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COMPLETE STREETS IMPLEMENTATION OVERVIEW

- Level-of-Traffic-Stress Analysis
 - Somers Point
- Regional Trail Network
 - Atlantic County
- Technical Assistance
 - Outreach, Training and Workshops

TOOLBOX OF CYCLING ACCOMMODATIONS

- **Prior Methods:**

- Bicycle-Level-of-Service
- NJDOT Bicycle Compatibility
- Bicycle Suitability
- DVRPC RideScore

- **Focus on Engineering**

- Design vs. user experience
- Bicycle Compatibility prioritizes wide shoulders

NJDOT BICYCLE COMPATIBILITY GUIDELINES

	Posted Speed Limit	Urban w/Parking	Urban w/o Parking	Rural
AADT < 2,000	Up to 30 mph	12 ft. – shared lane	11 ft. – shared lane	10 ft. –shared lane
	31 – 40 mph	14 ft. – shared lane	14 ft. – shared lane	12 ft. – shared lane
	41 – 50 mph	15 ft. – shared lane	15 ft. – shared lane	3 ft. – shoulder
	> 50 mph	Not Compatible	4 ft. - shoulder	4 ft. - shoulder
	Posted Speed Limit	Urban w/Parking	Urban w/o Parking	Rural
AADT 2,000 – 10,000	Up to 30 mph	14 ft. – shared lane	12 ft. – shared lane	12 ft. –shared lane
	31 – 40 mph	14 ft. – shared lane	14 ft. – shared lane	3 ft. – shoulder
	41 – 50 mph	15 ft. – shared lane	15 ft. – shared lane	4 ft. – shoulder
	> 50 mph	Not Compatible	6 ft. - shoulder	6 ft. - shoulder
	Posted Speed Limit	Urban w/Parking	Urban w/o Parking	Rural
AADT >10,000	Up to 30 mph	14 ft. – shared lane	14 ft. – shared lane	14 ft. –shared lane
	31 – 40 mph	14 ft. – shared lane	4 ft. – shoulder	4 ft. – shoulder
	41 – 50 mph	15 ft. – shared lane	6 ft. - shoulder	6 ft. – shoulder
	> 50 mph	Not Compatible	6 ft. - shoulder	6 ft. - shoulder

TYPICAL NJ STATE HIGHWAY



AADT: 50,000



Speed: 50 mph

Lane Width: 12 ft.

Number of Lanes: 4

Shoulder Width: 10 ft.

BICYCLE COMPATIBILITY ANALYSIS



	Posted Speed Limit	Urban w/Parking	Urban w/o Parking	Rural
AADT >10,000	Up to 30 mph	14 ft. – shared lane	14 ft. – shared lane	14 ft. –shared lane
	31 – 40 mph	14 ft. – shared lane	4 ft. – shoulder	4 ft. – shoulder
	41 – 50 mph	15 ft. – shared lane	6 ft. - shoulder	6 ft. – shoulder
	> 50 mph	Not Compatible	6 ft. - shoulder	6 ft. - shoulder

COMPATIBLE FOR WHO(M)?

