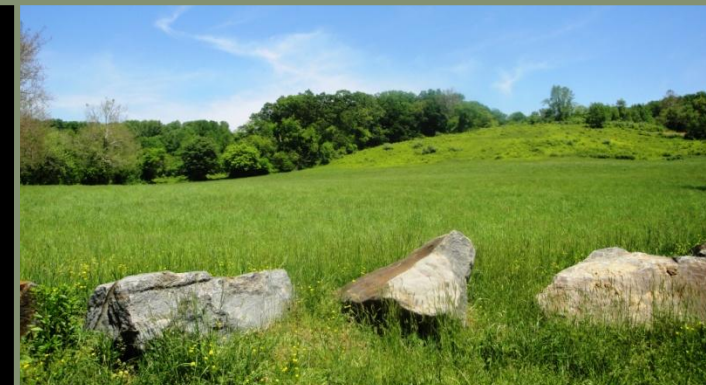


The Brandywine Valley Scenic Conservation Plan

Presentation to the
Conservation Committee
October 14, 2010



Outline

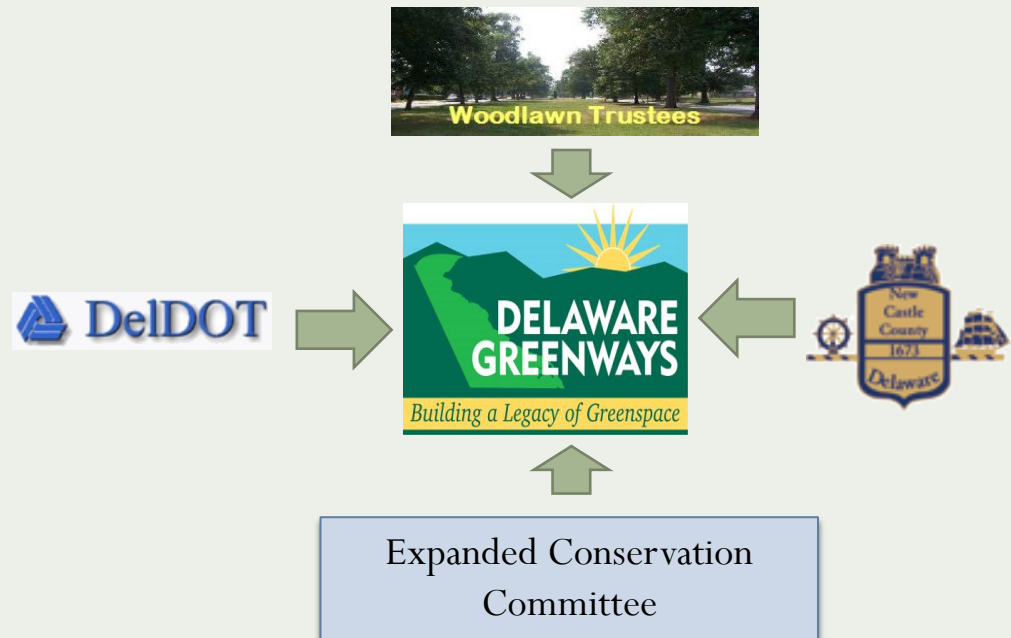
- I. Background
- II. Work Plan
- III. Public Involvement
- IV. Conceptual Framework & Methods
- V. Viewshed Analysis
- VI. Questions

I. Background

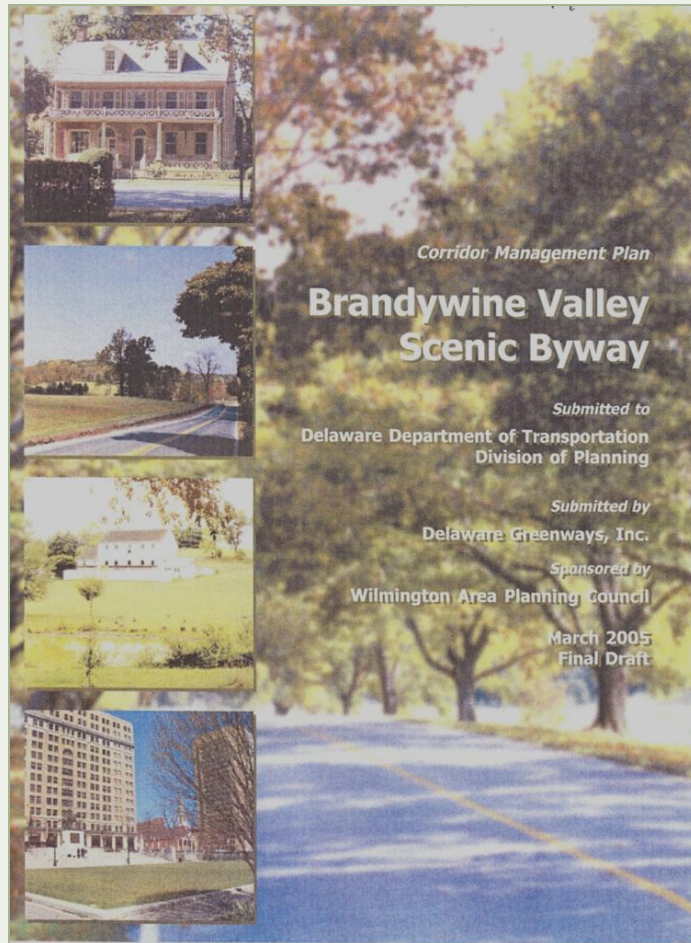
Project Funding

- through the Byways program of the Federal Highway Administration
- Funding managed by DelDOT
- Grant awarded to DGI
- In-kind from Woodlawn Trustees

Partners



The BVNSB: Previous efforts



- *The Brandywine Scenic River and Highway Study* (New Castle County, 1987)
- *BVNSB Corridor Management Plan* (2005)
- *Scenic Stewardship: A Plan to Preserve and Enhance the Landscape of the Brandywine Valley Scenic Byway* (2005)



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

The BVNSB:

Efforts still needed

Development of:

- policies
- management structure
- implementation tools

Involvement of the community in:

- building the plan
- advocating for policies and implementation

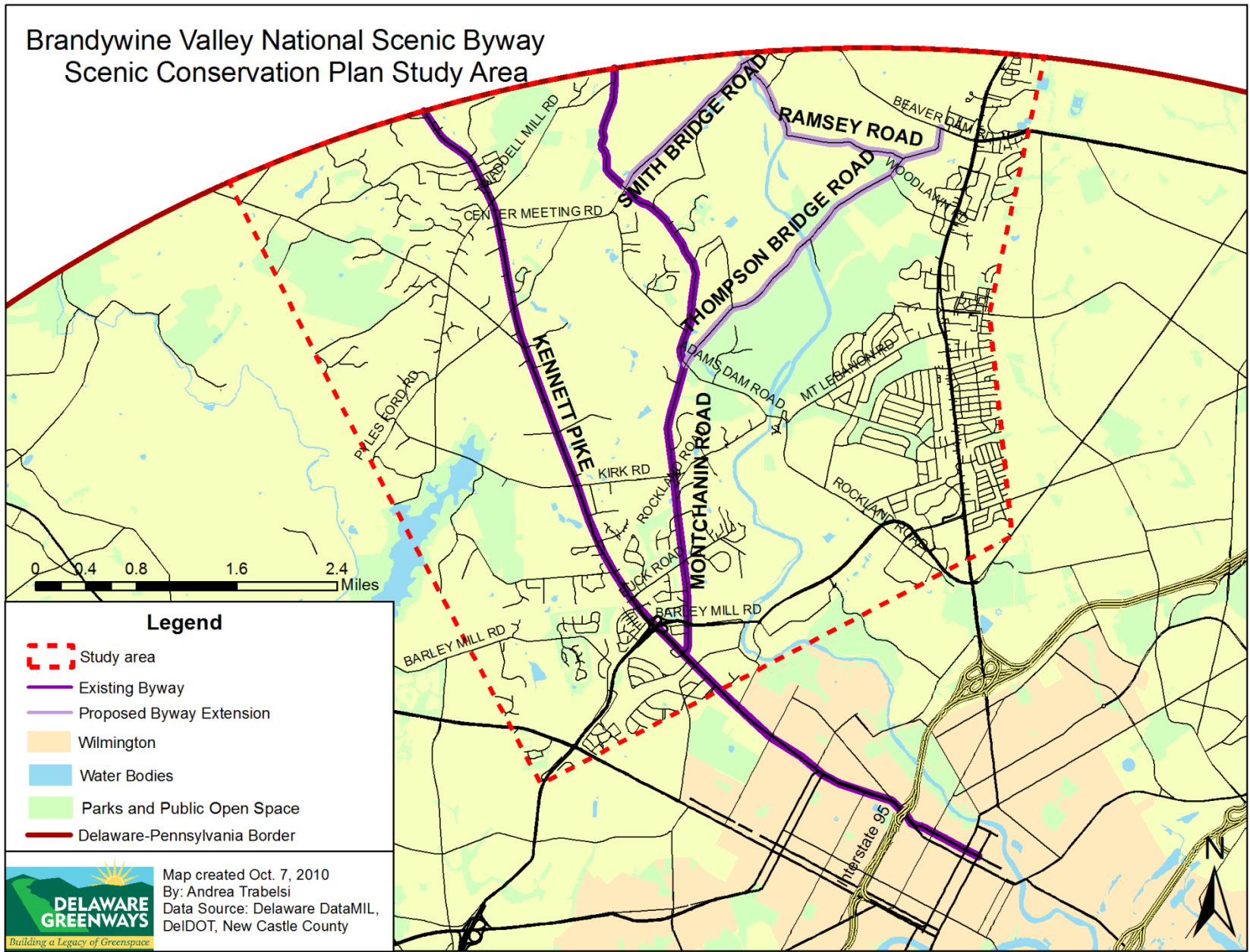
Initial Goals of the Plan

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...**”

