

# The Brandywine Valley Scenic Conservation Plan

2<sup>nd</sup> Meeting of the  
Conservation Committee  
February 10, 2010



# Agenda / Meeting Purpose

## I. Overview presentation

- Introduction
- Where we are in the Project
- Existing Conditions Report
- Viewshed Analysis Report

## II. Committee comments and discussion

## III. Next steps

A scenic view of a large, multi-story house on a hill, surrounded by bare trees and a field. The word "Introduction" is overlaid in white text. The house is a large, multi-story building with a prominent chimney and a small tower or cupola. It is situated on a grassy hillside. The foreground is dominated by a dense forest of bare trees, suggesting a late autumn or winter setting. A dirt road or driveway is visible in the lower right corner, with a trailer and some equipment parked on it. The overall atmosphere is quiet and somewhat somber due to the lack of foliage.

# Introduction

# Threats to the Byway:

- Chaotic development alien to the character of towns/landscapes
- Increase in unmanaged traffic
  - Inhibiting mobility of residents and visitors
  - Limiting modes of access (especially peds and bikes)
- Loss of this national treasure as a tourist asset

# Initial Goals of the Plan

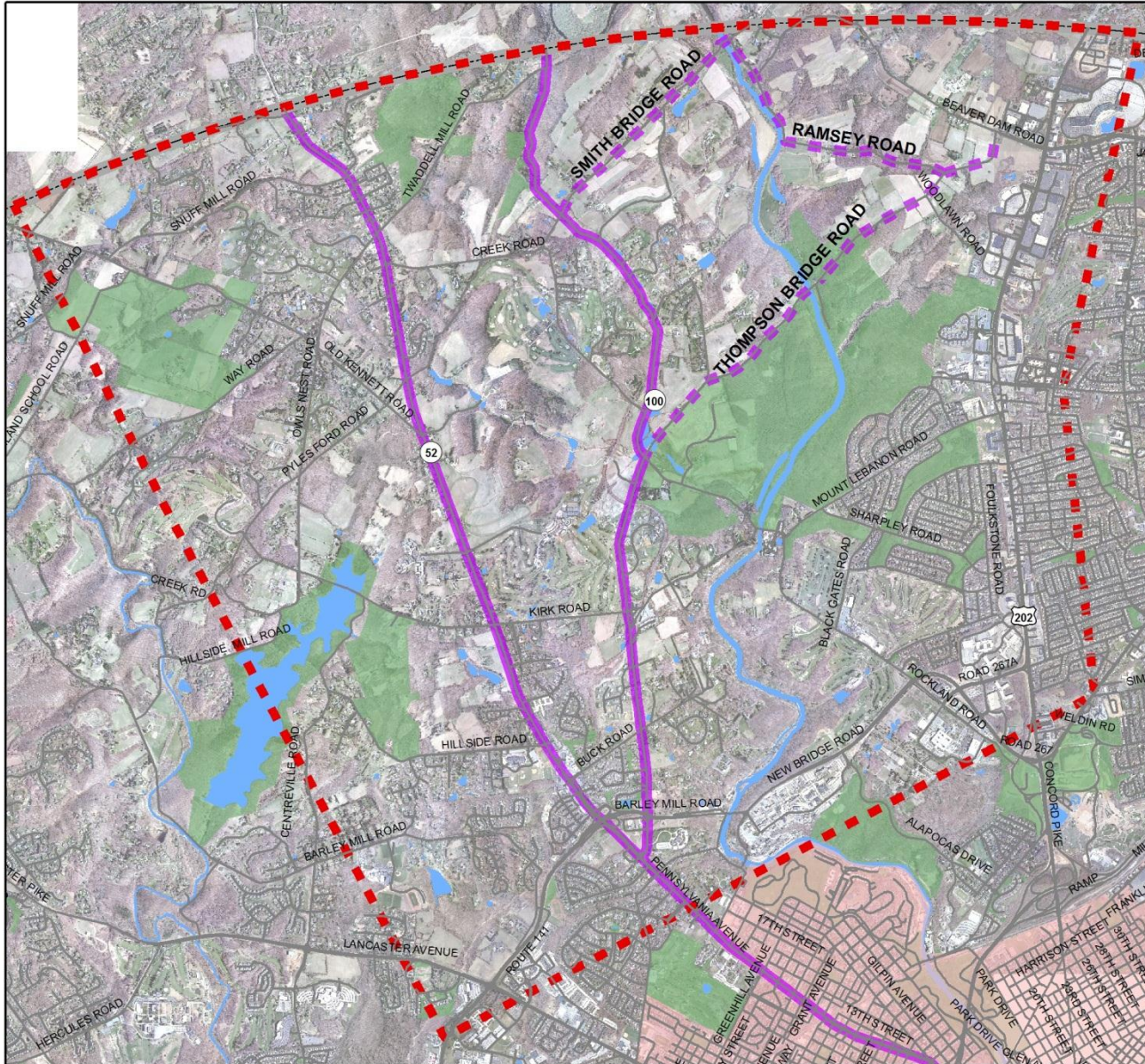
1. Maintain the character and experience of the Byway
2. Preserve land value
3. Provide safe, convenient access for residents, businesses, and visitors

## Goal 3 of the CMP:

“to establish a **collaborative, interdisciplinary approach** to developing and implementing all future transportation projects along the byway, involving all stakeholders to ensure that transportation projects are in harmony with the byway communities; **to preserve and enhance environmental, scenic, aesthetic, and historic resources while enhancing safety and mobility...**”

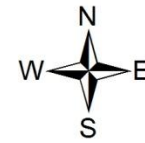
# Land Use Study Area

## I. Introduction



### Legend

- Land Use Study Area
- PA / DE State Line
- Byway
- Proposed Byway Extension
- City of Wilmington
- Water Body
- Public Parks and Open Space
- Road Centerline



0 0.5 1 1.5 Miles

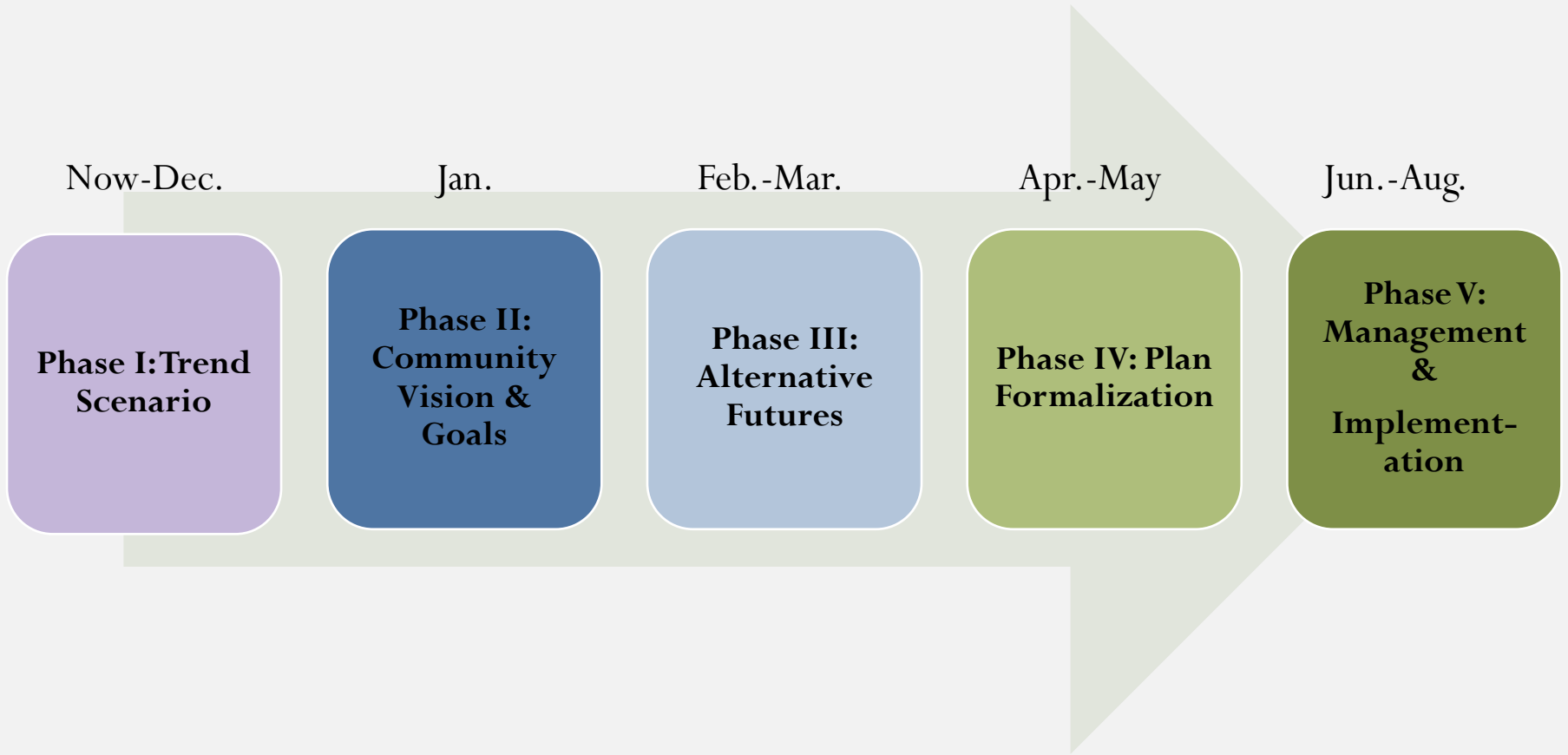
Map Created: November 22, 2010  
By: Andrea Trabelsi, Delaware Greenways  
Data Source: Delaware Dept. of Transportation, Delaware DataMIL



A scenic view of a small waterfall cascading over a stone wall into a rocky stream, surrounded by bare trees in a wooded area. The waterfall is the central focus, with water flowing over a low stone wall and creating white foam as it falls into a stream. The stream is filled with dark, smooth rocks and is surrounded by a dense forest of bare trees, suggesting a late autumn or winter setting. The background shows a hillside covered in fallen leaves and more trees. The overall atmosphere is peaceful and natural.