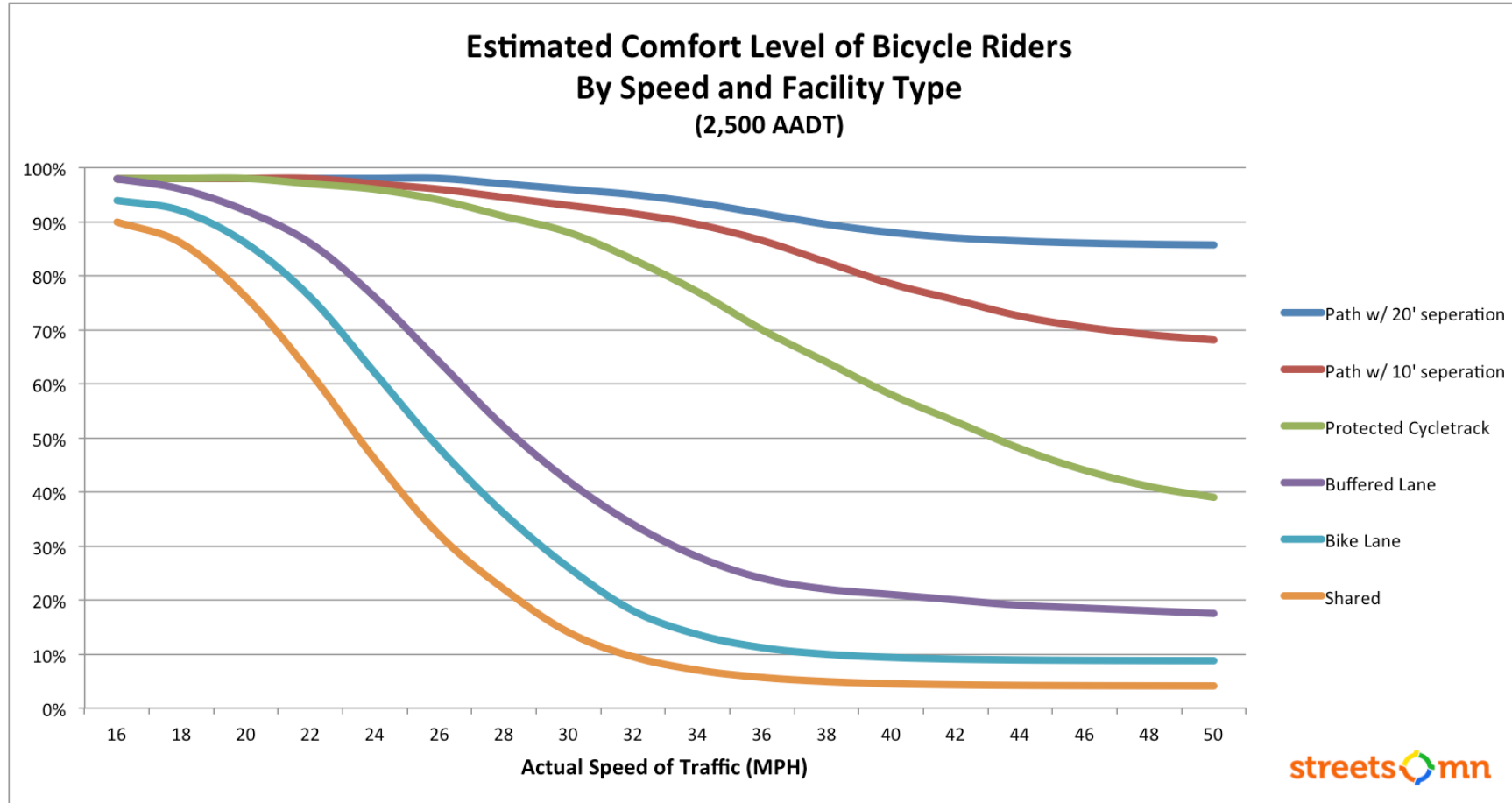


BICYCLE LEVEL OF TRAFFIC STRESS

- Reflective of how bicyclists perceive the roadway
- Experiential metric - based on user comfort
- Accounts for variance in skills, ability to tolerate traffic stress
- Prioritizes
 - lower speeds
 - narrower roadways
 - dedicated facilities
 - network connectivity



BASIS FOR COMFORT LEVEL



<http://tcstreetsforpeople.org/>

BICYCLE LEVEL OF TRAFFIC STRESS



- **Stress Level 1:**
All Users
(children, seniors)