Brandywine Valley National Scenic Byway
Scenic Conservation Plan Study Area



Legend

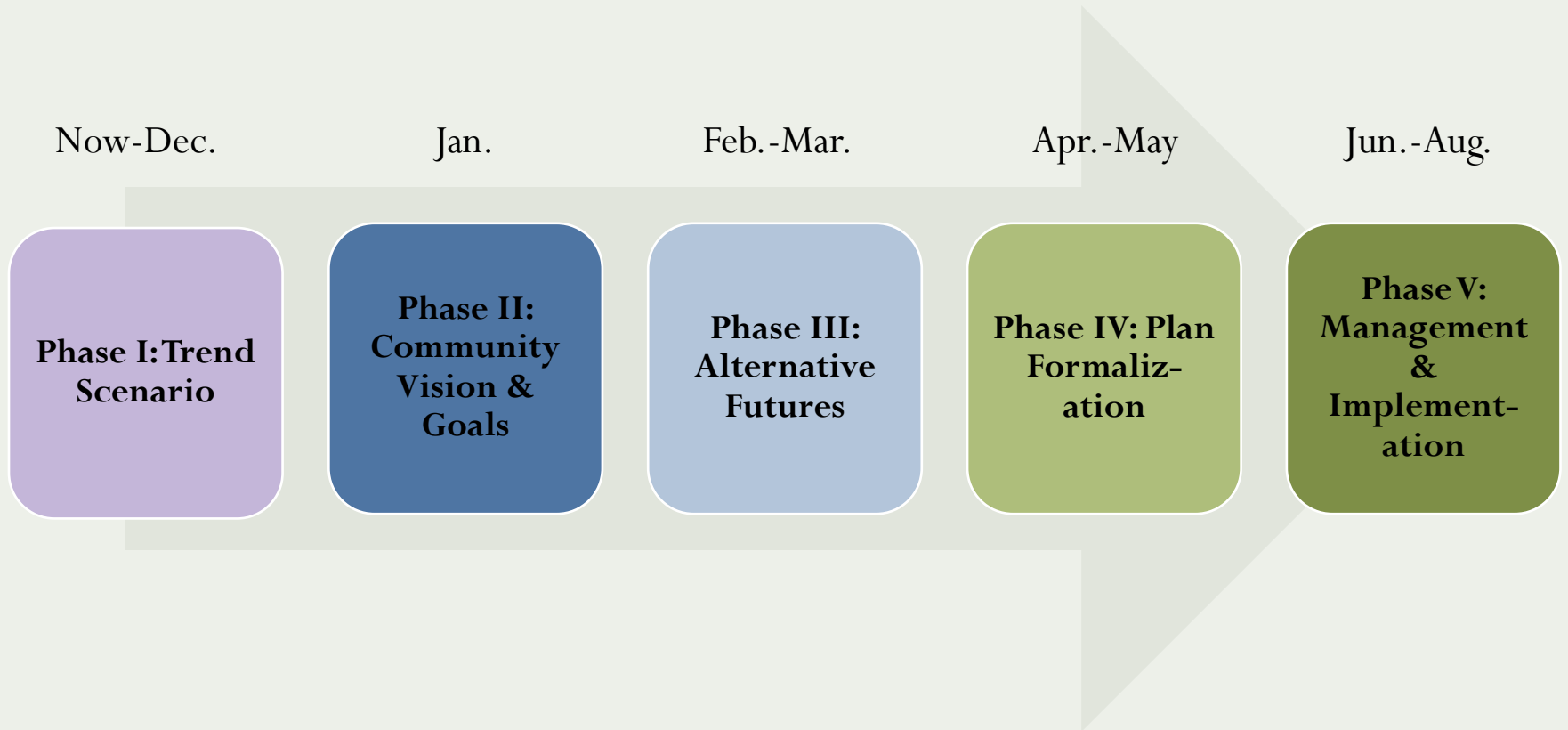
-  Study area
-  Existing Byway
-  Proposed Byway Extension
-  Wilmington
-  Water Bodies
-  Parks and Public Open Space
-  Delaware-Pennsylvania Border

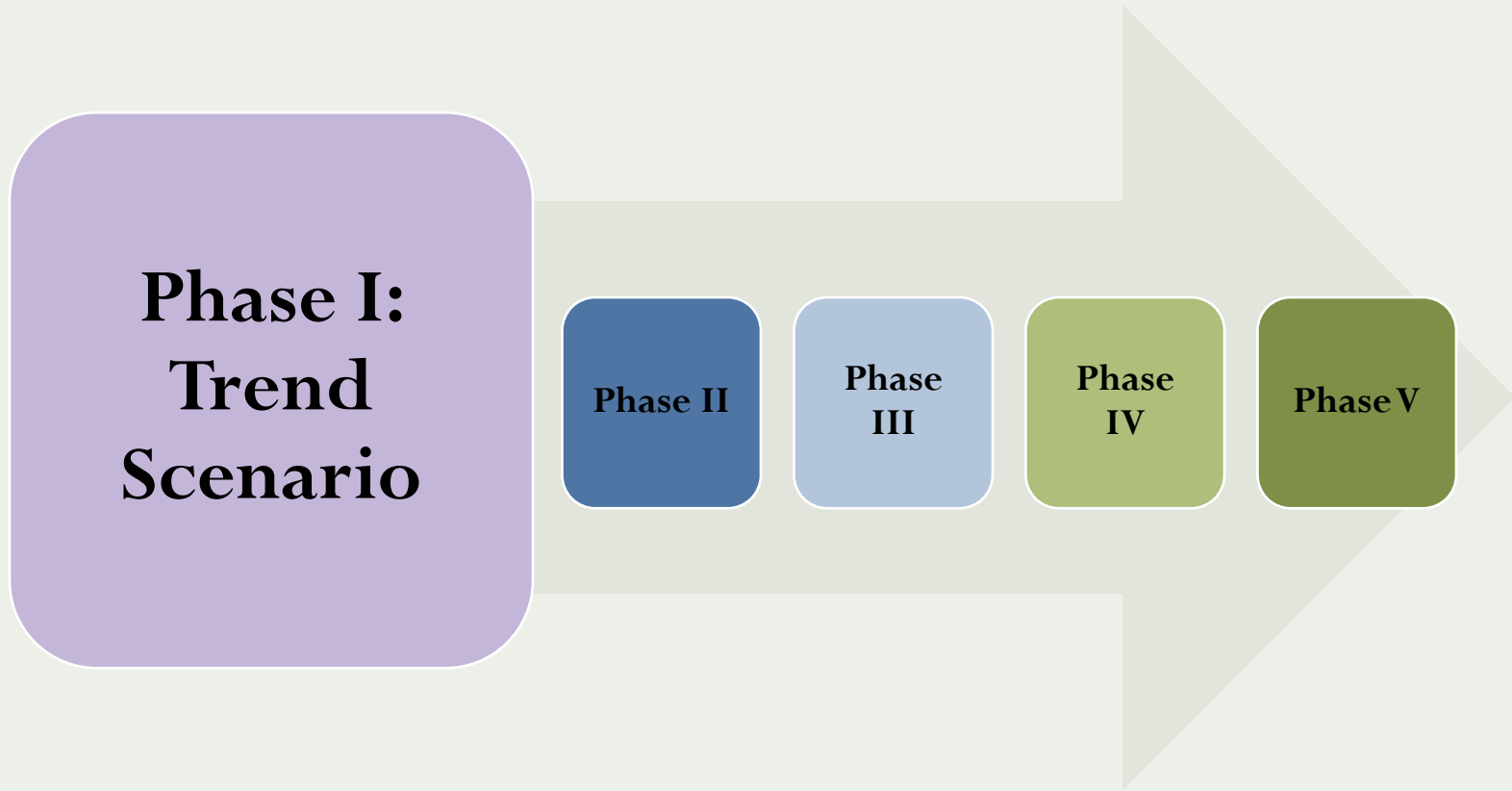


Map created Oct. 7, 2010
By: Andrea Trabelsi
Data Source: Delaware DataMIL,
DeIDOT, New Castle County