Where we are  
in the Project

# Timeline



Now-Dec.

Jan.

Feb.-Mar.

Apr.-May

Jun.-Aug.

**Phase I: Trend  
Scenario**

**Phase II:  
Community  
Vision &  
Goals**

**Phase III:  
Alternative  
Futures**

**Phase IV: Plan  
Formalization**

**Phase V:  
Management  
&  
Implement-  
ation**



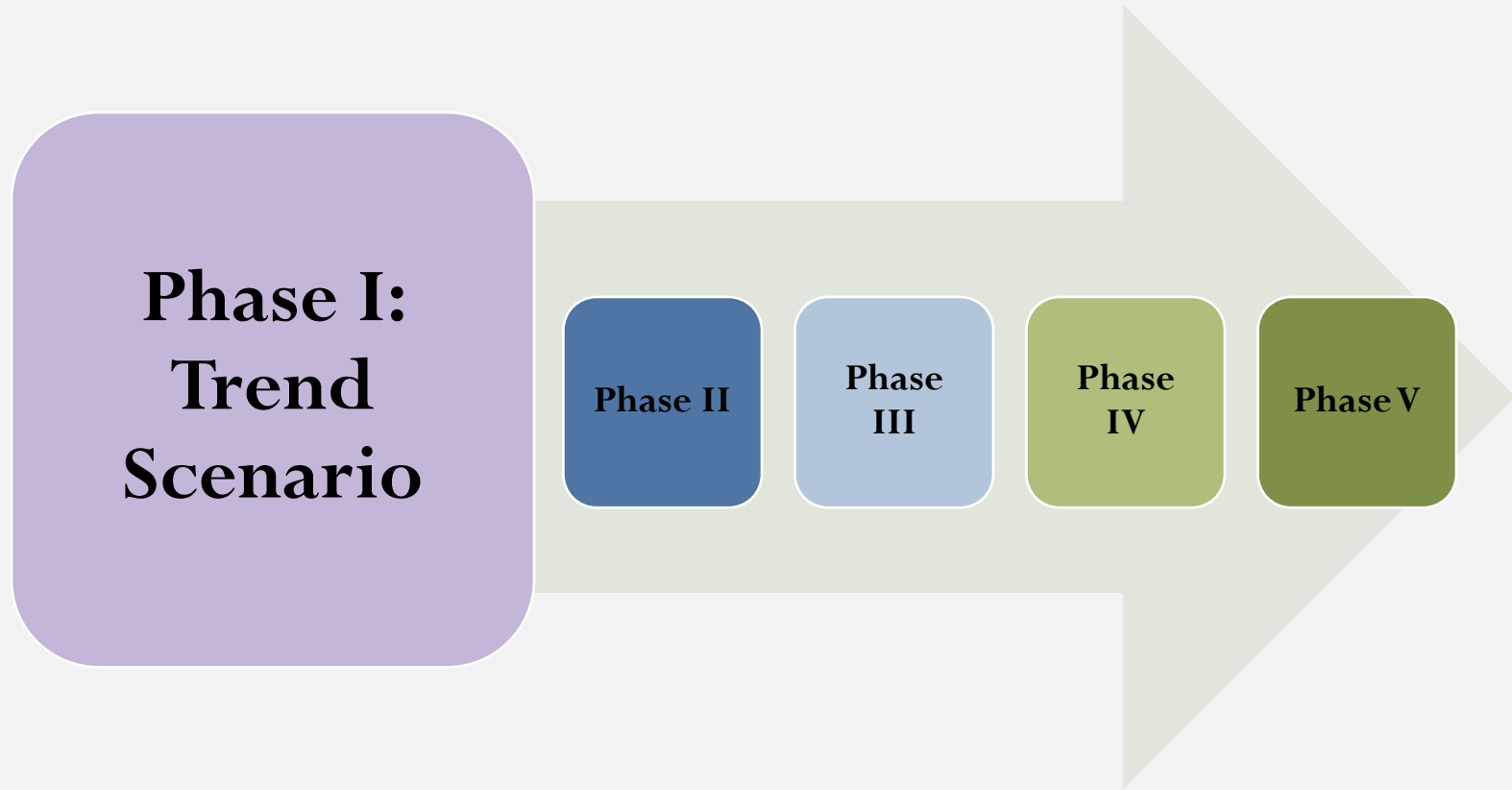
**Phase I:  
Trend  
Scenario**

**Phase II**

**Phase  
III**

**Phase  
IV**

**Phase V**



## Phase I

# Develop the Trend Scenario

Answers the question:

What will the future look like if current practices continue?



**This  
Meeting**

- ✓ Inventory of existing environmental, demographic and transportation conditions
- ✓ Inventory of visual environment
- ✓ Identification of prime viewsheds and their threats

**Next  
Meeting**

- Analysis of how the study area is impacted under current regulatory and market trends



# Existing Conditions Report

# Topics Covered

- Land Use
  - Geography and Natural Environment
  - Historic and Current Population and Land Use
  - Protected Lands
  - Current Zoning
  - Infrastructure
  - Land Use Contexts

# Topics Covered (continued)

- Transportation
  - Physical Characteristics of the Roadways
  - *Crash Analysis*
  - *Functional Classification*
  - Traffic Volumes
  - *Roadway Typology*
  - Currently Planned Improvements
  - *Non-Motorized Transportation*
  - Public Transportation

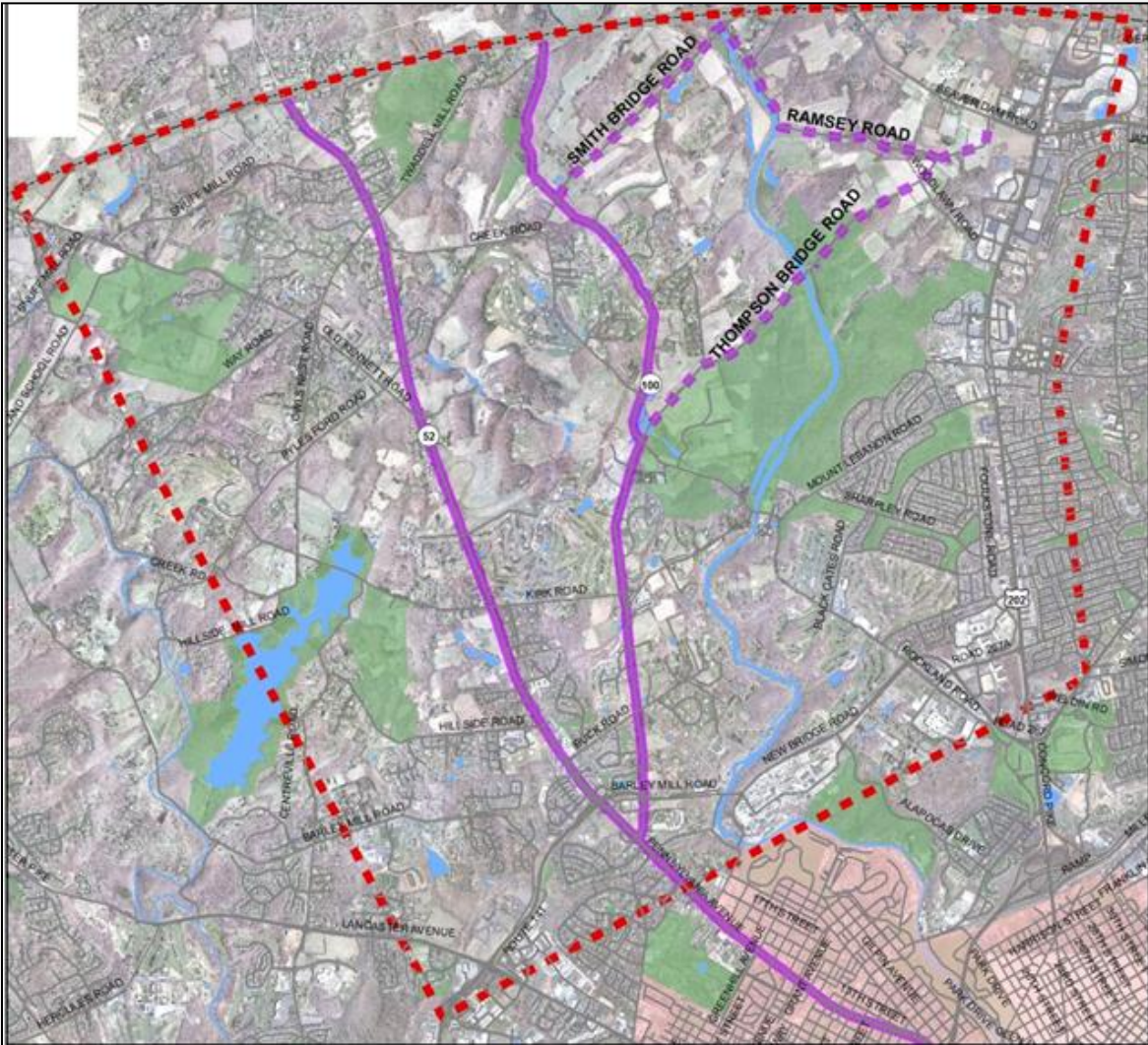
# Topics Covered (continued)

