

West Windsor Township Bikeway/ Trail Plan

Mercer County , New Jersey
NJDOT Bicycle/Pedestrian Planning Assistance

Project Steering Committee Meeting #1
October 21, 2003



The Planning Process

- ◆ Form Steering Committee
- ◆ Inventory existing conditions
 - Identify areas with high numbers of bicycle and pedestrian crashes
 - Identify generators/destinations
 - Determine compatibility of existing roadways
- ◆ Identify potential corridors for bikeways/ trails and preferred facility type
- ◆ Develop concept improvements for target areas
- ◆ Develop pedestrian improvement recommendations for Princeton Junction area
- ◆ Develop design standards for new facilities
- ◆ Amend Township Master Plan

Overview of Existing Conditions

- ◆ Review existing data
 - Bicycle and pedestrian crash data
 - Prior planning efforts
- ◆ Field views
 - Existing facilities
 - Compatibility analysis
- ◆ Mapping
 - Crash locations
 - Environmental features
 - High activity areas/bicycle and pedestrian generators and destinations
 - Existing facilities (bike lanes, trails), pedestrian facilities in Princeton Junction area, and bicycle compatibility analysis

Bicycle and Pedestrian Crash Analysis

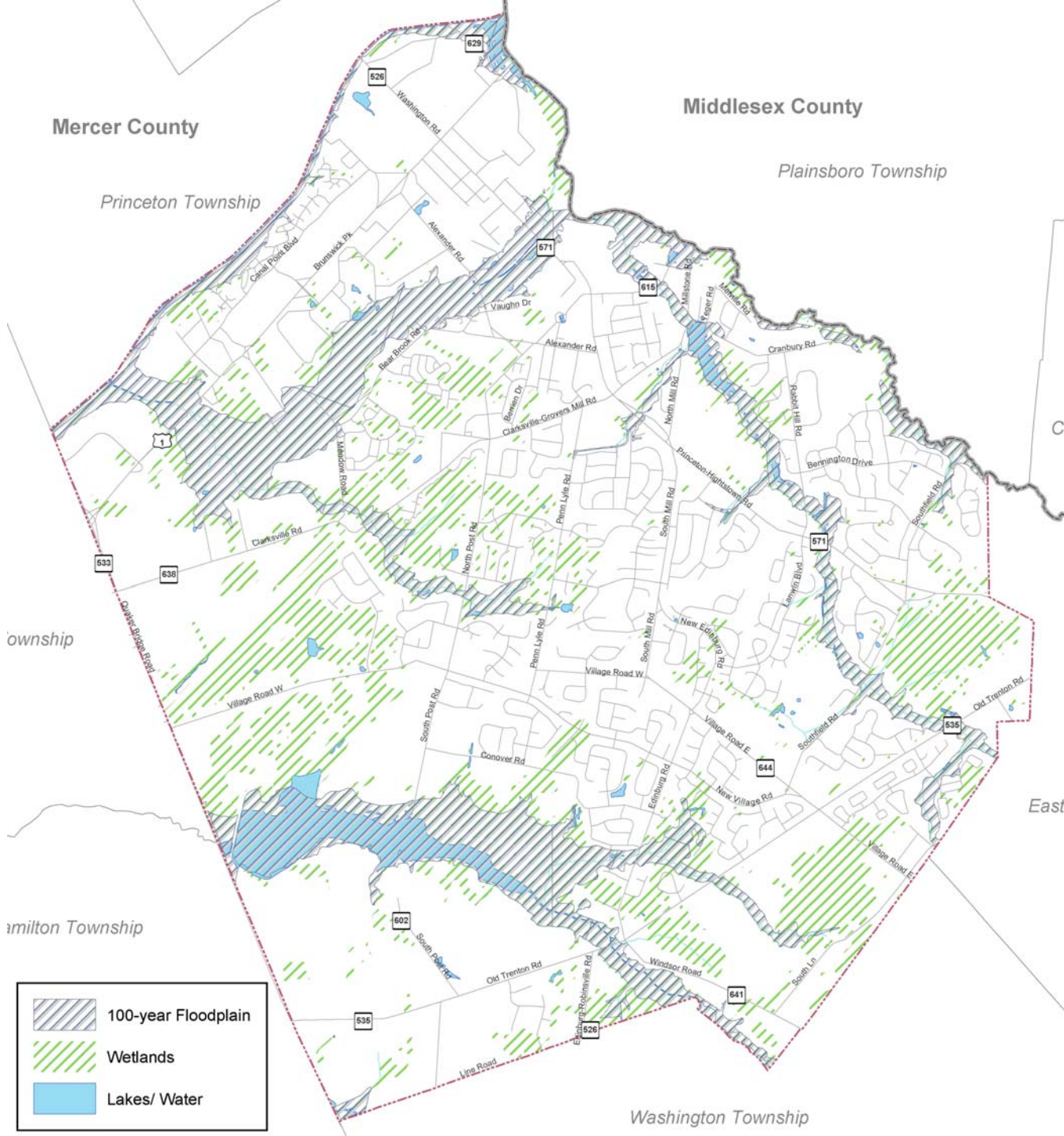
Bicycle Crashes




- 3 bicycle crashes reported from January 2001 to July of 2003
- Two crashes occurred on Township arterial roads (Washington Road and Alexander Road)

Pedestrian Crashes

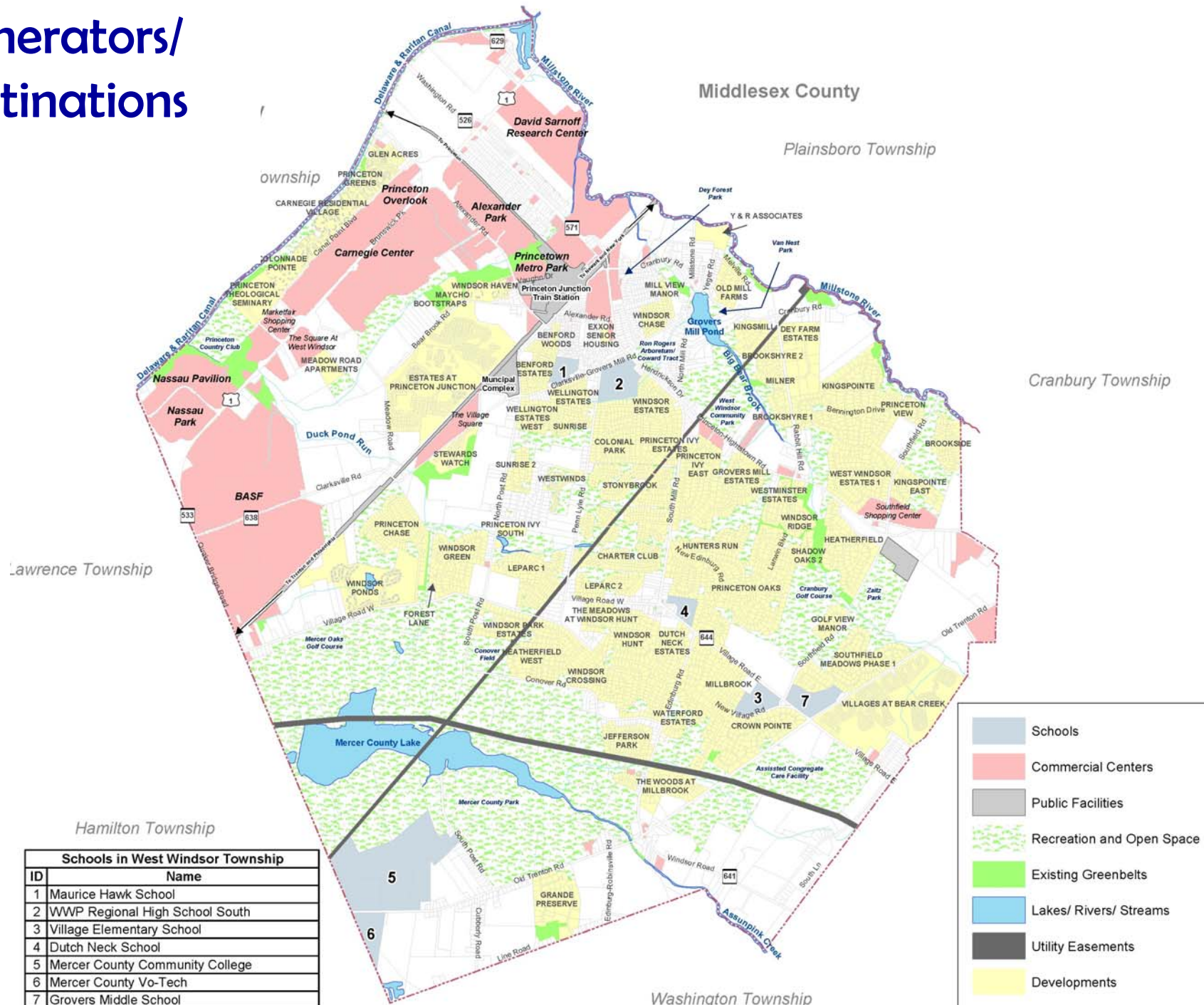
- 21 pedestrian crashes reported from January 2001 to July of 2003
- Two fatal crashes
 - ◆ US 1 at Nassau Park Boulevard
 - ◆ Alexander Road at Vaughn Drive
- 7 crashes in Nassau Park Shopping Center parking lot
- 2 crashes near Princeton Junction Train Station