II. Work Plan

Timeline





Phase I

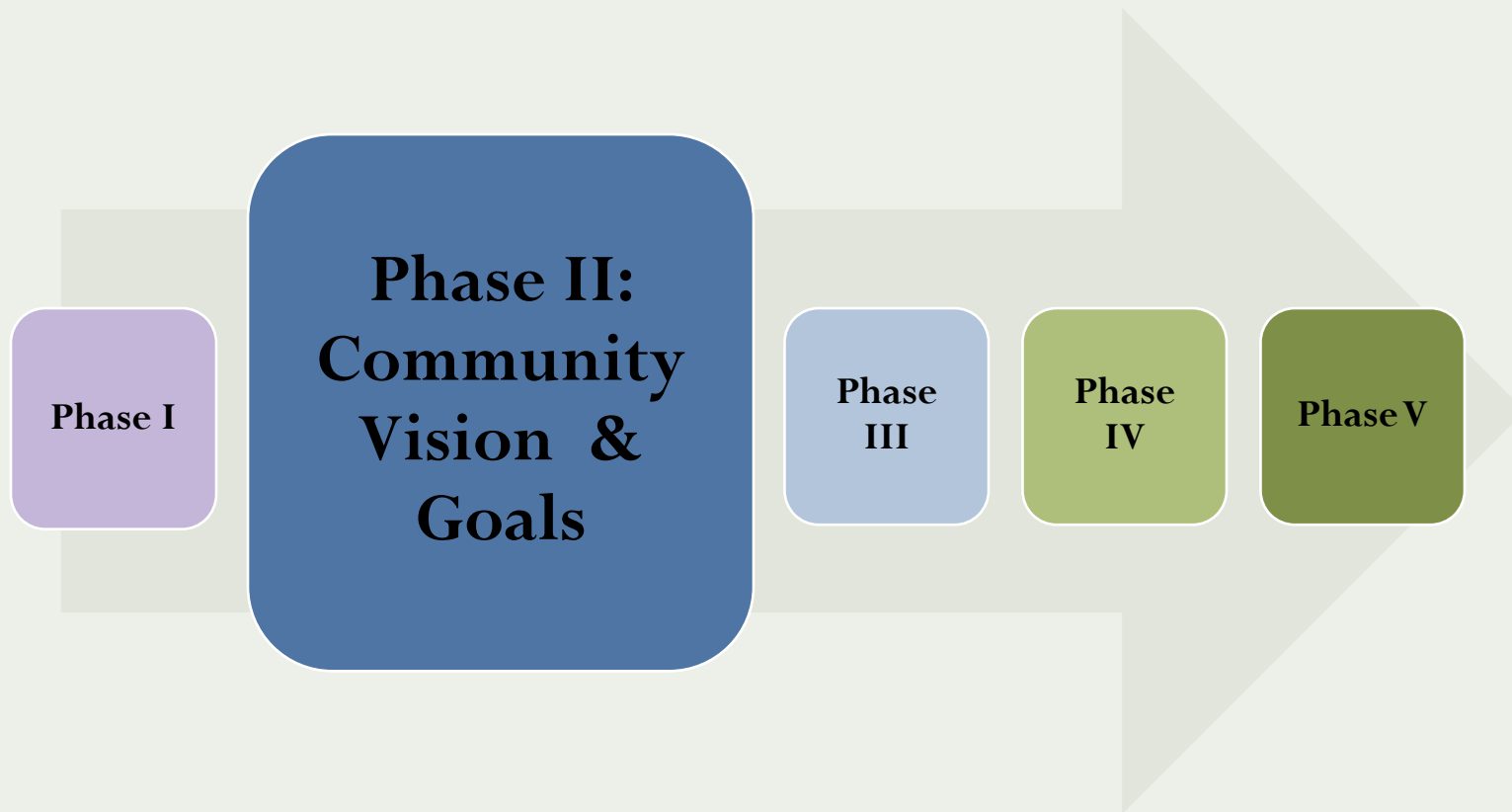
Develop the Trend Scenario

- Inventory of existing environmental, demographic and transportation conditions
- Inventory of visual environment
- Identification of prime viewsheds and their threats
- Analysis of how the study area is impacted under current regulatory and market trends

Answers the question:

What will the future look like if current practices continue?





Phase II

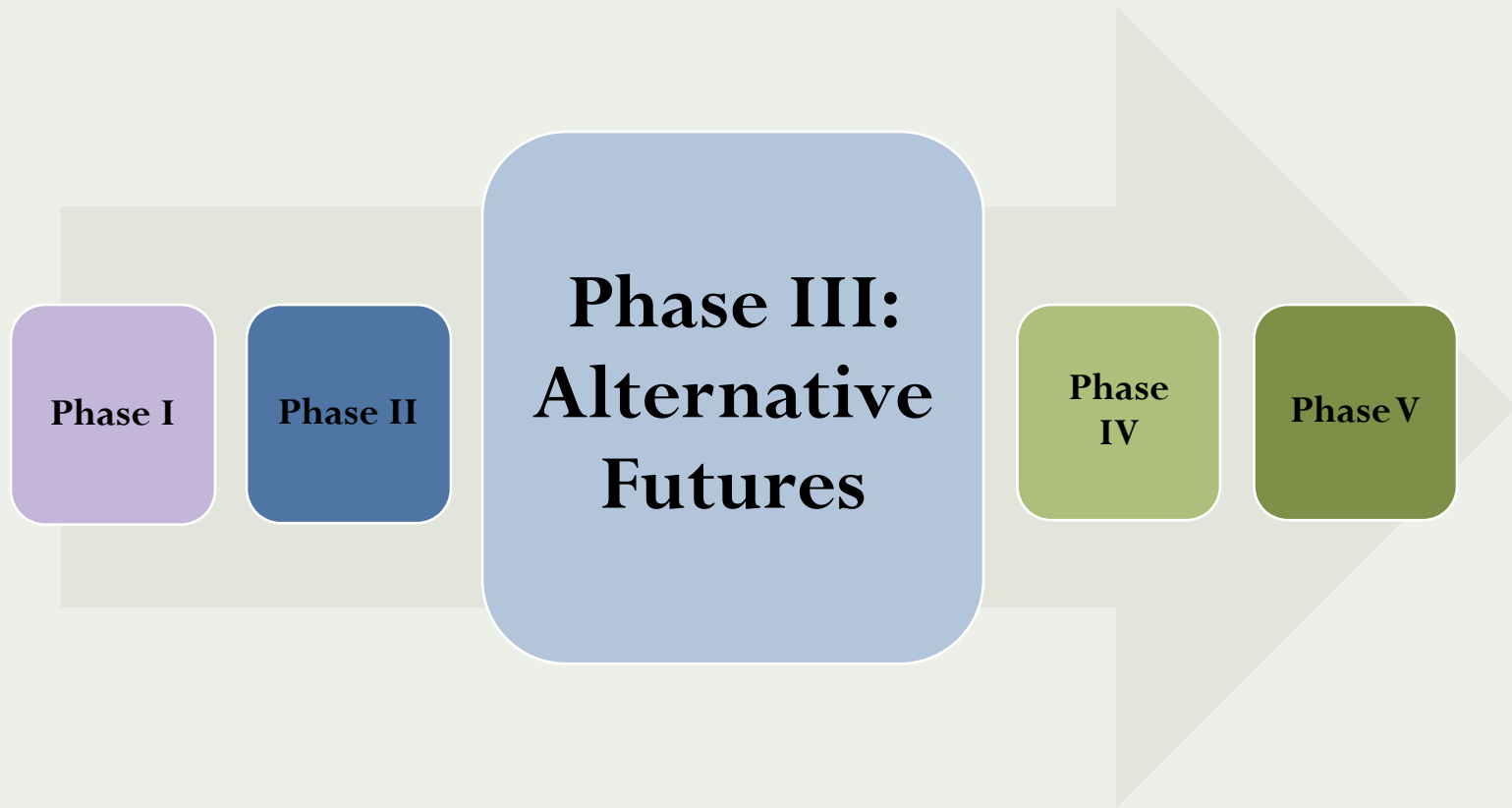
Community Vision & Goals

- Establish a vision for the future, to include:
 - Goals
 - Objectives
 - Measures of Success

Answers the question:

What would we like the area to be like in the future and how do we get there?