- Synthesis of Existing Key Issues
  - Linking Land Use and Transportation
  - Transportation Design Implications
  - Emerging Issues (at the end of the presentation)



# Land Use

# Land Use Study Area



- ### Legend
- Land Use Study Area
  - PA / DE State Line
  - Byway
  - Proposed Byway Extension
  - City of Wilmington
  - Water Body
  - Public Parks and Open Space
  - Road Centerline



Map Created: November 22, 2010  
By: Andrea Trabelsi, Delaware Greenways  
Data Source: Delaware Dept. of Transportation, Delaware DataMIL





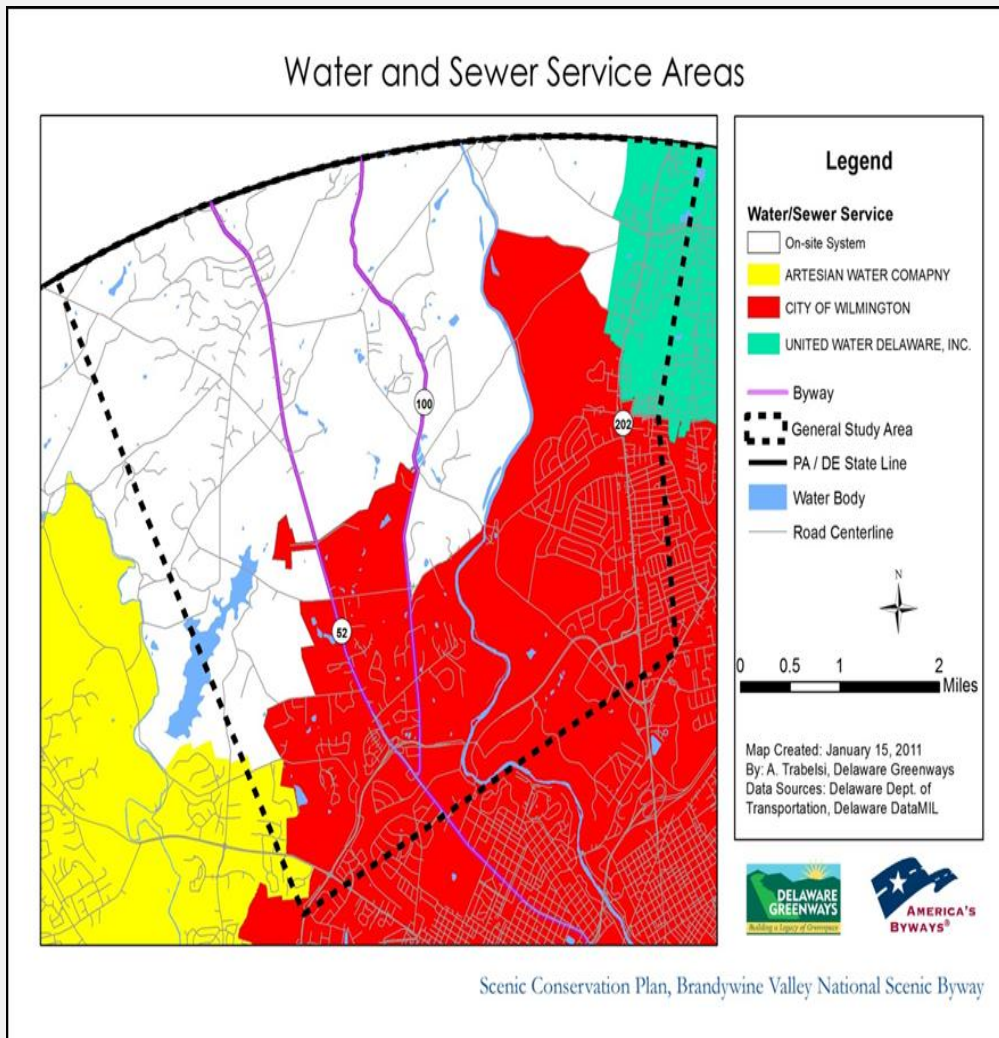
# Protected Lands



## Protection Status

<b>Total Study Area</b>	<b>16,000 acres</b>
<b>Land Preserved by Conservation Easement</b>	1,900 acres
<b>Parks, other public open space, dedicated private or community owned open space</b>	4,400 acres
<b>Lands in the Agricultural Preservation Program</b>	400 acres
<b>Remaining unprotected lands</b>	9,300 acres

# Infrastructure



Scenic Conservation Plan, Brandywine Valley National Scenic Byway

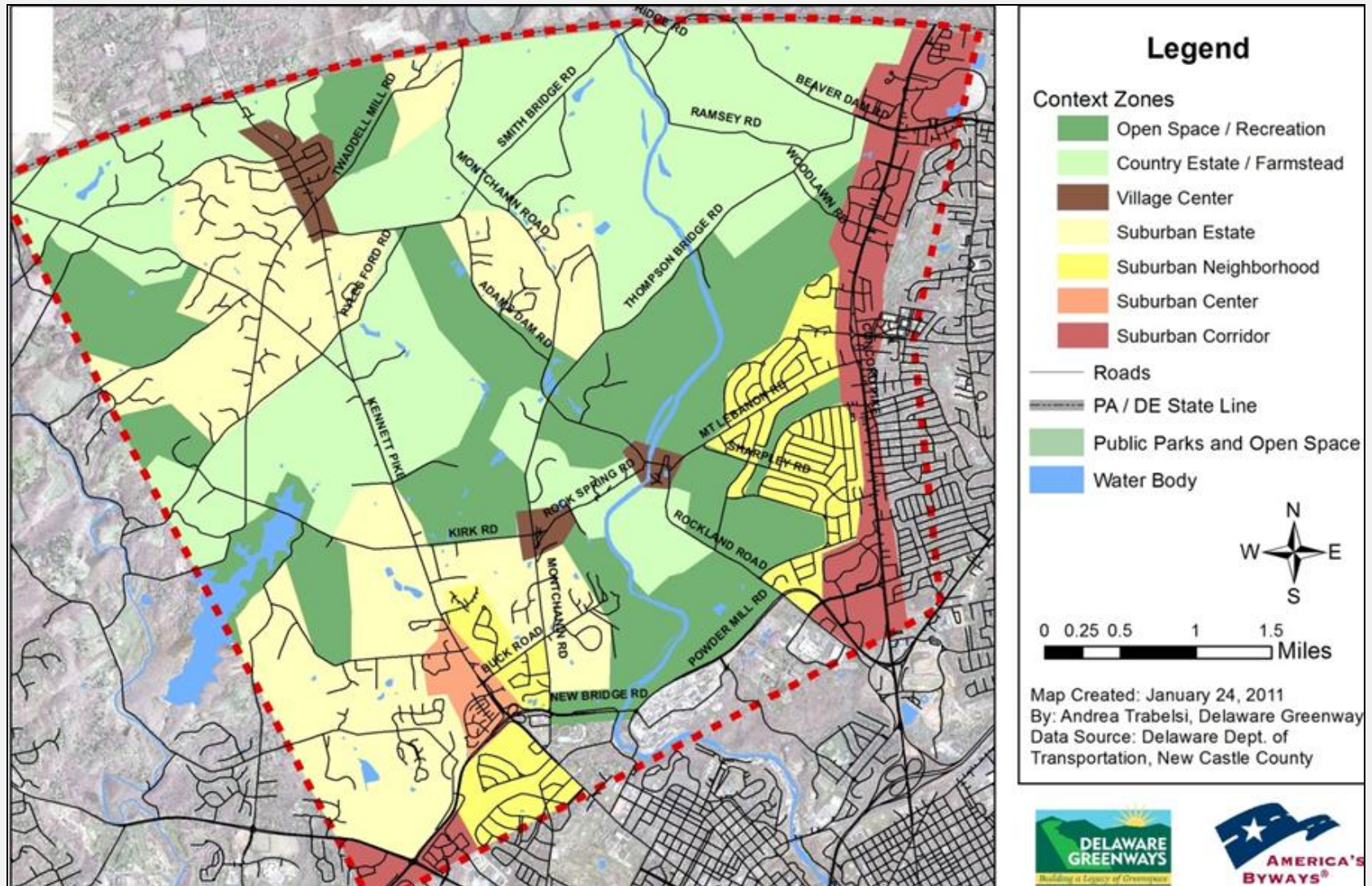
- Water and Sewer Service areas are generally coincident (shown as colored in map)
- Non-served areas use well water and on-site sewage.
- County uses non-served areas as a growth management tool.