Environmental Features



	100-year Floodplain
	Wetlands
	Lakes/ Water

Generators/ Destinations



Schools in West Windsor Township	
ID	Name
1	Maurice Hawk School
2	WWP Regional High School South
3	Village Elementary School
4	Dutch Neck School
5	Mercer County Community College
6	Mercer County Vo-Tech
7	Grovers Middle School

- Schools
- Commercial Centers
- Public Facilities
- Recreation and Open Space
- Existing Greenbelts
- Lakes/ Rivers/ Streams
- Utility Easements
- Developments

Existing Facilities-Bike Lanes

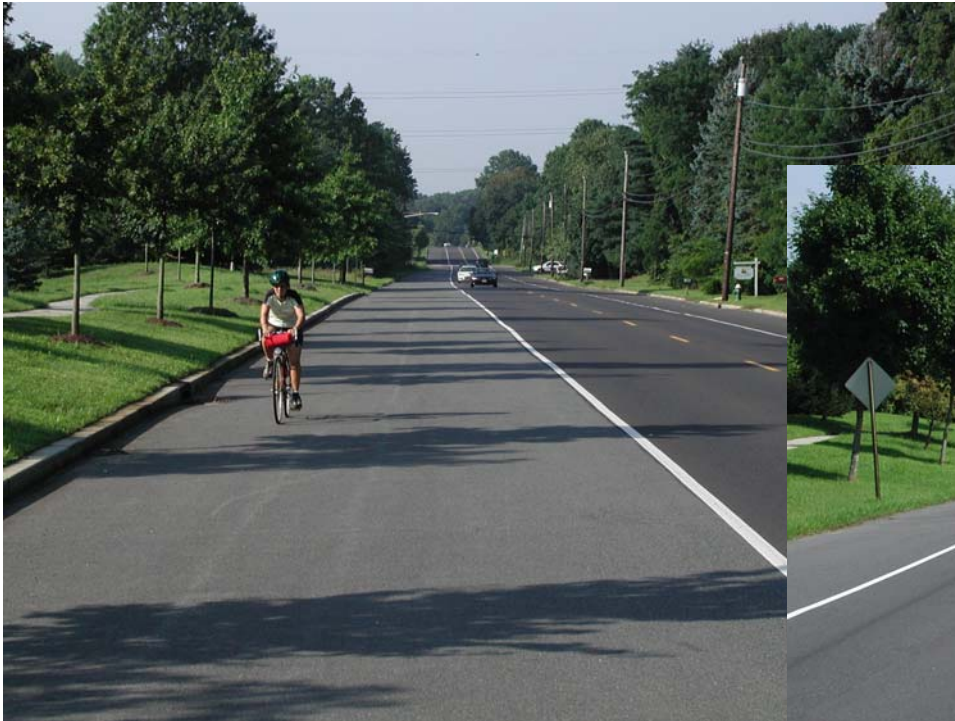


New Edinburg Road



New Village Road

Existing Facilities – Shoulders



Edinburg Road



South Mill Road

Existing Facilities - Recreational/ Off-road Trails



Mercer County Park



Duck Pond Run

Existing Traffic Calming



Alexander Road

Bicycle Parking



West Windsor Library