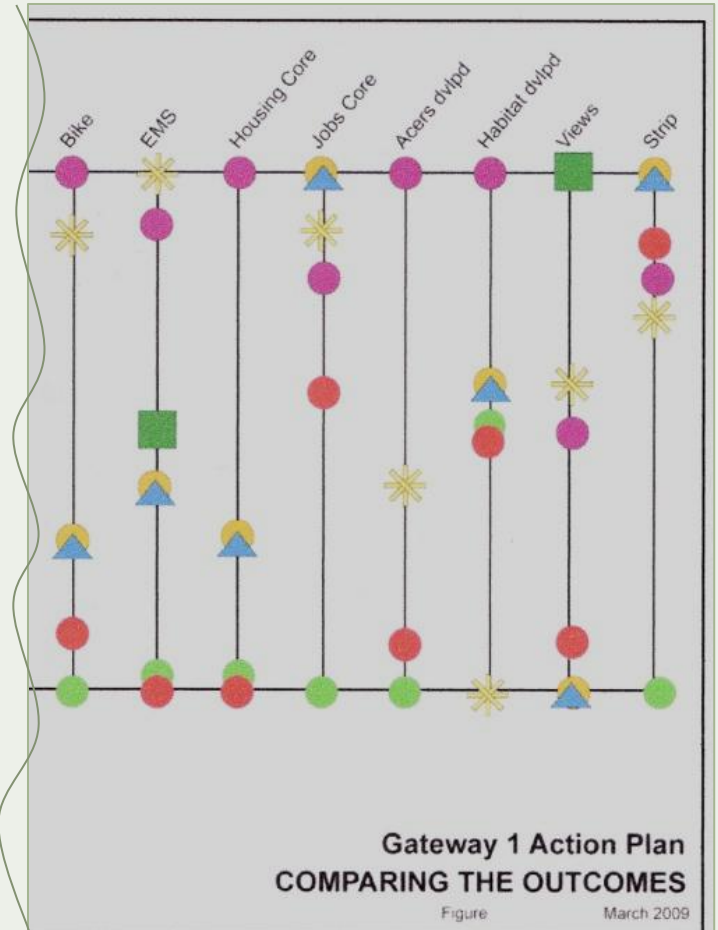
Phase III

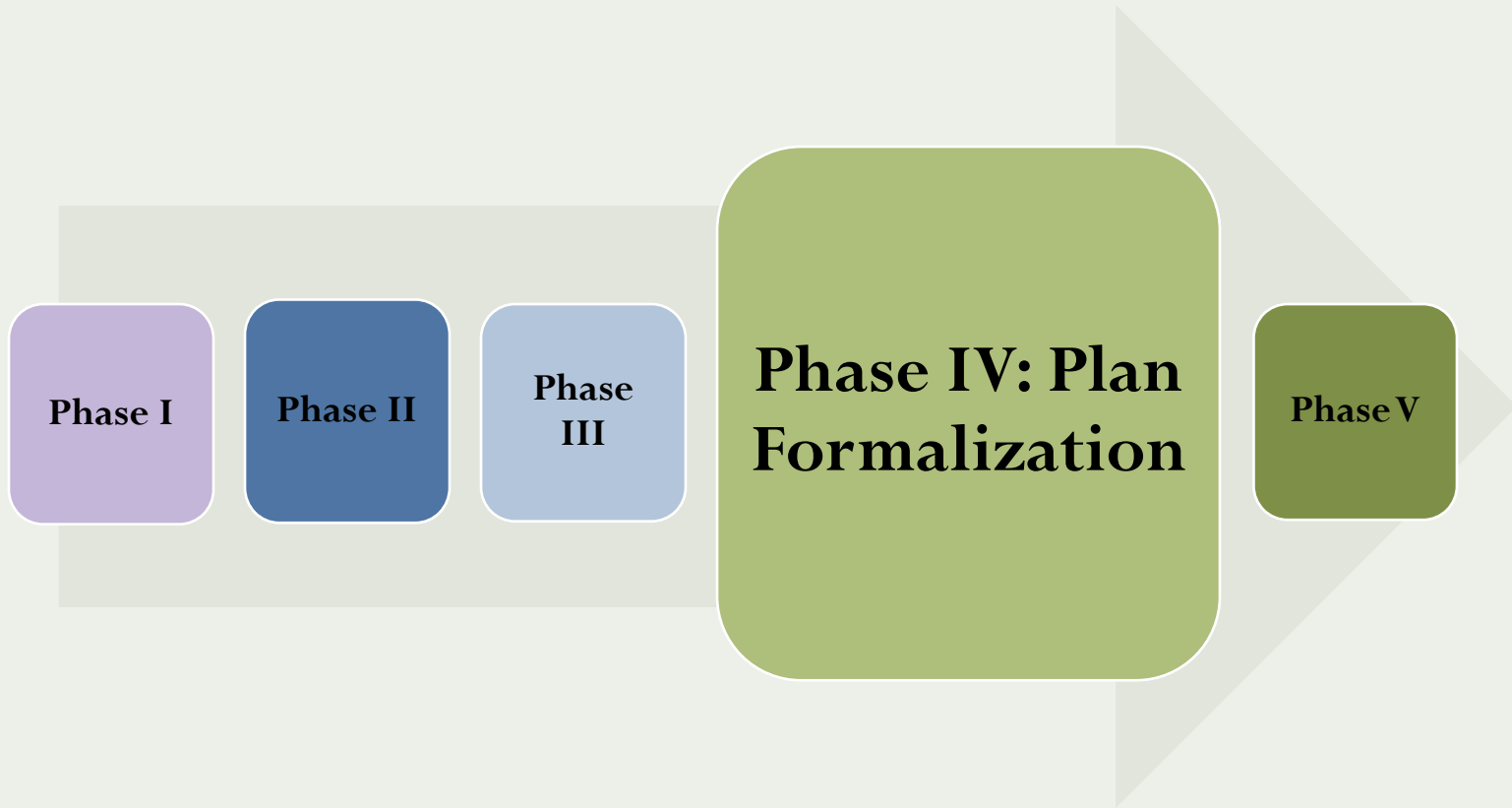
Evaluate Alternative Futures

- Evaluate 3-5 alternative futures developed by DGI based on trend forecasts, community vision/goals, and study area analysis
- Selection of the Preferred Scenic Conservation Plan

One method of comparing alternatives

Courtesy of Maine DOT





Phase I

Phase II

**Phase
III**

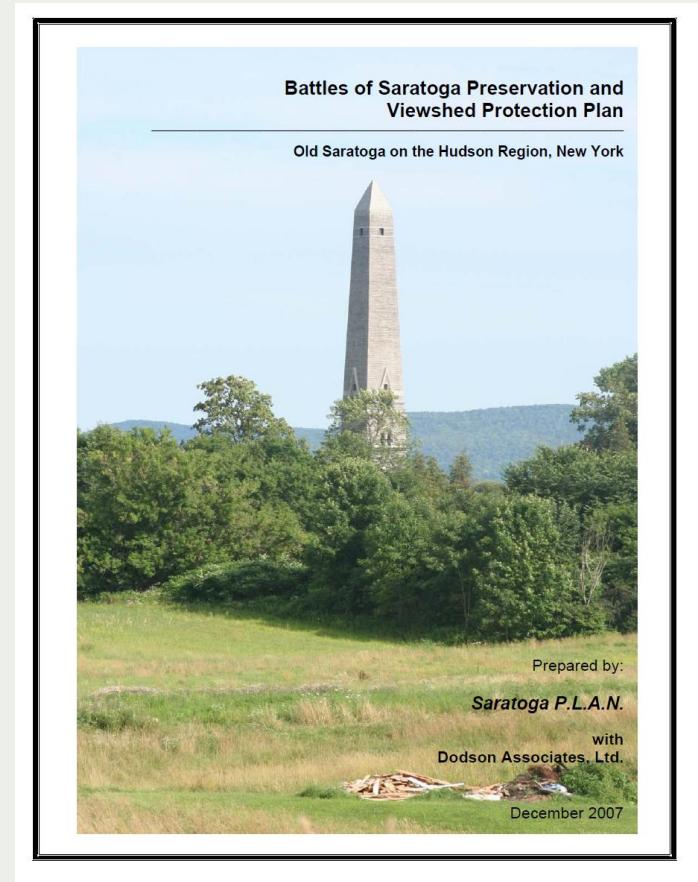
**Phase IV: Plan
Formalization**

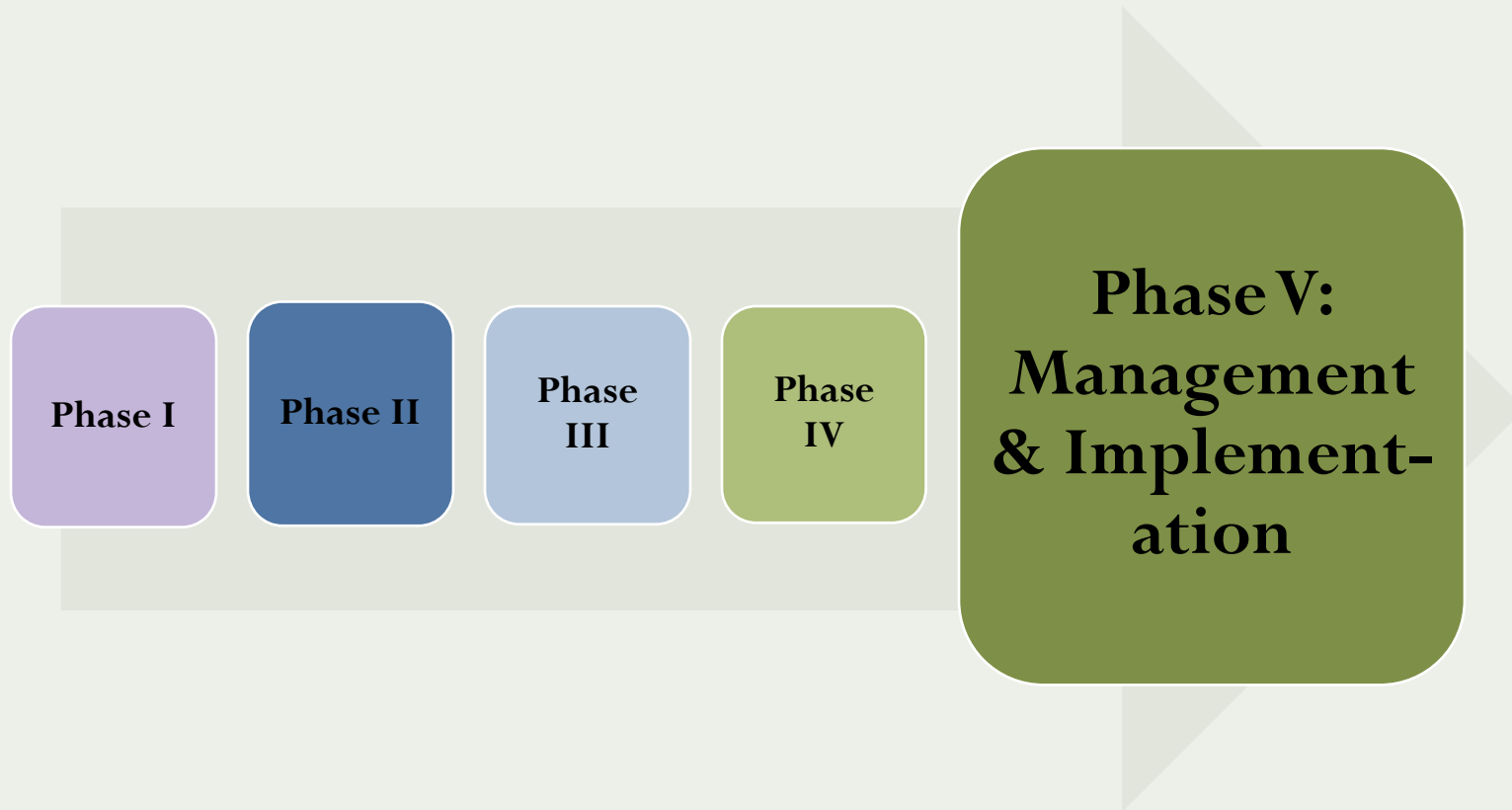
Phase V

Phase
IV

Plan Formalization

- Draft Scenic Conservation Plan
 - Maps
 - Policy
 - Design Guidelines
- Review draft plan with public
- Committee feedback on final plan