# Land Use Contexts



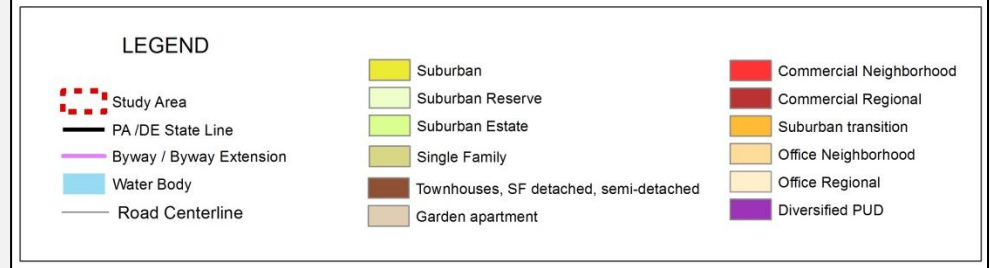
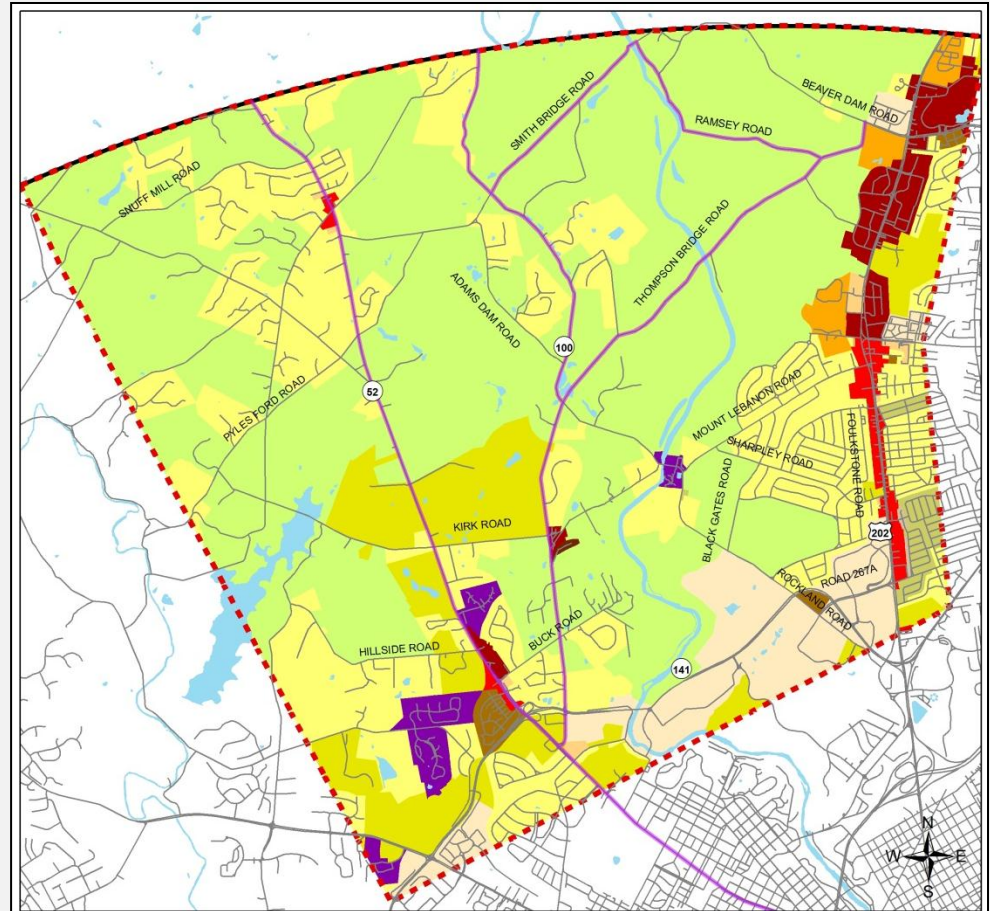
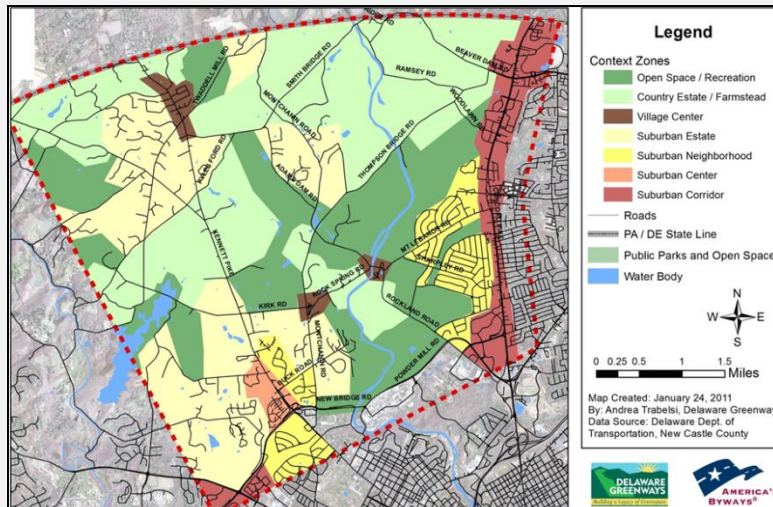
- Land Use Contexts:
  - Suburban Estate
  - Open Space / Recreation
  - Village Center
  - Suburban Neighborhood
  - Country Estate Farmstead
  - Suburban Center
  - Suburban Corridor

# Existing Land Use Context Map



# Zoning Map

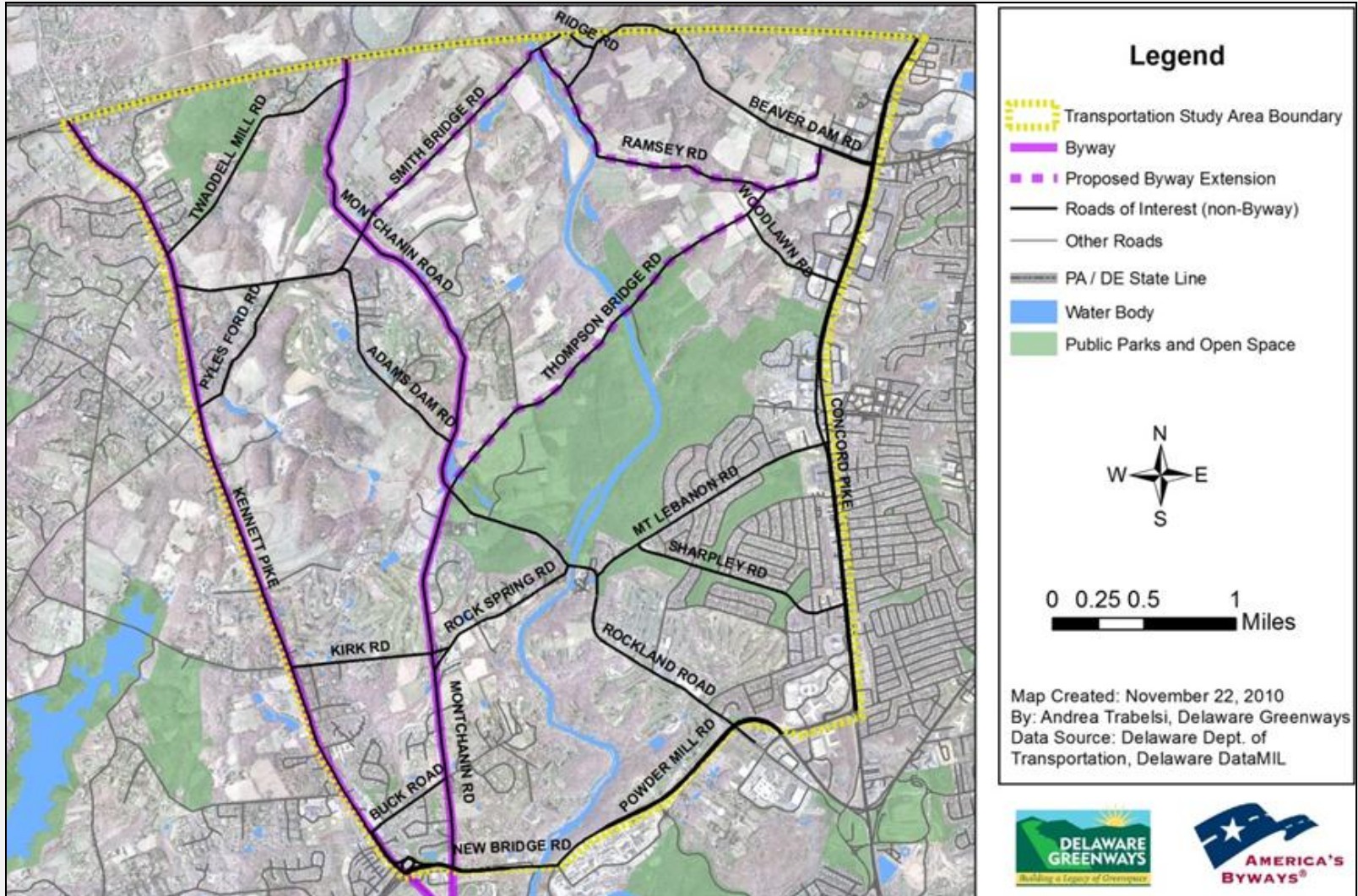
Context Zones (for comparison)