- **Stress Level 2:**
Most Adults

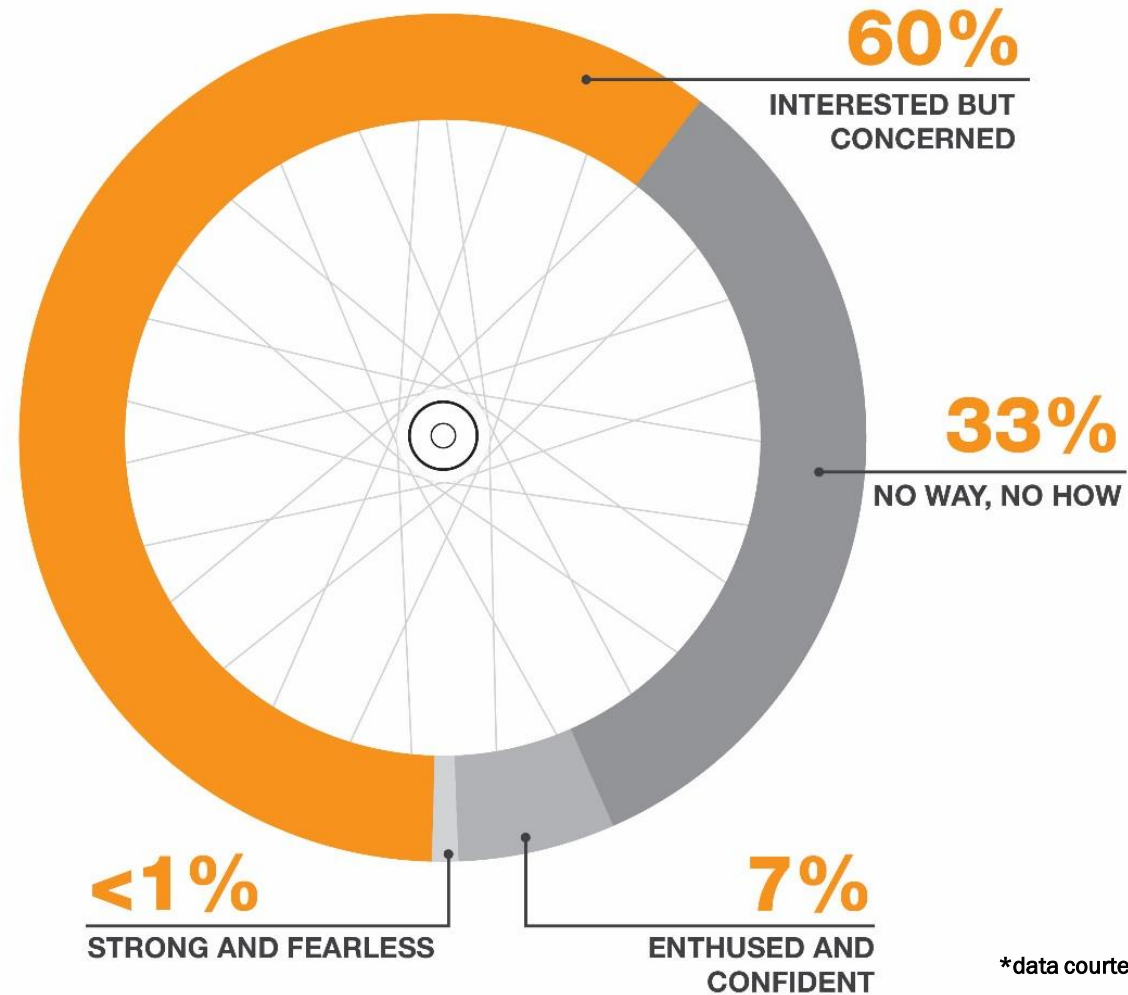


- **Stress Level 3:**
Enthusiastic Riders