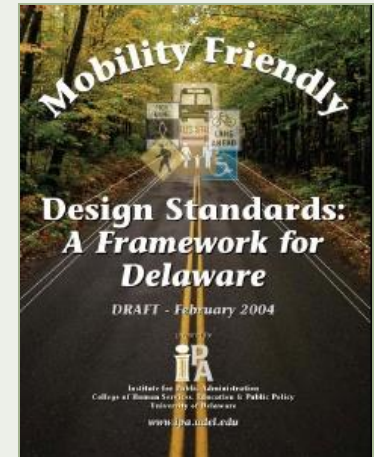
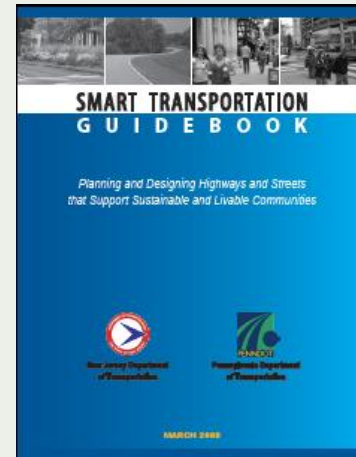
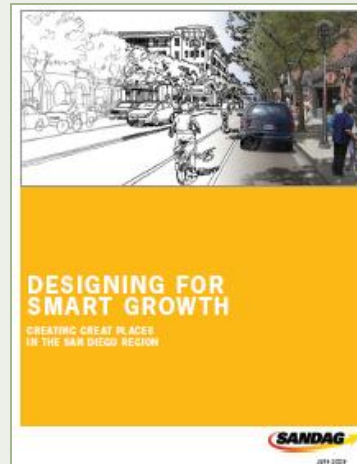
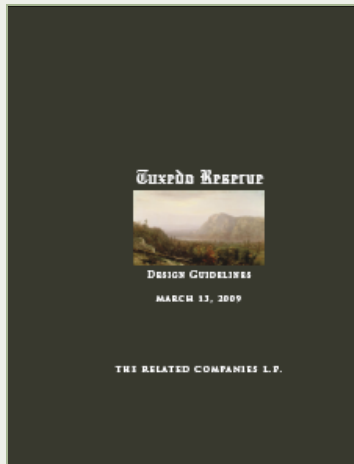


Phase
V

Management & Implementation

Further Develop the Implementation Plan

- Buildings and Landscapes Design Guidelines
- Transportation Design Guidelines
- Implementation Manual



Phase
V

Design Guidelines

- Buildings and the Landscape
 - Protect viewsheds, environment
 - Maintain community character
- Transportation
 - Set in conjunction with Development Design Guidelines
 - Include Roadway Typical Sections
 - Recommend Roadside Landscape Design

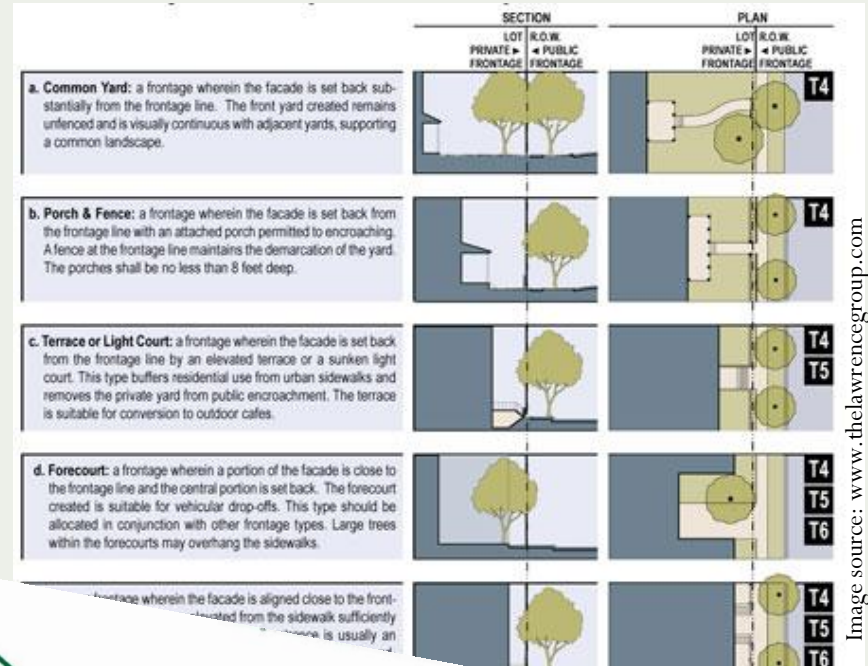


Image source: www.thelawrencegroup.com

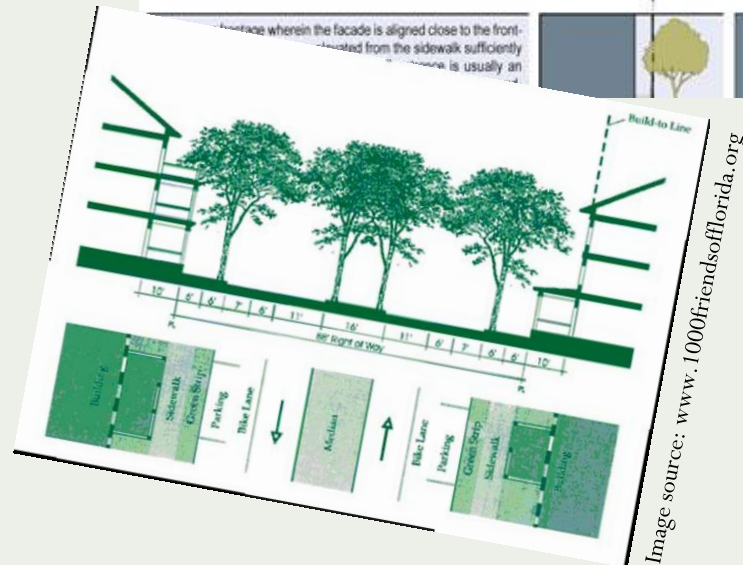
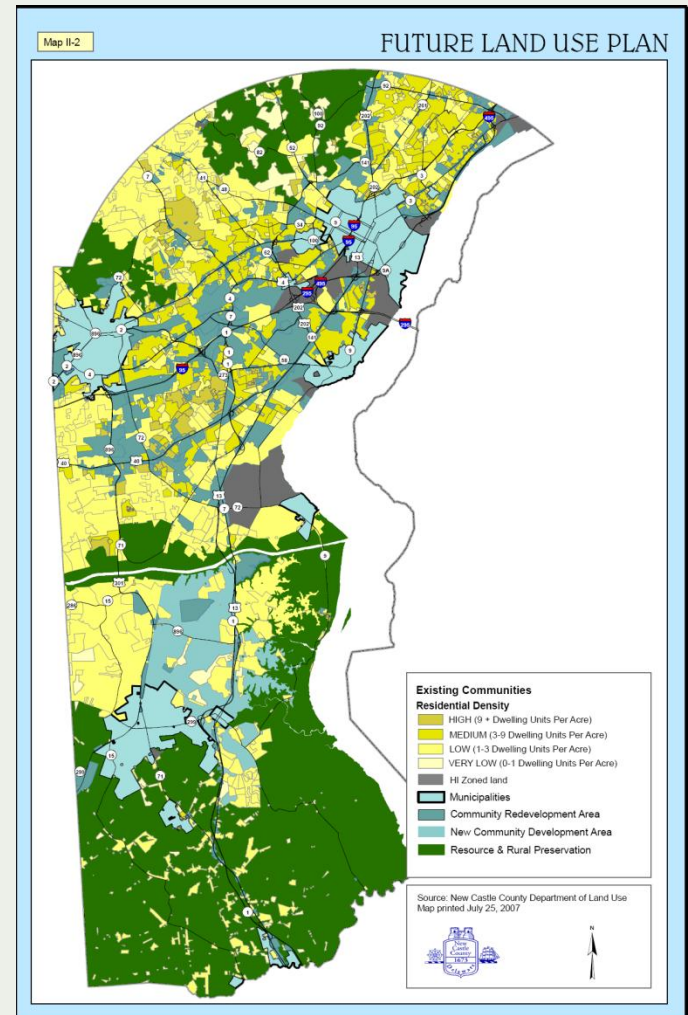


Image source: www.1000friendsofflorida.org

Phase
V

Implementation Manual

- Recommend Policies (e.g. incentives, regulations, legislation)
- Provide input into 2012 New Castle County Comp Plan and DelDOT design process
- Implementation Tools



III. Public Involvement

Component 1: Committees



- **Scenic Conservation Committee** charged with guiding the effort a helping publicize the study.
- **Viewshed Working Group** charged with doing the field work to identify viewsheds worthy of complete preservation and manmade viewsheds of note.
- **Landowners Committee** charged with testing and evaluating land preservation strategies.