Princeton Junction Train Station

NJDOT Bicycle Compatibility Guidelines

ADT 1,200 – 2,000

Speed Limit	Urban w/ Parking	Urban w/o Parking	Rural
< 30 mph	Shared lane (12 ft.)	Shared lane (11 ft.)	Shared lane (10 ft.)
31-40 mph	Shared lane (14 ft.)	Shared lane (14 ft.)	Shared lane (12 ft.)
41-50 mph	Shared lane (15 ft.)	Shared lane (15 ft.)	Shoulder (3 ft.)
>50 mph	Not Applicable (NA)	Shoulder (4 ft.)	Shoulder (4 ft.)

NJDOT Bicycle Compatibility Guidelines

ADT 2,000 – 10,000

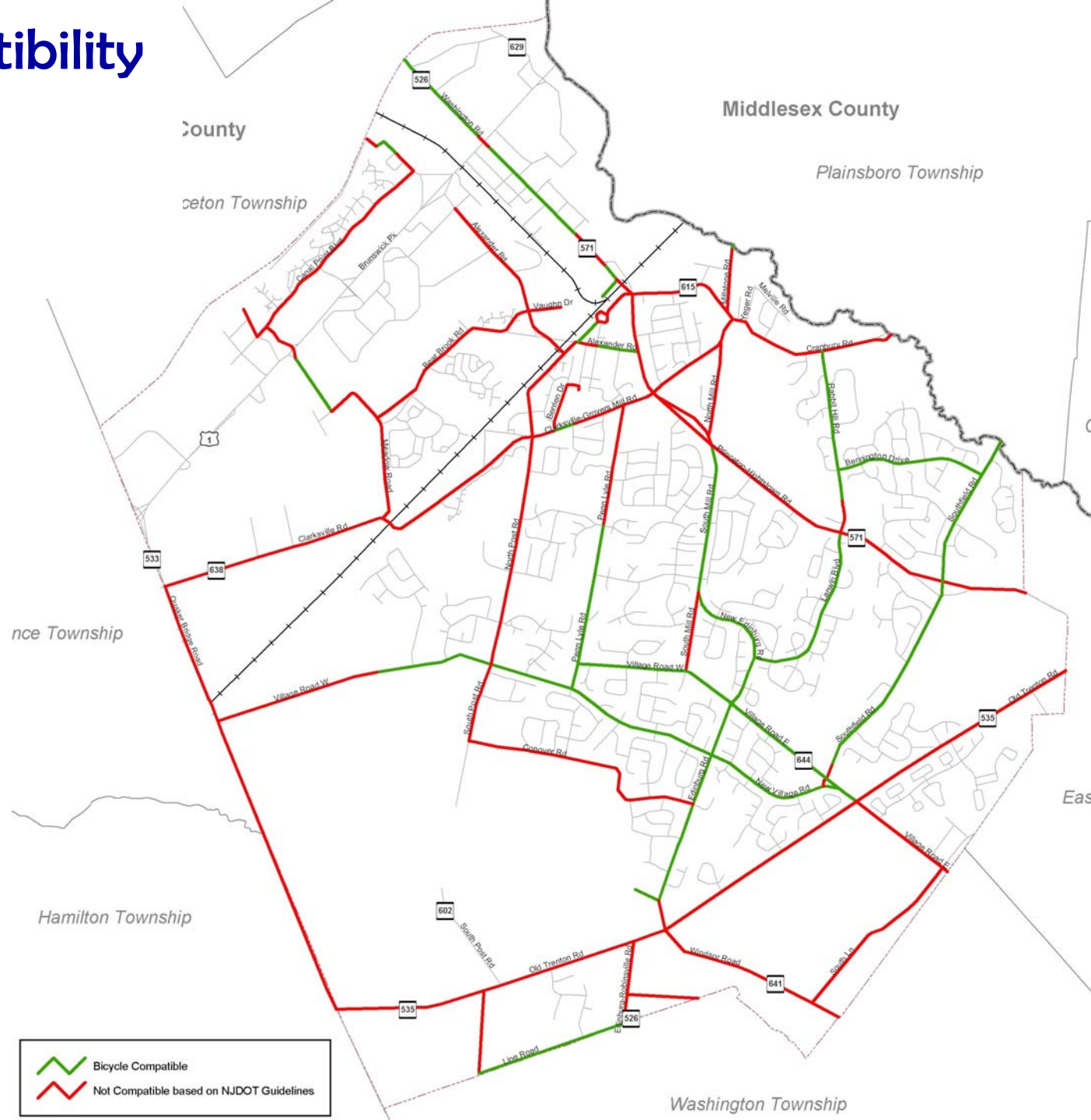
Speed Limit	Urban w/ Parking	Urban w/o Parking	Rural
< 30 mph	Shared lane (14 ft.)	Shared lane (12 ft.)	Shared lane (12 ft.)
31-40 mph	Shared lane (14 ft.)	Shared lane (14 ft.)	Shoulder (3 ft.)
41-50 mph	Shared lane (15 ft.)	Shared lane (15 ft.)	Shoulder (4 ft.)
>50 mph	NA	Shoulder (6 ft.)	Shoulder (6 ft.)