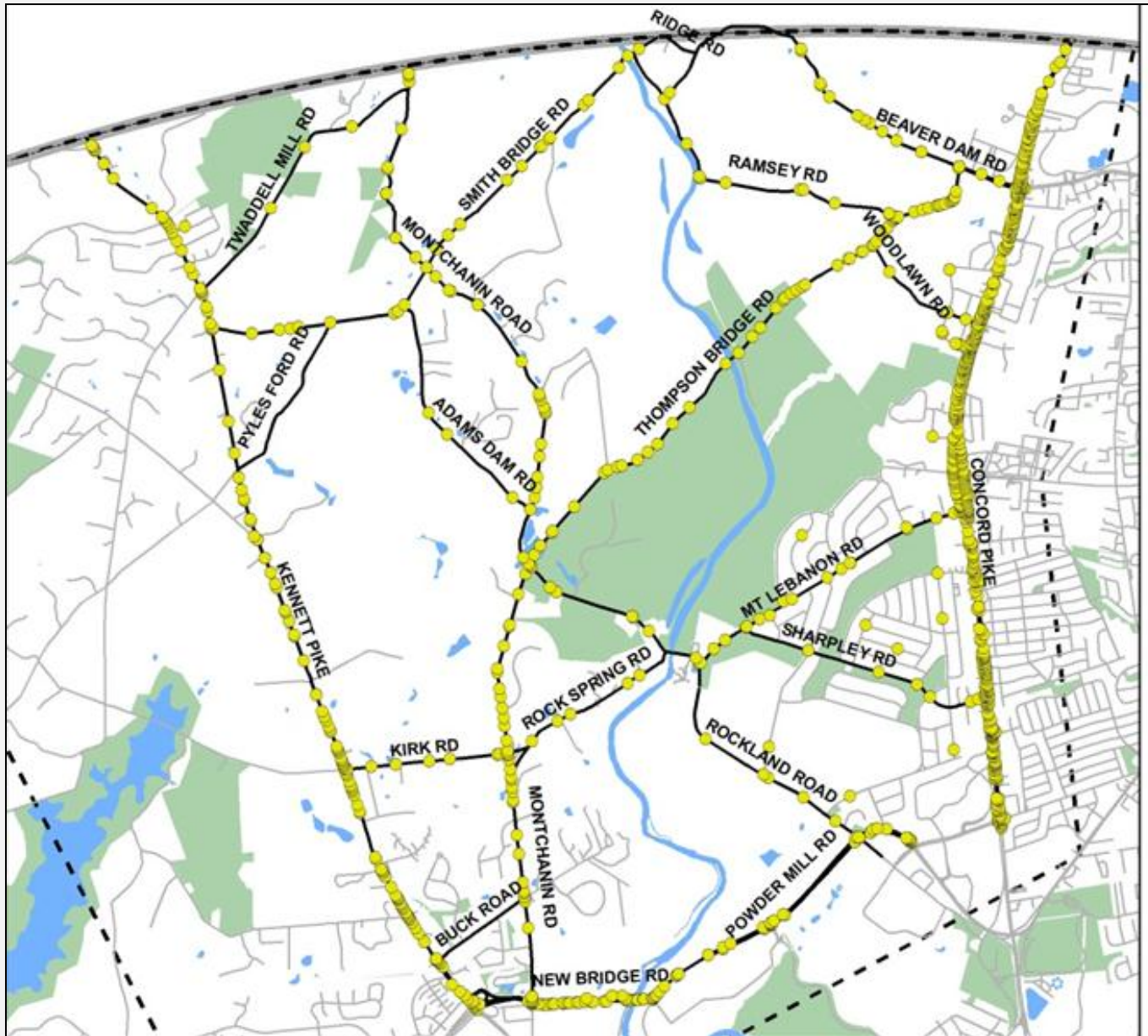


# Transportation

# Study Area Roadways



# Study Area Crashes





# Study Area Crashes

**Table 3.3-A: Crashes by Roadway**

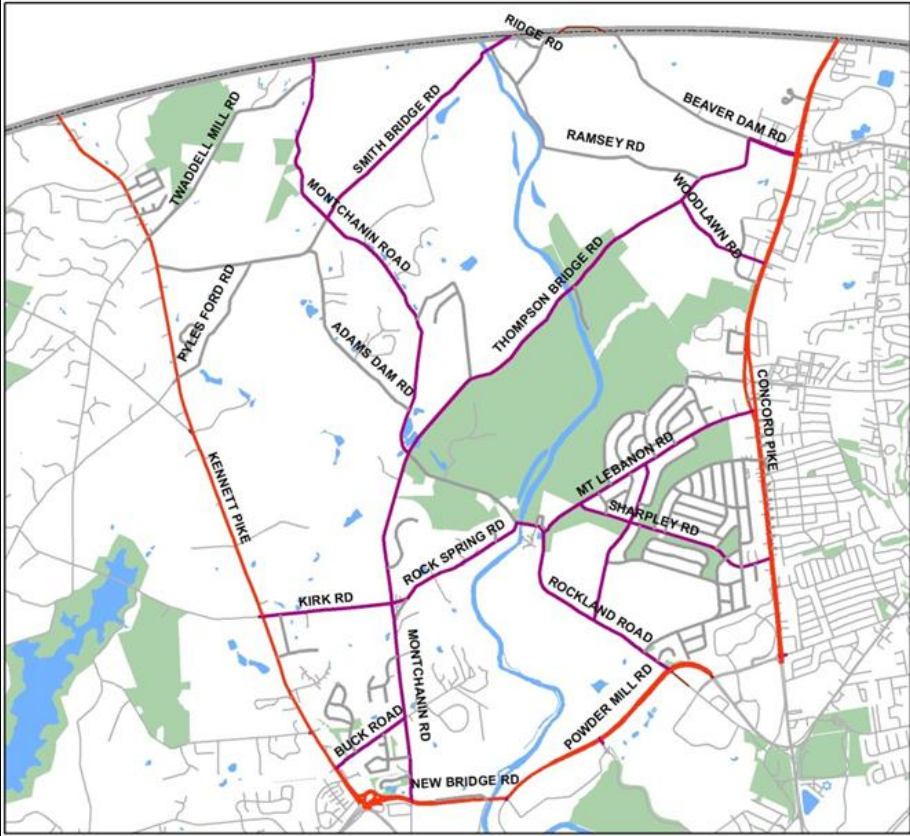
<b>Roadway</b>	<b>Total Crashes</b>	<b>Injury Crashes</b>	<b>Fatalities Crashes</b>	<b>Pedestrian Crashes</b>
Route 202	726	32	1	4
Route 52	178	10	1	1
Montchanin Road	114	4	0	0
Thompson Bridge Road	72	4	0	0
Beaver Valley Road	15	3	0	0
Route 141	51	4	2	0
Center Meeting Road	7	0	0	0
Mt Lebanon Road	22	0	0	0
Ramsey and Creek Roads	17	3	0	0
Adams Dam Road	7	1	0	0
Rockland Road	13	0	1	0
Kirk Road	5	1	0	0
Smith Bridge Road	13	1	0	0
Buck Road	0	0	0	0
Twaddle Mill Road	3	0	0	0
<b>Totals</b>	<b>1243</b>	<b>63</b>	<b>5</b>	<b>5</b>

# Crash Facts

- Key Clusters: Rt. 52/82 Intersection, Rt. 92 Ramsey to Beaver Valley, Rt. 100 at Kirk and Rock Springs
- Crash Rates: Ramsey/Creek and Beaver Valley: Four times higher than similar roadways.
- Day of Week: Most crashes occur on Friday; no other day is close
- Manner of Impact: Byway: 33%, Backroads: 56% are run off road crashes

# Functional Classification

Roadway Functional Classifications



**Legend**

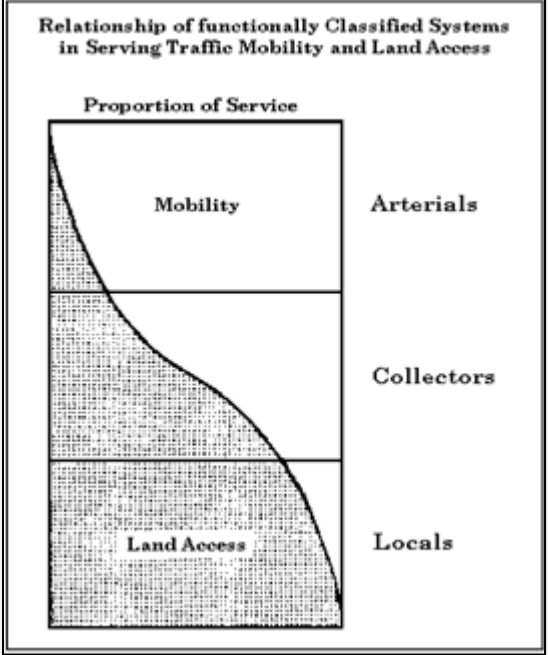
Roadway Functional Class

- Principal arterial
- Major collector
- Local roads
- Other roads (unclassified / outside study area)
- PA / DE State Line
- Water Body
- Public Parks and Open Space

N  
W — E  
S

0 0.25 0.5 1  
  
 Miles

Map Created: November 22, 2010  
 By: Andrea Trabelsi, Delaware Greenways  
 Data Source: Delaware Dept. of Transportation, Delaware DataMIL



# Problem with Functional Classification

Both of these Roadways are Principal Arterials  
Should improvement designs use the same design criteria?