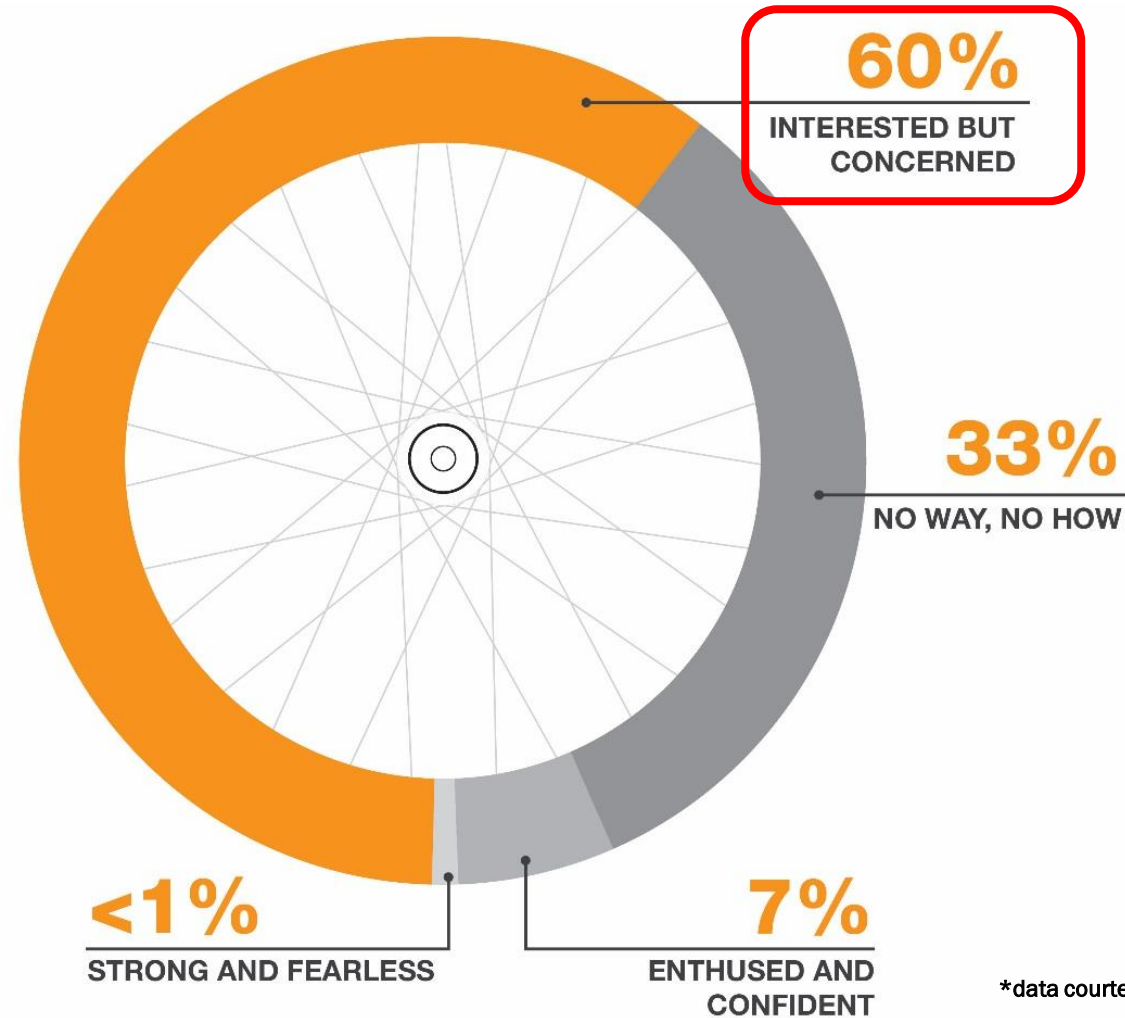
- **Stress Level 4:**
Experienced Riders

ALL USERS, ALL MODES, ALL ABILITIES?