Scenic Conservation Committee

Committee Duties



- Review all project deliverables
- Assist in developing findings and recommendations
- Assist with Public Meetings:
 - Getting the word out.
 - Mingling with attendees
 - Evaluate comments
- Assist other committees in their duties
- Advocate for implementation of the Plan

Component 2: The General Public



Public Meetings

- Visioning
- Alternative review
- Draft Plan

Webpage



Newsletter and News Releases

A New Approach is Needed...

“The problems we
have created cannot
be solved with the
same thinking that
created them....”

Albert Einstein

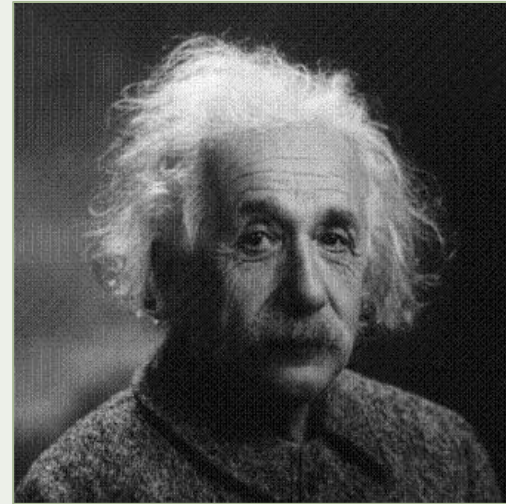


Image Source: Library of Congress, Prints & Photographs Division. Original copyright expired.

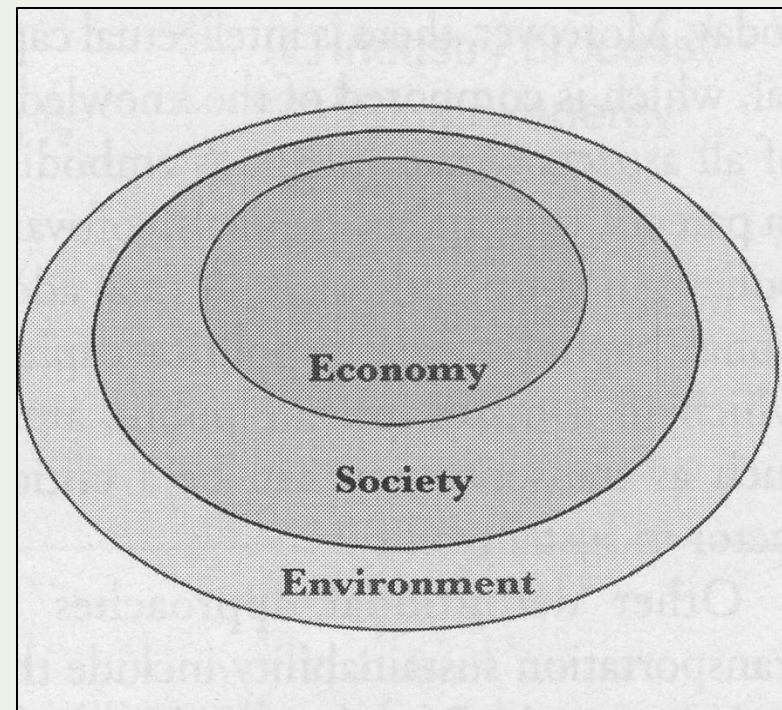
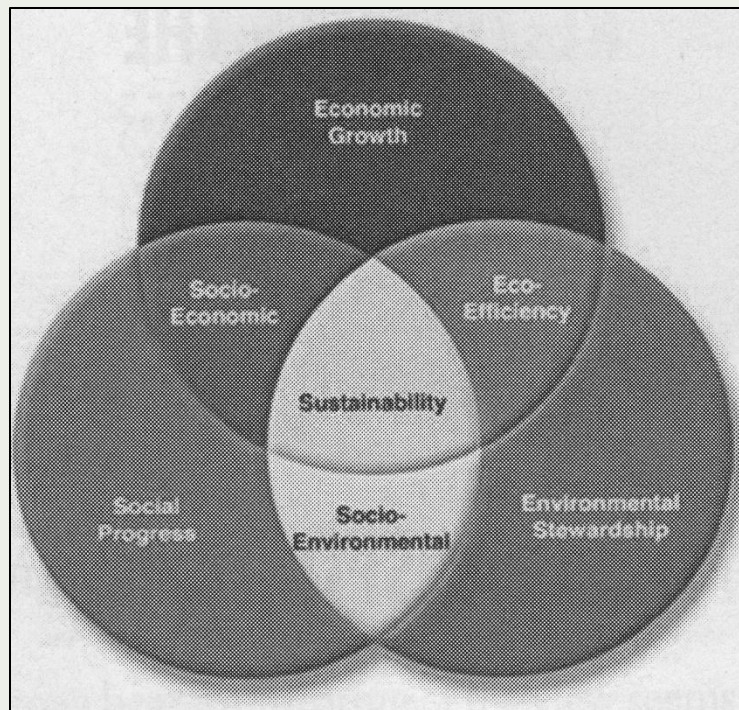
IV. Conceptual Framework & Methods

Sustainability / Livability



Drawing from Sustainability concept

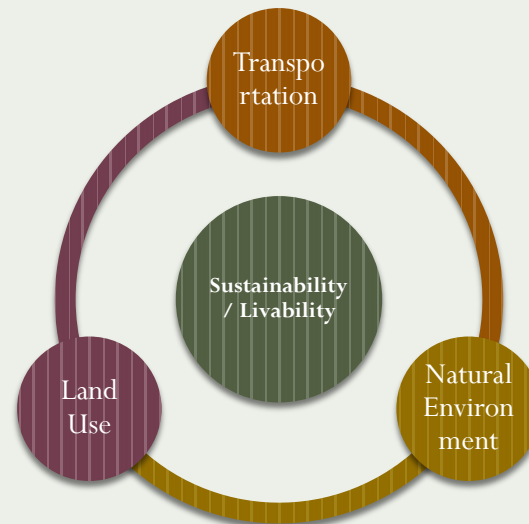
True sustainability balances the economy, society and the environment.



How can we define Sustainability?

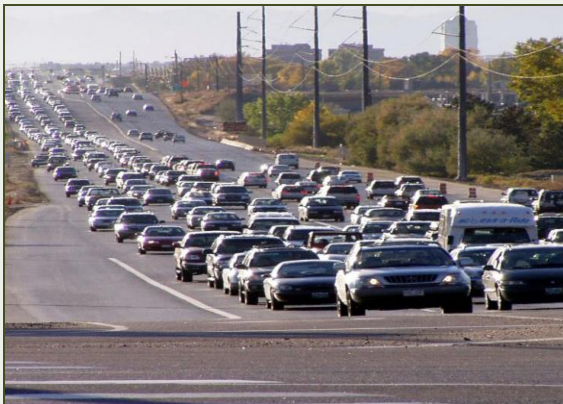
Two definitions of sustainability:

- General: meets the needs of the present without compromising the ability of future generations to meet their own needs.
- Transportation: meets the needs of society to move freely, gain access, communicate, trade and establish relationships without sacrificing other essential or ecological values today or in the future



Sustainability / Livability

- At what point are we no longer sustainable? At What Point is the Byway Impacted?



Source: Psychology Today

- when this becomes the way we design?

-when this becomes the result?

Methods/Tools

The Study will consider traditional land use and transportation planning techniques enveloped within leading edge concepts including:

- Preservation
- Network Connectivity
- Context Zones
- Viewshed Analysis

Preservation:

After you have exhausted what there is in business, politics, conviviality, and so on - have found that none of these finally satisfy, or permanently wear - what remains? Nature remains.

- Walt Whitman

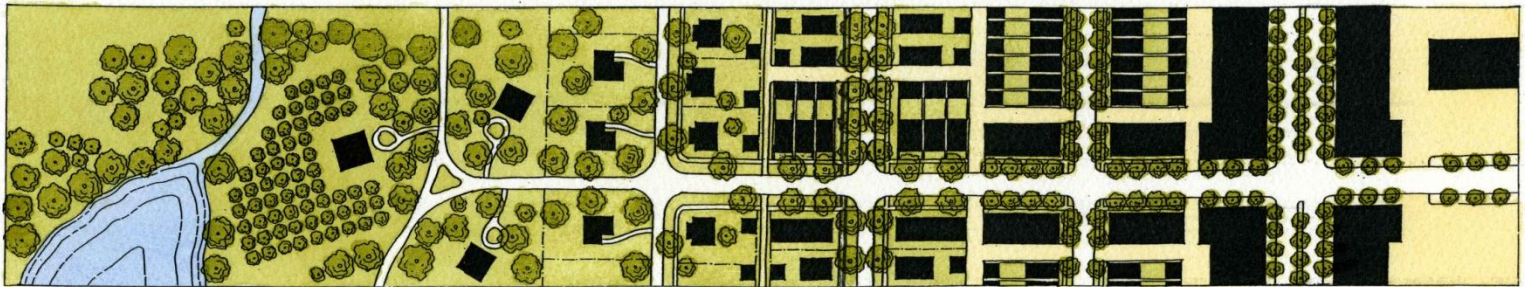
US poet (1819 – 1892)

- Preservation = Safeguard, Maintain, Stabilize
- Deciding What to Preserve is up to Each Community
- Communities seek to preserve:
 - Historical Resources
 - Natural Resources
 - Community Character
 - Views