Route 202



Route 52

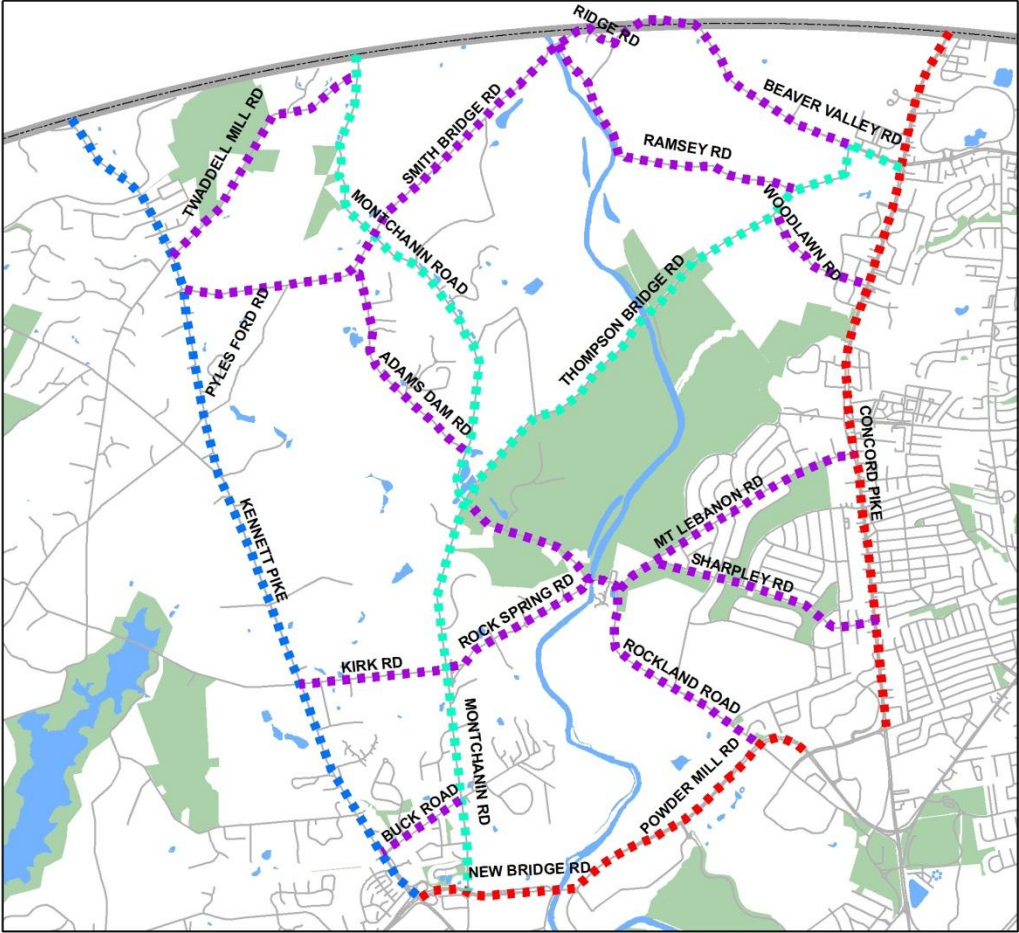
# Roadway Type

Roadway Class	Roadway Type
Arterial	Regional
Arterial	Community
Collector	Community
Collector	Neighborhood
Local	Local

- Roadway Type is based upon:
  - Type of trip served (through or local)
  - Adjacent land use
  - Enables context sensitive design
  - Has nothing to do with highway improvement funding

# Study Area Roadway Types

### Roadway Type Classifications



**Legend**

**Road Types**

- Community Arterial
- Community Collector
- Neighborhood Collector
- Regional Arterial

— Roads

--- General Study Area

— PA / DE State Line

Public Parks and Open Space

Water Body

0 0.2 0.4 0.8 1.2 Miles

Map Created: January 24, 2011  
By: Andrea Trabelsi, Delaware Greenways  
Data Source: Delaware Dept. of Transportation, New Castle County



**Table 3.6-B: Functional Classification and Roadway Type of Study Area Roadways**

<b>Road Name</b>	<b>Functional Class</b>	<b>Roadway Type</b>
US Route 202	Principal Arterial	Regional Arterial
DE Route 52	Principal Arterial	Community Arterial
DE Route 141	Principal Arterial	Regional Arterial
DE Route 100	Major Collector	Community Collector
DE Route 92	Major Collector	Community Collector
Kirk Road	Major Collector	Neighborhood Collector
Mt Lebanon Road	Major Collector	Neighborhood Collector
Rockland Road	Major Collector	Neighborhood Collector
Smithbridge Road	Major Collector	Neighborhood Collector
Rock Spring Road	Major Collector	Neighborhood Collector
Woodlawn Road	Major Collector	Neighborhood Collector
Buck Road	Major Collector	Neighborhood Collector
Sharpley Road	Major Collector	Neighborhood Collector
Twaddell Mill Road	Local	Neighborhood Collector
Adams Dam Road	Local	Neighborhood Collector
Beaver Valley Road	Local	Neighborhood Collector
Center Meeting Road	Local	Neighborhood Collector
Creek Road	Local	Neighborhood Collector
Ramsey Road	Local	Neighborhood Collector

Note: All other roads in the study area are categorized as the “Local” road type.

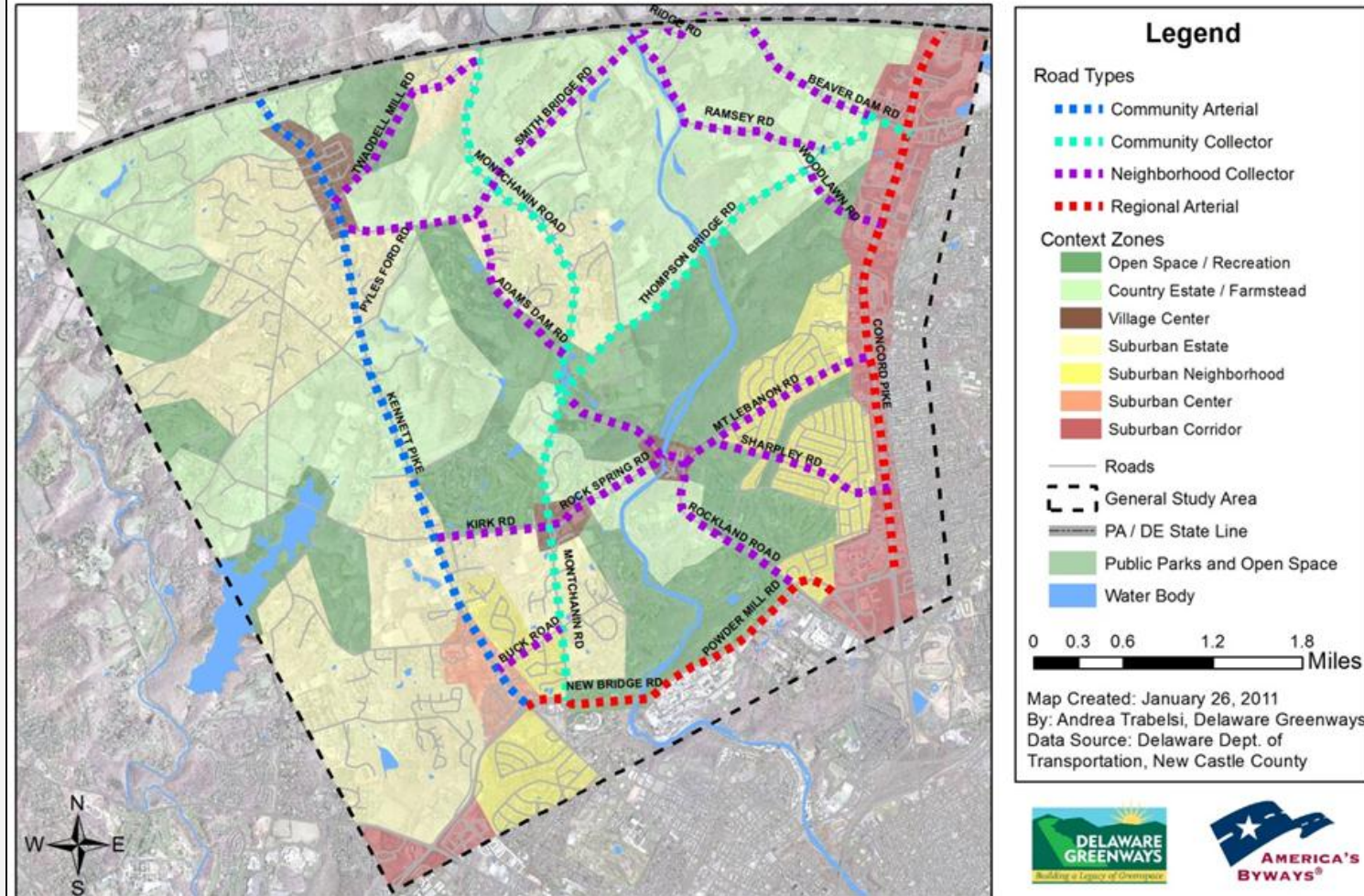


# Synthesis of Key Existing Issues



# Linking Land Use and Transportation

Existing Land Use Contexts and Roadway Type Classifications



# Linking Land Use and Transportation

**Table 4.1-A: Matrix of Land Use Context Districts and Roadway Types in the Study Area**

Land Use Context District	Roadway Type				
	Regional Arterial	Community Arterial	Community Collector	Neighborhood Collector	Local Roadway*
Open Space/Recreation	X	X	X	X	X
Country Estate/Farmstead		X	X	X	X
Village Center		X	X	X	X
Suburban Estate		X	X	X	X
Suburban Neighborhood	X		X	X	X
Suburban Center		X			X
Suburban Corridor	X			X	X

\*All other roads shown in Figure 4.1-A, which are within the transportation study area are considered "Local" roads.