NJDOT Bicycle Compatibility Guidelines

ADT over 10,000/over 5% trucks

Speed Limit	Urban w/ Parking	Urban w/o Parking	Rural
< 30 mph	Shared lane (14 ft.)	Shared lane (14 ft.)	Shared lane (14 ft.)
31-40 mph	Shared lane (14 ft.)	Shoulder (4 ft.)	Shoulder (4 ft.)
41-50 mph	Shared lane (15 ft.)	Shoulder (6 ft.)	Shoulder (6 ft.)
>50 mph	NA	Shoulder (6 ft.)	Shoulder (6 ft.)

Bicycle Compatibility



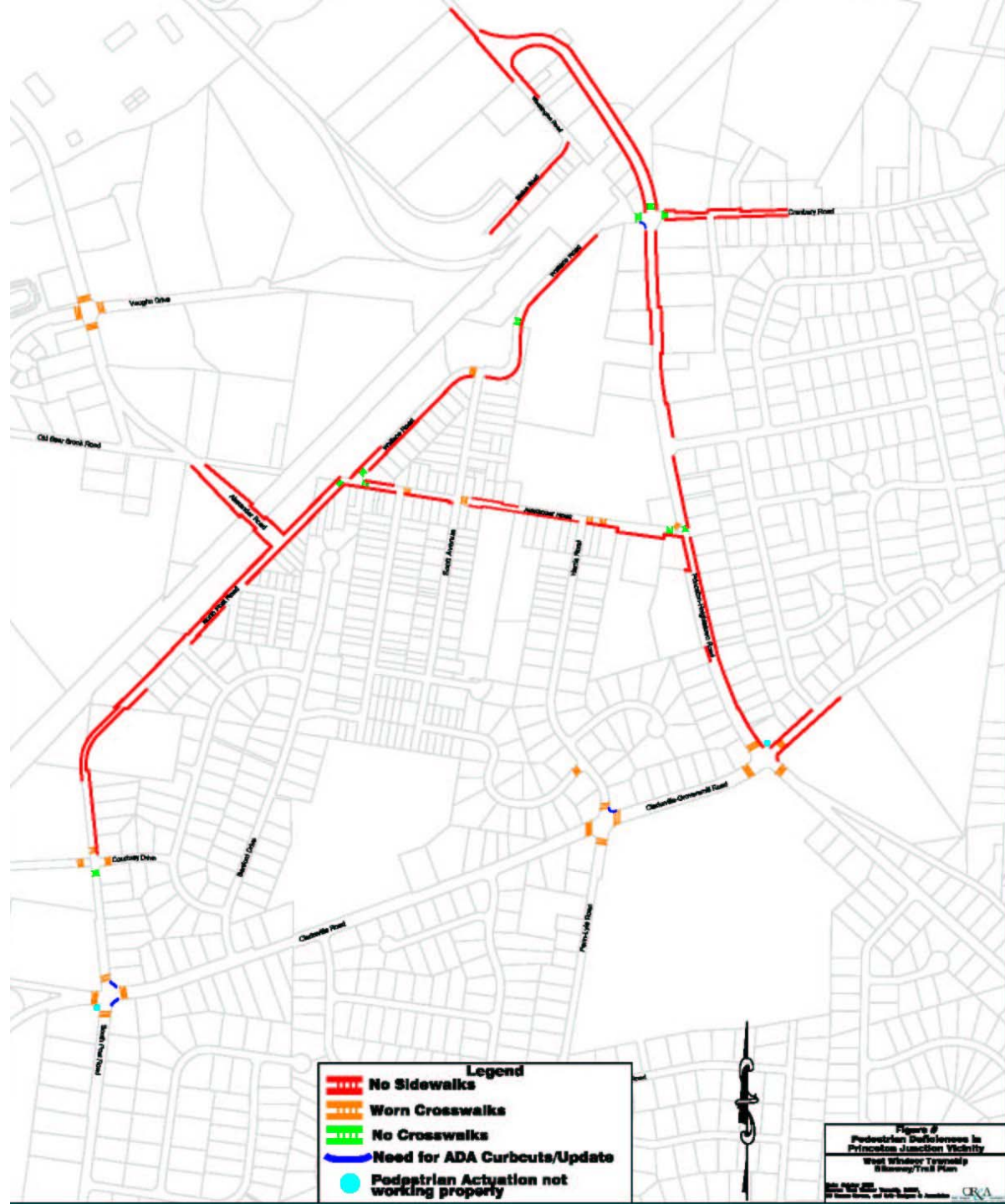
	Bicycle Compatible
	Not Compatible based on NJDOT Guidelines