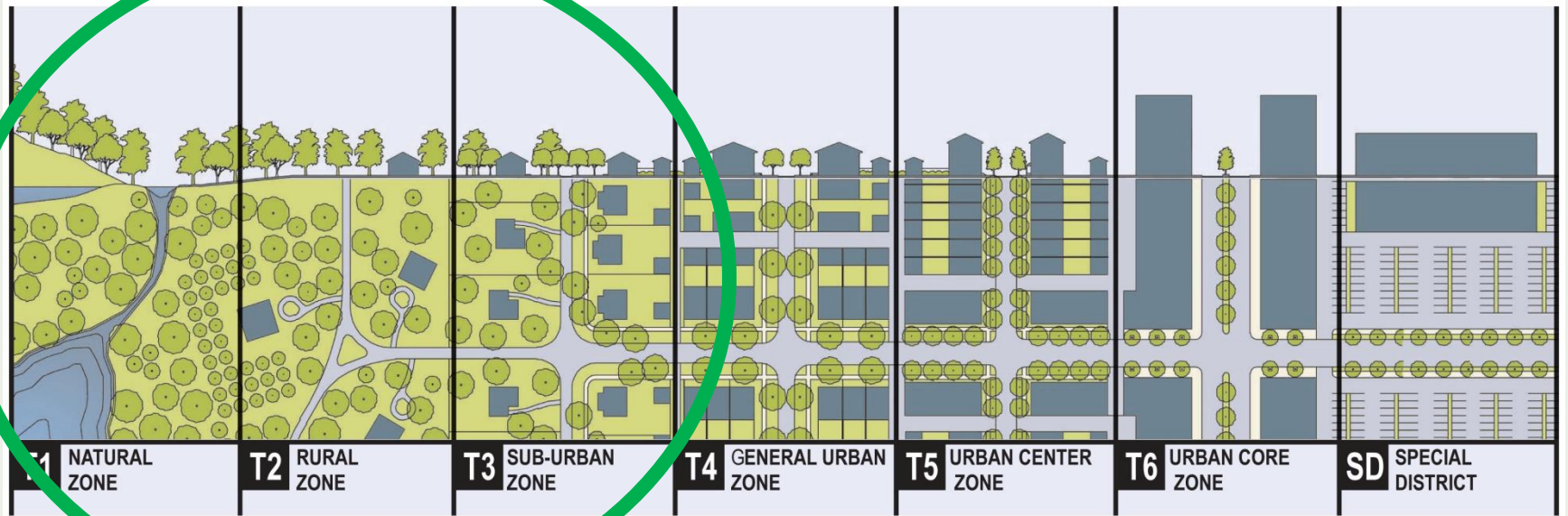
Context Zones

- A Context Zone is a relatively homogeneous area of the environment, natural or human.
- Taken together as adjacent areas, a range of different habitats and places emerge.
- Using Context Zones as a basis of analysis allows a look at how these environments change in time and place in relation to one another.

Natural & Human Context Zones



Context Zones of Land Use



DPZ & Co.

Brandywine study
area Context
Zones

Potential Rural Village Context Zone



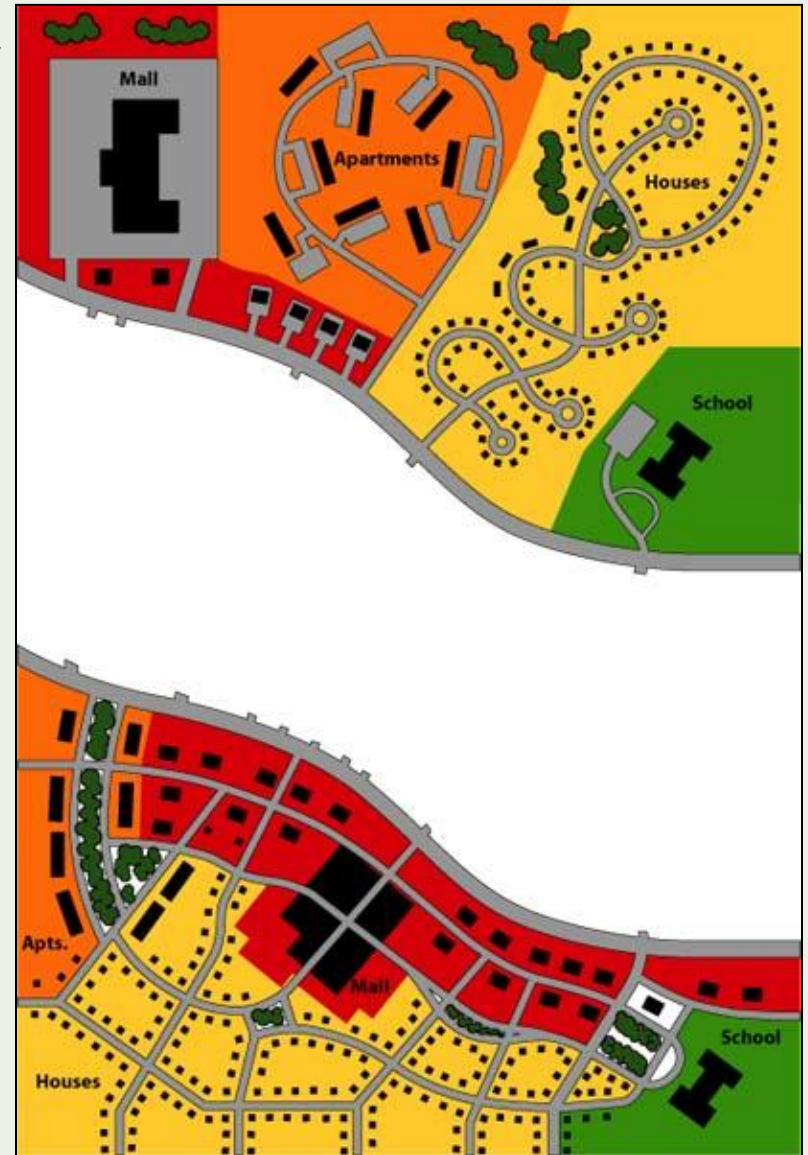
Village of Montchanin

Network Connectivity

Which Street Network is better for the Byway?

Hint: One network offers more flexibility in designing individual roadways, and gives more choices to motorists, bicyclists and pedestrians alike.

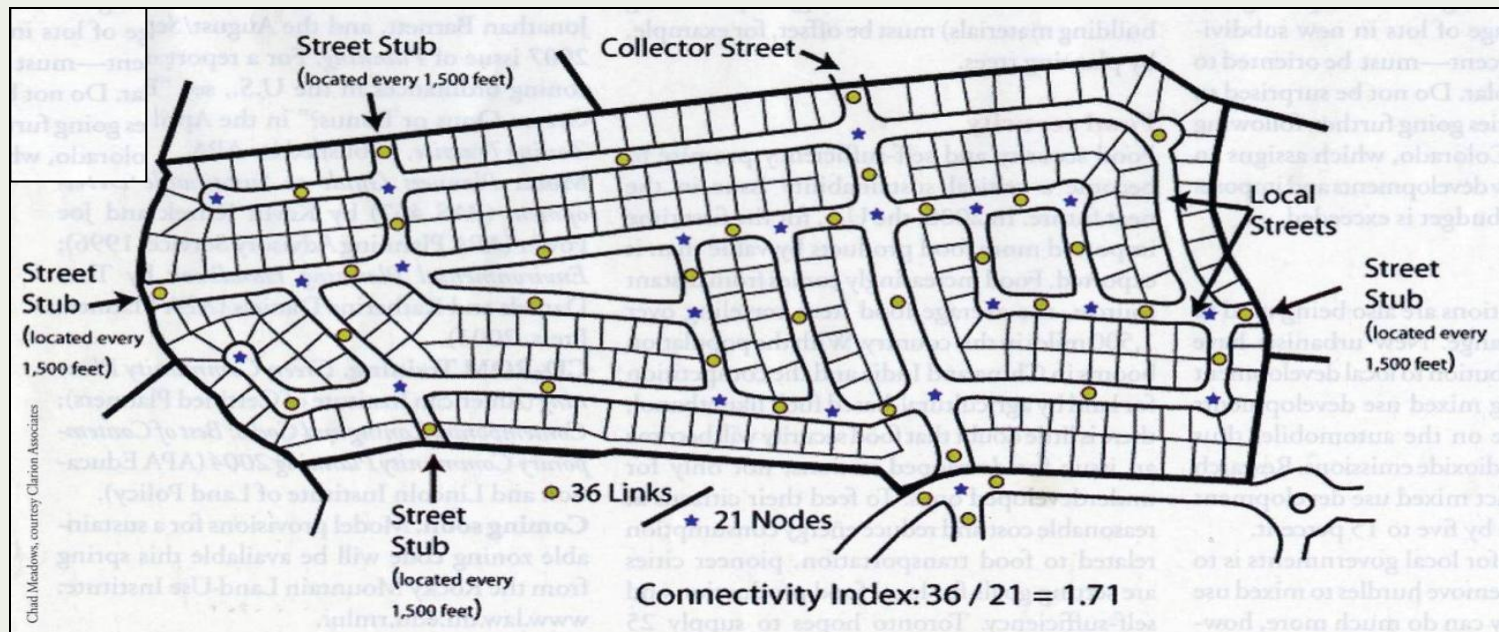
Which network is most prevalent in the Brandywine Valley?



Measuring Connectivity

$$\text{Connectivity Index} = \frac{\text{Number of Street Links}}{\text{Number of Network Nodes}}$$

Strive for better than 1.4



Characteristics of Sustainable Roadway Networks

- Provide multiple connections within the network and to the external network – at least two ways to go every which way.
- Keep local trips on the local roads and through trips on the arterial roads – big traffic to the big roads, little traffic to the little roads.
- Provide for all modes of transportation.