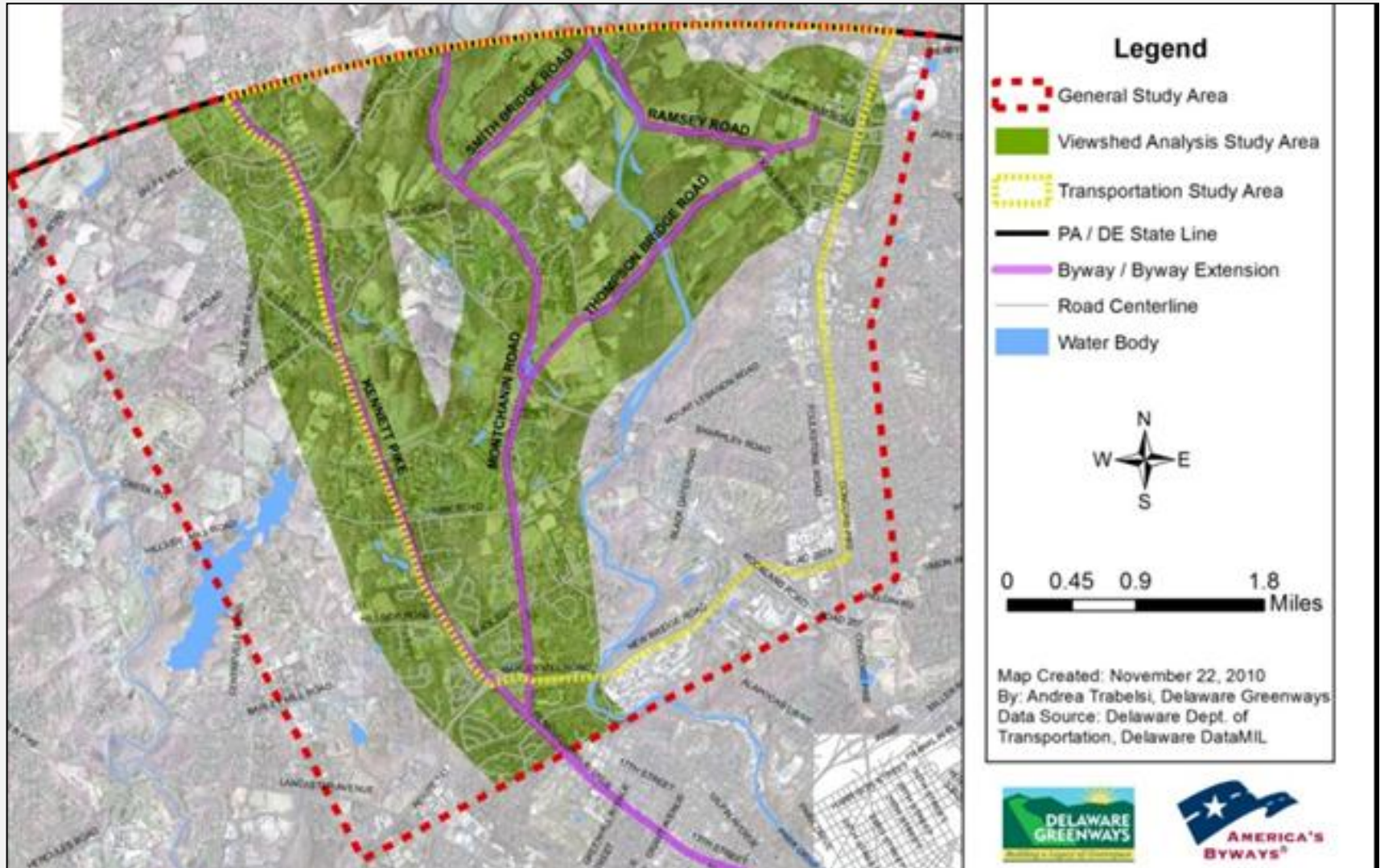


# Viewshed Analysis Report

# Topics Covered

- Introduction
- Purpose and Methods
  - Viewshed Analysis—Key Component of the Scenic Conservation Plan
  - Previous Efforts and Supporting Resources
  - Study Area
  - Methodology
- Technical Identification of Viewsheds
  - Existing Conditions for Key Visual Elements
  - Valuable Scenery, Vantage Points, and View Zones
  - Access
  - Protected vs. Unprotected
  - Community Preferences
- Conclusions

