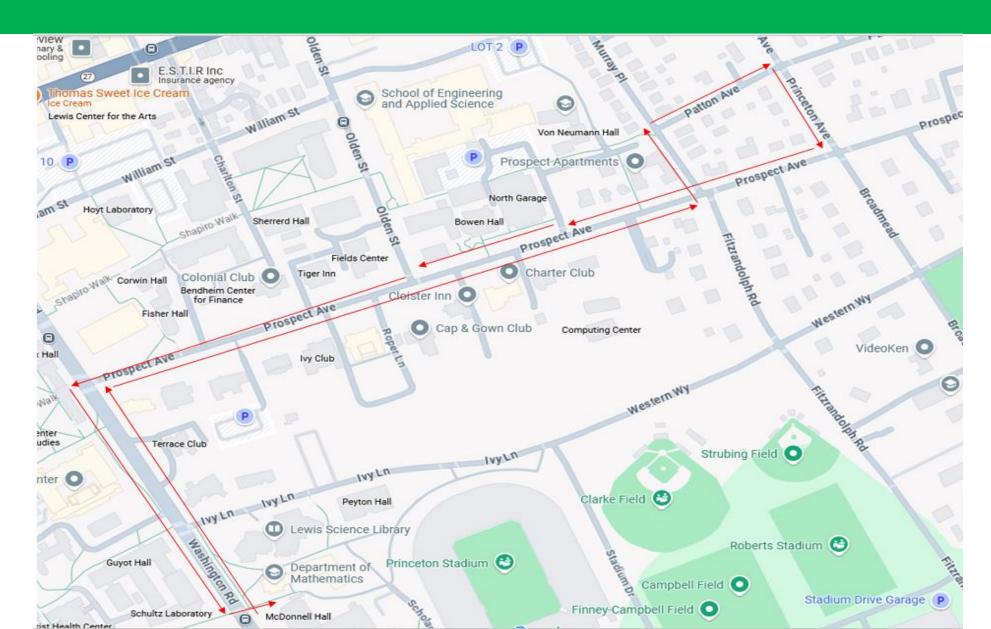
## Tool: Road Diet



## Tool: Road Diet



## Let's Get Started!





#### NJ School Zone Design Guide

# New Jersey School Zone Design Guide







### NJ School Zone Design Guide

1	Introduction and Overview	Page 1	Includes a discussion on the benefits of walking and bicycling to school and an overview of the NJ SRTS Program.
2	What is a School Zone?	Page 5	Covers the definition of a school zone and includes a discussion of the statutes and laws related to pedestrians, bicyclists and school area safety.
3	MUTCD Traffic Control for School Areas	Page 17	Sets forth standards and guidance for the use of school zone signage, pavement markings and related devices.
4	Determining Placement of Crossing Guards	Page 26	Provides guidance on how to identify the locations where crossing guards are needed.
5	Crossing the Street	Page 40	Focuses on intersection and midblock crossing improvements.
6	Along the Street	Page 47	Focuses on the streetscape elements that enhance the pedestrian and bicyclist environment including sidewalks and bikeways that facilitate travel along the street.
7	Traffic Calming	Page 56	Highlights the engineering techniques that have been proven to be effective in reducing vehicle speeds and volumes.
8	Students & Bicycling	Page 72	Discusses some ways that bicycling to school can be encouraged and made safer.
9	The School Site & School Grounds	Page 85	Presents the key pedestrian and bicycle safety elements of locating a well-designed school site.
10	Crime Prevention through Environmental Design	Page 94	Discusses the potential to reduce the dangers associated with walking and biking to school through the careful design and manipulation of the physical environment of the school site.
11	Schools Near Railroad Crossings	Page 102	Focuses on the unique concerns related to students crossing railroads on their way to and from school.
12	Schools Near Highway Ramps	Page 112	Discusses the dangers pedestrians and bicyclists face crossing ramps and design solutions to improve visibility, reduce vehicular speeds and reduce pedestrian and bicyclist exposure.
13	Maintenance & Other Improvements	Page 117	Includes a discussion of maintenance issues and provides examples of prioritization of school zones for municipal snow shoveling.
14	How to Start Improving Your School Zone	Page 126	Includes a discussion of the steps needed to improve the conditions for students walking and biking to school.

#### NJ Complete Streets Design Guide



**2017** State of New Jersey

Complete Streets
Design Guide



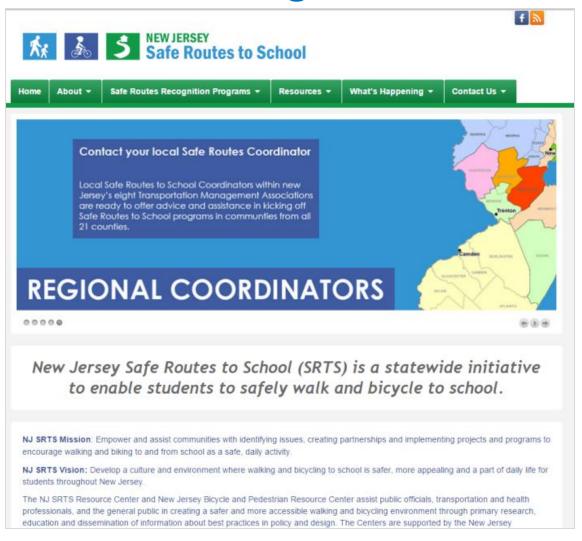
#### NJ Complete Streets Design Guide

#### Table of Contents

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Chapter 1:
Complete Streets in New Jersey
Chapter 2:
Integrating Complete Streets into the
Planning and Design Process
Chapter 3:
Complete Streets Toolbox—Policy and
Design Guidance for Implementing
Complete Streets
Chapter 4:
Street Typologies
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#### TMA SRTS Regional Coordinators

#### Website: SafeRoutesNJ.org



# SafeRoutes Academy Saferoutesnj.org