*data courtesy of City of Portland, 2005

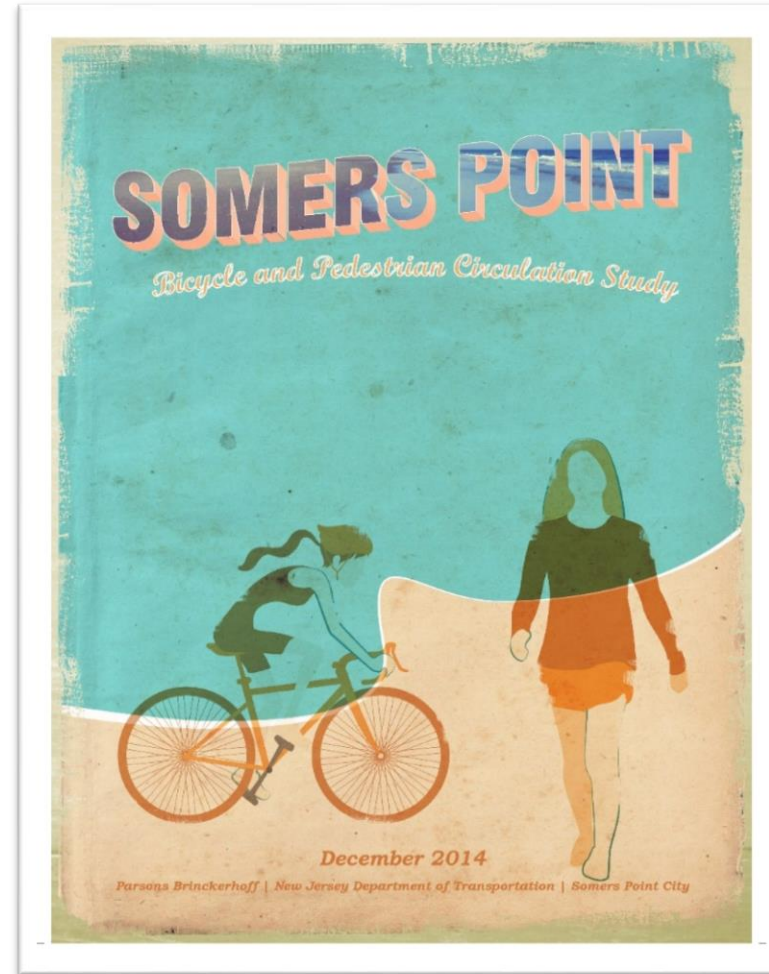
ALL USERS, ALL MODES, ALL ABILITIES?



*data courtesy of City of Portland, 2005

CASE STUDY: SOMERS POINT, NJ

- Somers Point, NJ
 - 5 square miles
 - 10,700 residents
 - 2 off-road multi-use paths
 - Adjacent to Ocean City



CASE STUDY: SOMERS POINT, NJ

- Existing Bicycle Facility
- Level of Stress 1
- Level of Stress 2
- Level of Stress 3
- Level of Stress 4



CASE STUDY: SOMERS POINT, NJ

- “Island Effect”
demonstrated by removing
higher stress roads



EXAMPLE: SOMERS POINT – MAYS LANDING ROAD

Existing:

- 2 lanes
- 45 mph
- LTS 4



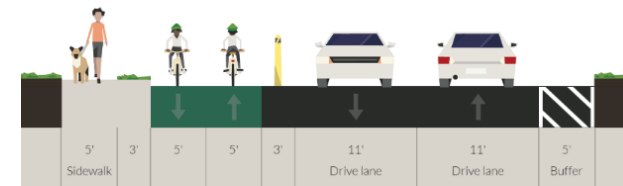
Add Bike Lanes

- 45 mph
- LTS 4



Add Separated Bike Lanes

- LTS 1

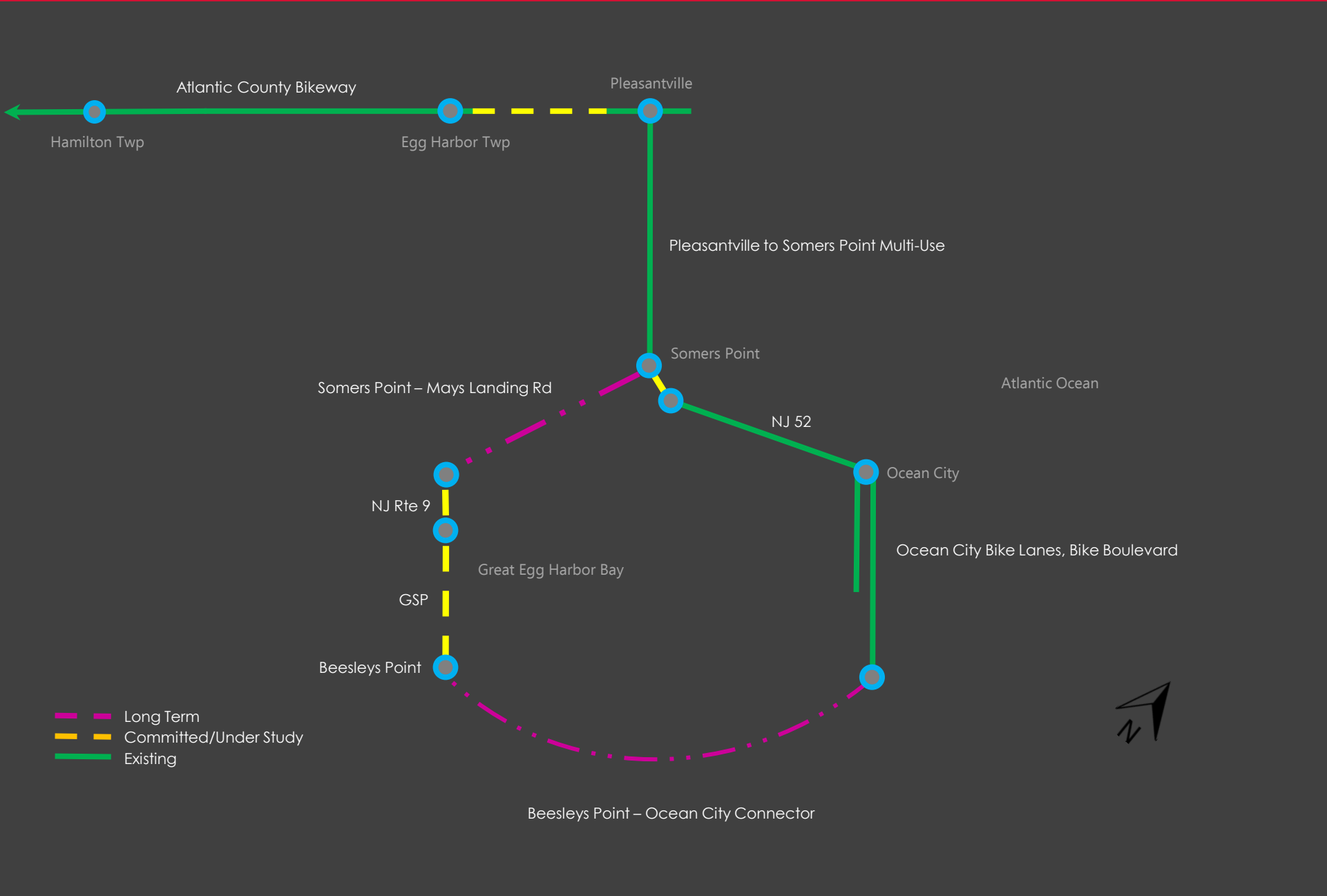


CASE STUDY: SOMERS POINT, NJ

Existing Network
Condition Only
LOS 1 & 2 Only



ATLANTIC COUNTY TRAIL NETWORK



COMPLETE STREETS TECHNICAL ASSISTANCE

- NJDOT Complete Streets Policy (2009)
- Guidance Materials
 - Guide to Complete Streets Policy Development (2011)
 - Guide to Creating a Complete Streets Implementation Plan (2012)
 - *Complete Streets Design Guide (2016)*
- Templates and Checklists
 - Model Complete Streets Policy Template (2012)
 - Complete Streets Checklist (RBA - 2010)
- Brochures and Infographics
 - Complete Streets Infographic (2014)
 - Sharrow Flyer (2015)
 - *Walk-Safe Infographic (2016)*

WRITING AND ADOPTING A POLICY

MAKING COMPLETE STREETS A REALITY: A GUIDE TO POLICY DEVELOPMENT



Guide to Complete Streets Policy Development



New Sidewalk Installation, Hamilton, NJ

In this way, completing the street becomes the default way of doing business, from initial planning and design through to construction, operation, and maintenance. As Complete Streets elements become integrated into all phases of roadway projects, implementation occurs gradually and a robust network of Complete Streets is established incrementally through routine improvements without the need for separate, costly retrofit projects.

Types of improvements may include the following:

- New construction
- Reconstruction
- Rehabilitation
- Resurfacing
- Maintenance
- Operations

- Private development
- Public Private Partnerships (PPP)

The Borough of Netcong's Complete Streets policy provides an example of a comprehensive list of improvement activities:

"Complete Streets ... should be incorporated into all planning, design, approval, and implementation processes for any construction, reconstruction, or retrofit of streets, bridges, or other portions of the transportation network, including pavement resurfacing, restriping, and signalization operations if the safety and convenience of users can be improved within the scope of the work..."