In short – a sustainable roadway network provides a high level of connectivity while preserving the character of the community through which it passes.

V. Viewshed Analysis



What is a viewshed?

A **viewshed** is an area of land, water, or other environmental element that is visible to the human eye from a fixed vantage point. Viewsheds tend to be areas of particular scenic or historic value that are deemed worthy of preservation against development or other change.



Viewshed Analysis Process

- Step 1 – Develop Evaluation Criteria
- Step 2 – Identify Unprotected Viewsheds
- Step 3 – Viewshed Working Group Evaluates Viewsheds in Field
- Step 4 – Compile Results of Field Work and Develop Recommendations

Step 1: Develop Evaluation Criteria

Landform

- Distinctive (3) Prominently undulating hills in and along the river valley.
- Noteworthy (2) Gentle slopes and rolling hills.
- Common (1) Predominantly flat terrain.

Vegetation

- 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.

Water

- Distinctive (3) River predominant within foreground view.
- Noteworthy (2) River/creek in the view.
- Common (1) No water.

Land Use

- Distinctive (3) Agricultural land.
- Noteworthy (2) Parkland, open space, and natural areas.
- Common (1) Modern residential development and streetscapes.

Step 1: Criteria (contd.)

Cultural/Historic Character

- Distinctive (3) Predominant features related to the Revolutionary War.
- Noteworthy (2) Other regional, cultural, and historic features.
- Common (1) Few cultural or historic features.

Views

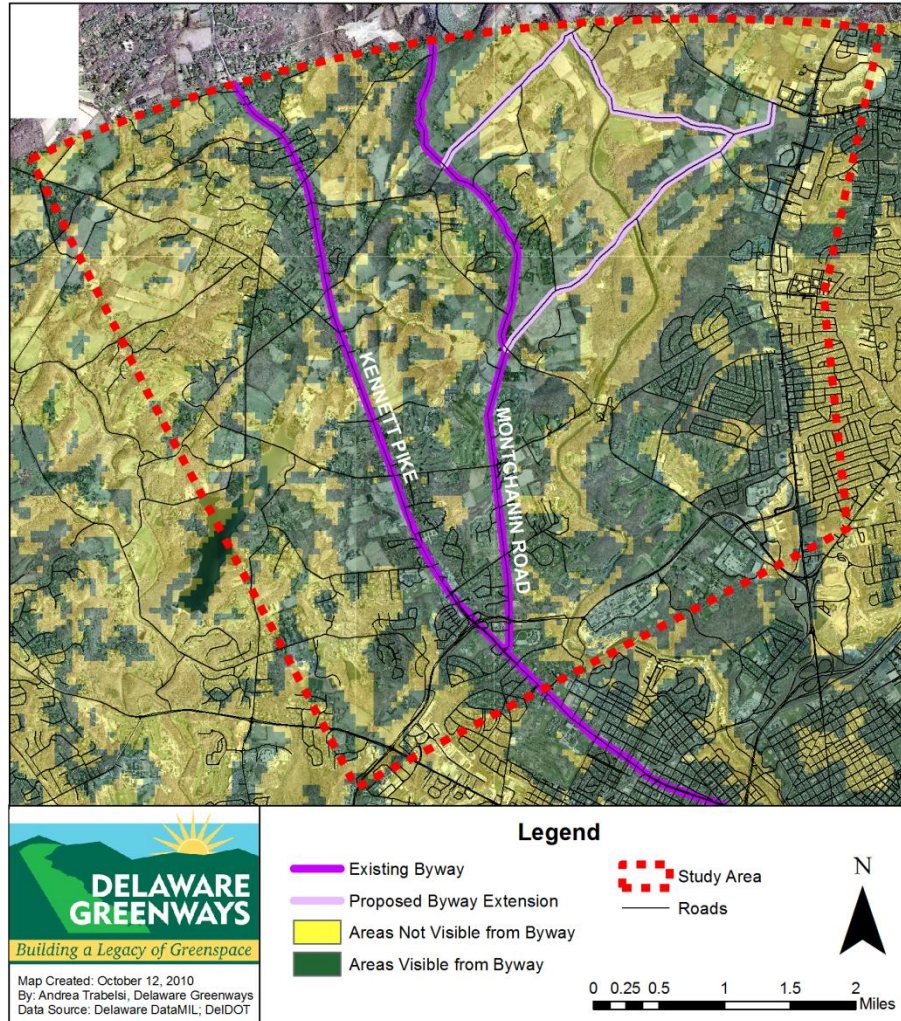
- Distinctive (3) Long and wide.
- Noteworthy (2) Medium and/or narrow.
- Common (1) Short.

Composition

- Distinctive (3) Significant unity and contrast.
- Noteworthy (2) Some unity, contrast and variety.
- Common (1) Lack of unity, contrast and variety.

Step 2: Identify unprotected viewsheds

Land Visible from the
Brandywine Valley National Scenic Byway



DELAWARE GREENWAYS
Building a Legacy of Greenspace

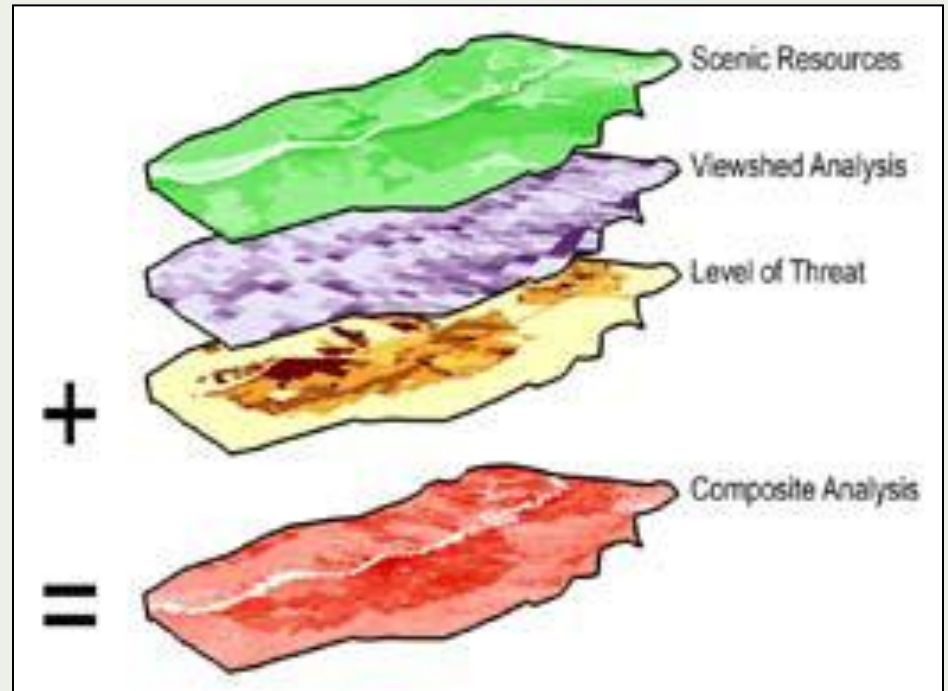
Map Created: October 12, 2010
By: Andrea Trabelsi, Delaware Greenways
Data Source: Delaware DataMIL; DelDOT

Step 3: Field Evaluation

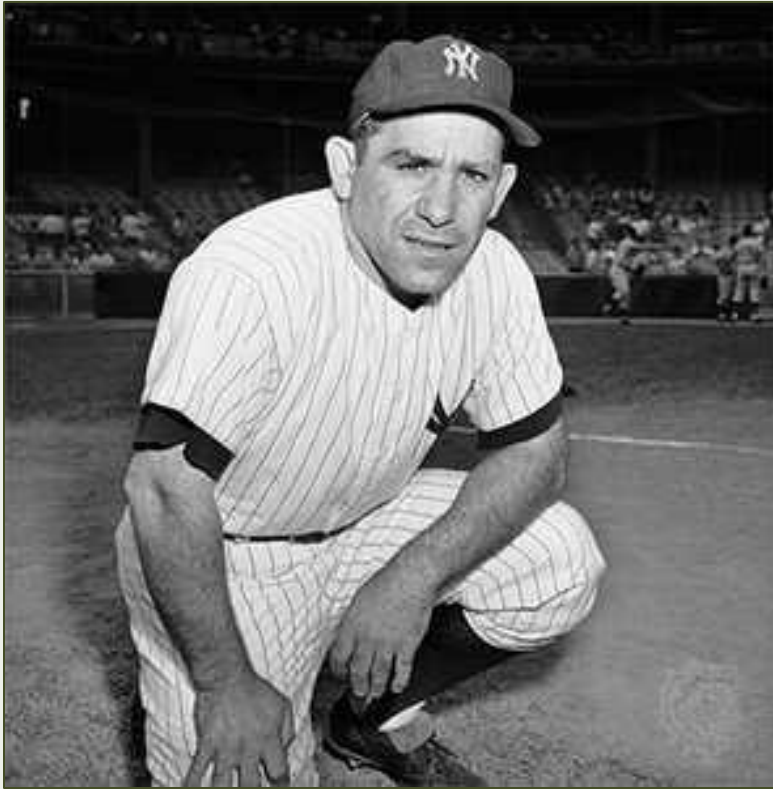
- i. Training
- ii. Viewshed verification and documentation
- iii. Follow-up discussion



Step 4: Compile Results & Make Recommendations



Questions???



“The future ain't what
it used to be”.

Yogi Berra