Princeton Junction Area Pedestrian Deficiency Analysis

Existing Conditions Analysis:

- Identify missing links within sidewalk network
- Identify locations in need of crossing improvements, including:
 - ◆ Faded or worn/ missing crosswalks
 - ◆ Low visibility crosswalks near generators
 - ◆ Lack of pedestrian push buttons
 - ◆ Pedestrian actuation not working properly
 - ◆ Need for ADA curb cuts

Pedestrian Deficiencies



Issues/Constraints

- ◆ Lack of shoulders
- ◆ Shoulders/bike lanes disappear at intersections
- ◆ Gaps in sidewalk network
- ◆ Narrow/discontinuous multi-use paths
- ◆ Unsafe drainage grates
- ◆ Utilities close to roadway edge
- ◆ Existing easements – do agreements allow for public use/ public access?

Lack of Shoulders



South Post Road



North Mill Road

Bike lanes/ Shoulders Disappear at intersections



Village Road West/ North Post Road



New Village Road/ Edinburg Road

Gaps in Sidewalk Network



Alexander Road/ Wallace Road



Edinburg Road/ Village Road West

Narrow/ Discontinuous Multi-use Paths



Path entrance to D&R Greenway



Footbridge over Bridegroom Run

Unsafe Drainage Grates



Old Trenton Road



Carnegie Center Drive

Utilities Up Against Cartway



Princeton-Hightstown Road



Clarksville Road

Initial Recommendations

- ◆ Add shoulders/bike lanes where feasible
- ◆ Install bicycle-friendly loop detectors/video enhanced signals @ high activity intersections
- ◆ Install bike route signage
- ◆ Install STR signage
- ◆ Develop guidelines to assist with bicycle parking installation
- ◆ Require future paths in new developments to be at least 8' wide
- ◆ Continue to implement multi-use trail network
- ◆ Install pedestrian improvements, especially in Princeton Junction area

Multi-use Trails

- ◆ Township is acquiring, open space along proposed greenbelts
- ◆ Potential to provide multi-use trails
 - 8-10' paved paths should be considered in some locations to accommodate a wider range of users
 - Challenges include wetlands, floodplains, stream and road/rail crossings
 - Requires coordination and support of homeowner's associations and property owners

Next Steps

- ◆ Prepare Existing Conditions Memorandum (November)
- ◆ Identify 4 spot locations for more detailed recommendations (December)
- ◆ Hold 2nd Steering Committee Meeting (December)
- ◆ Hold Workshop with Committee & Bicycle Community/Residents (January)
- ◆ Prepare Draft Plan & present to Committee and to Council/Planning Board (March/ April)
- ◆ Prepare Master Plan Amendment (April/ May)