*- Borough of Netcong
Complete Streets Resolution Language*

A Complete Streets policy may also stipulate accommodations for pedestrians and bicyclists

"Jersey City's goal is to develop a complete transportation network, not just streets. Forty percent of households do not own a car, so sidewalks are a critical element for mobility."

*Robert Cotter
Director of Planning, Jersey City*



*Pedestrian Accommodations during Construction,
Little Ferry, NJ*

during construction. For example, the Borough of Red Bank's and the NJDOT's Complete Street policies both include such a provision and cite NJDOT Policy #705 (Accommodating Pedestrian and Bicycle Traffic during Construction), which describes how bicycle and pedestrian traffic will be addressed during construction.

4. Design Standards

The fourth ingredient provided in a strong Complete Streets policy is a reference to design standards that will be followed when implementing the policy. This may simply state that the latest local and national standards and criteria will be used, or it may refer more specifically to individual design standards. Under New Jersey state law, ensuring that improvements conform with accepted standards is one of the necessary

IMPLEMENTING THE POLICY

A GUIDE TO CREATING A COMPLETE STREETS IMPLEMENTATION PLAN NEW JERSEY DEPARTMENT OF TRANSPORTATION



December 2012  

Guide to Creating a Complete Streets Implementation Plan



INTRODUCTION

Complete Streets are streets designed for everyone – all users, travel modes, and ability levels – balancing the needs of drivers, pedestrians, bicyclists, transit vehicles, emergency responders, and goods movement. However, adopting a Complete Streets policy does not mean that every street in every community should have sidewalks, bike lanes, and transit. There is no universal, prescriptive design. Instead design is driven by local context and demand. By applying Complete Streets as a core, guiding principle, a robust, multi-modal network with facilities for all users can be established incrementally over time.

This *Guide to Creating a Complete Streets Implementation Plan* is a follow-up to the *Guide to Complete Streets Policy Development*. The purpose of this document is to show municipalities how to translate policy into action, how to take a municipal Complete Streets Policy and use it as a roadmap for implementing strategies, procedures, plans, and projects in ways that create networks of safe, multimodal streets that reflect local travel needs, priorities, and community context.

The *Guide to Policy Development* described the process of writing and adopting a Complete Streets policy: how to understand and respond

to local context, issues, and needs; address concerns about liability; and build local support for policy adoption. A model policy template is also provided to guide the development of a relevant and effective policy.

Whereas the *Guide to Policy Development* makes the case for Complete Streets and leads to the point where policies begin to come into everyday use, *NJDOT's Guide to Creating a Complete Streets Implementation Plan* empowers municipal decision makers and professionals to get it done through a comprehensive program of planning, training, and design initiatives.



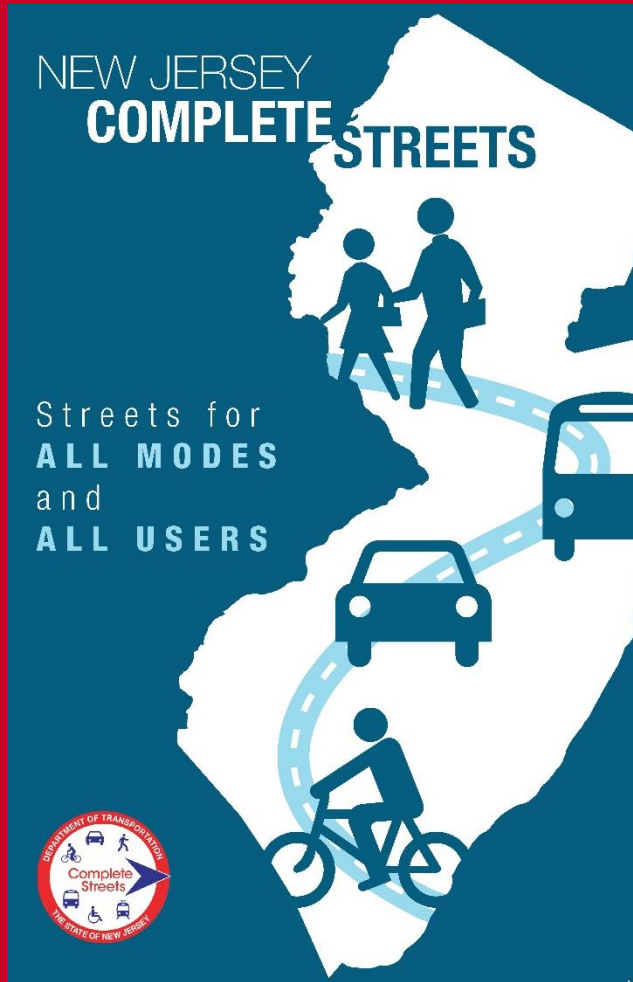
This striped bicycle lane fits the local context, improves safety and mobility, and completes the Street in Wildwood, NJ