# Study Area

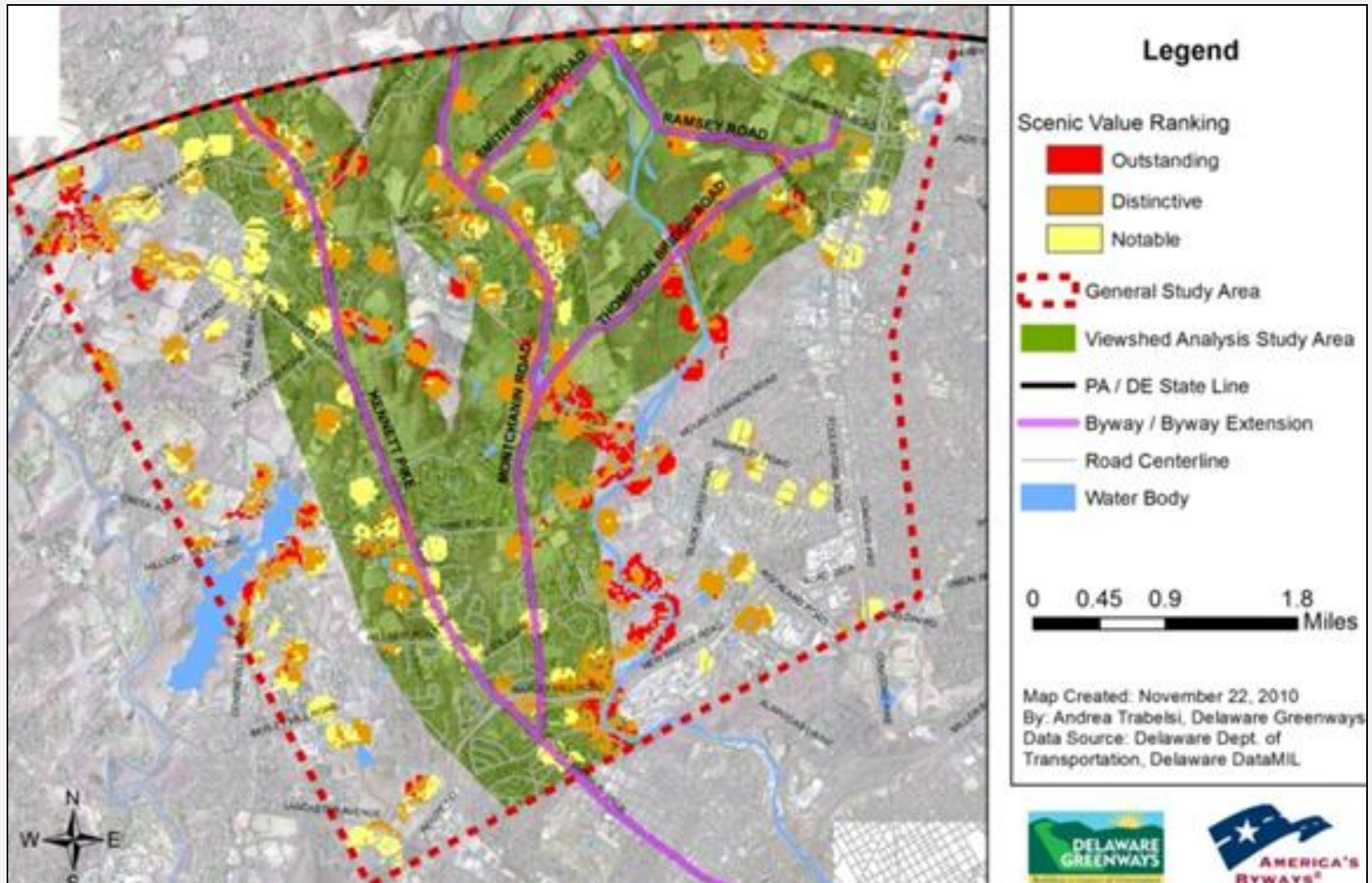


# Methodology (Quantitative)

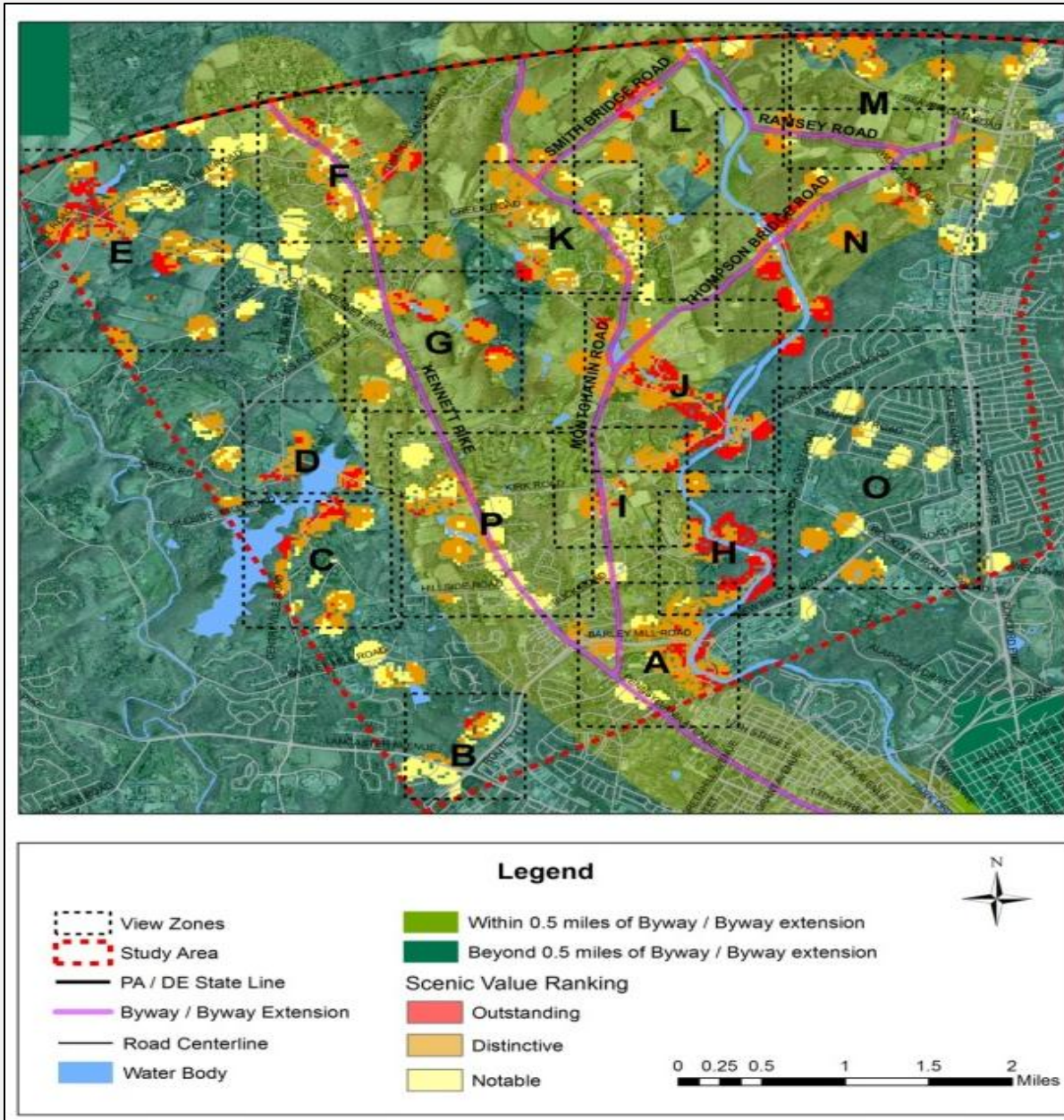
**Table 2.4.A: Scenic Resources Ranking Criteria from Saratoga, NY study**

<b>Landform</b>	
Distinctive (3)	Predominantly undulating hills
Noteworthy (2)	Gentle slopes
Common (1)	Predominantly flat terrain
<b>Vegetation</b>	
Distinctive (3)	Predominantly open fields with mixed forest in the background
Noteworthy (2)	Large tracts of forest/vegetation in mid-ground
Common (1)	Scrub brush and non-distinct vegetation
<b>Water</b>	
Distinctive (3)	River/Creek/Lake predominant within foreground view
Noteworthy (2)	River/Creek/Lake in view or small pond in view
Common (1)	No water
<b>Land Use</b>	
Distinctive (3)	Agricultural land
Noteworthy (2)	Parkland, open space, and natural areas
Common (1)	Modern residential development and streetscapes
<b>Cultural/Historic Character</b>	
Distinctive (3)	Cultural/historic features dominate the view
Noteworthy (2)	Few cultural/historic features
Common (1)	Cultural/historic features are undetectable due to abundance of non-cultural/historic features in view
<b>Views</b>	
Distinctive (3)	Long/wide
Noteworthy (2)	Medium and/or narrow
Common (1)	Short
<b>Composition</b>	
Distinctive (3)	Significant unity and contrast
Noteworthy (2)	Some unity, contrast, and variety
Common (1)	Lack of unity, contrast, and variety

# Scenic Value Ranking (Quantitative)



# View Zones





# Viewshed Field Day



**Group 1: James Willson, Councilman Bob Weiner, Jaynine Warner, Ellie Moroney**



**Group 2: Board Member Miguel Pena, Jack Hunt, Sally DeWeese, Jeff Greene**



**Group 3: L to R: Paul Morrill, Councilwoman Janet Kilpatrick, Winnie Li, Andrea Trabelsi, David Zylstra**

# Viewshed Field Day Conclusions

- Highly valuable viewsheds of concern:
  - Portions of the Granogue estate
  - Biderman Golf Course
  - Woodlawn Trustees land
  - Ramsey Farm



# Viewshed Field Day Conclusions

- Viewpoints identified in this study should be field verified and protected as part of any development plan.



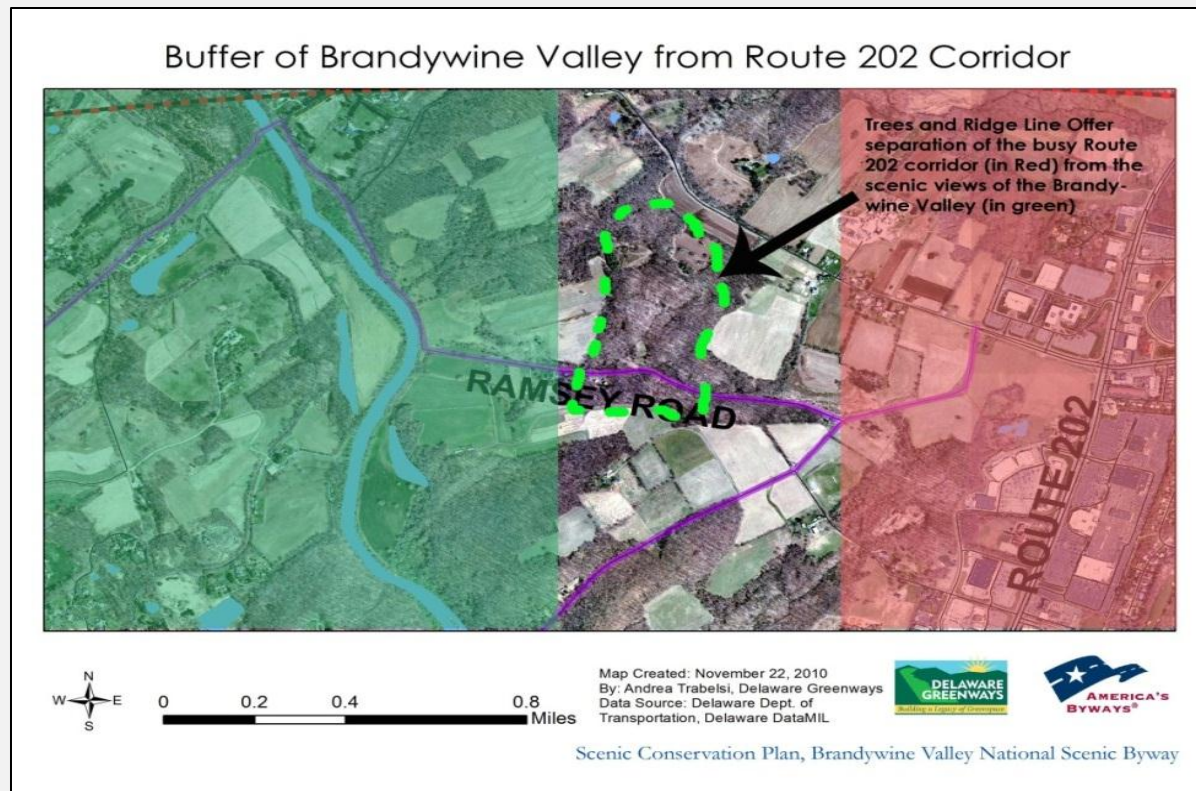
# Viewshed Field Day Conclusions

- Additional field verification of other View Zones in the BVNSB study area should be undertaken as the study proceeds and thereafter including scenery along trails.



# Viewshed Field Day Conclusions

- Landscapes that buffer developed areas from valuable views help achieve sustainable development.



# Viewshed Field Day Conclusions

- The possibility of a Rail-with-Trail path along the tracks Wilmington Western Railroad that runs adjacent to Granogue should be explored.



# Viewshed Field Day Conclusions

- Explore the possibility of paving the Northern Delaware Greenway Trail spur between Ramsey Road and Thompson's Bridge Road



**Caution:** Some felt paving might detract from natural/rustic character of surroundings.  
May need a survey of users to assist in the decision.

# Viewshed Field Day Conclusions

- Design Guidelines Considerations:



Avoid unsightly 'jersey barriers' on bridges



Use rustic guardrails instead of galvanized steel.



Develop an improved grass shoulder



Continue use of boulders as borders



# Emerging Issues

- Wastewater and water resources, public water and sewers (future environmental issues?)
- Large landowners (which ones will unexpectedly develop?)
- Pedestrian and bicycle access (encouraging bicycles and pedestrians to use windy roads?)
- Access to trails and scenic areas (seeing viewsheds from moving vehicles?)
- Traffic signing and signing by property owners (sign clutter, consistency)
- Development access and development layout (cul-de-sac developments)
- Context sensitive design manual (level of specificity?)
- Land development guidelines (what types/designs of developments are preferred?)



Comments  
&  
Discussion

# Next Steps



# Next Steps

- Develop the Trend Scenario:
  - Elements:
    1. Preparation of demographic projections
    2. Estimation of maximum number of landowner entitlements
    3. Estimation of entitlements needed to accommodate demographic projections
    4. Allocation of entitlement projections to most likely to be developed lands
    5. Run travel demand model
    6. Identification of problems and challenges
    7. Development of common vision, goals, and objectives
    8. Committee Meeting(s)
  - Public Presentation