And the momentum is building – by November of 2012 more than 40 New Jersey jurisdictions had adopted a Complete Streets policy, more than any other state. But getting our municipal leaders and professionals to write and adopt Complete Streets policies is just the first step on the journey to building safe streets, improving mobility and access, and creating healthy, sustainable communities.

Incorporating multimodal accommodations into the routine planning, design, maintenance, and operations of our street systems and communities requires more than just understanding and agreeing with a two or three page policy that has been adopted by the governing body. For successful implementation, Complete Streets must become ingrained in even the most routine actions and undertakings of our villages, towns, and cities.

Researchers tell us that the strategies, projects, and improvements that promote and accommodate multimodal travel occur most often at the local level where the demand is, but that the support that makes it all possible – the policies and traffic regulations, design standards and guidelines, training and dissemination of expertise, and funding – typically comes from the state and national level.⁽¹⁾

COMPLETE STREETS INFOGRAPHIC



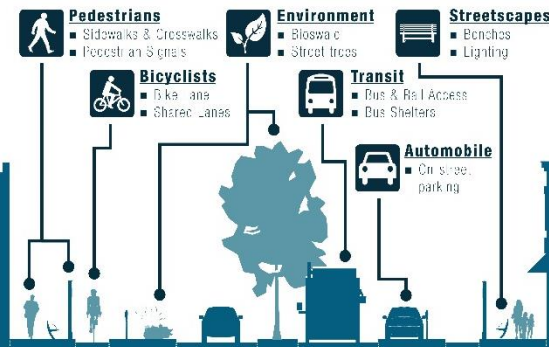
COMPLETESTREETS

Complete Streets are streets designed for **ALL USERS, ALL MODES** and **ALL ABILITY LEVELS**. They balance the needs of drivers, pedestrians, bicyclists, transit vehicles, emergency responders, and goods movement based on the context of the roadway.



DESIGNTOOLKIT

Each street has unique needs; dependent on its community context. A Complete Street in a rural area might look quite different than a Complete Street in an urban area but both are designed to maximize safety and accessibility for all current and potential users. Design elements provide the tools to complete any street in any context. These may include, but are not limited to, those displayed below.



PLANADOPTION

- Find a local champion
- Educate local officials and the public
- Involve stakeholders



PLANIMPLEMENTATION

- Update local planning, zoning and design procedures
- Train staff, professionals, and decision makers
- Form partnerships with business and civic groups
- Initiate pilot projects

LIABILITY

Does the pursuit of safety by implementing Complete Streets plans, design, and construction expose an agency to liability? NO!

In New Jersey, these types of improvements are immune from liability provided the plan, design, or improvement has been approved by an official body, approved by a public employee exercising discretion, and is in conformity with standards previously approved by an authorized entity or person.

OUTREACH EVENTS AND WORKSHOPS

- Complete Streets Summit – 2013 and 2015
- Bicycle and Pedestrian Advisory Council (BPAC)
 - Meets quarterly
- Policy, Planning, and Design – 16 Workshops
- Complete Streets Implementation – 4 Workshops