# Recreational Trail Investment Planning









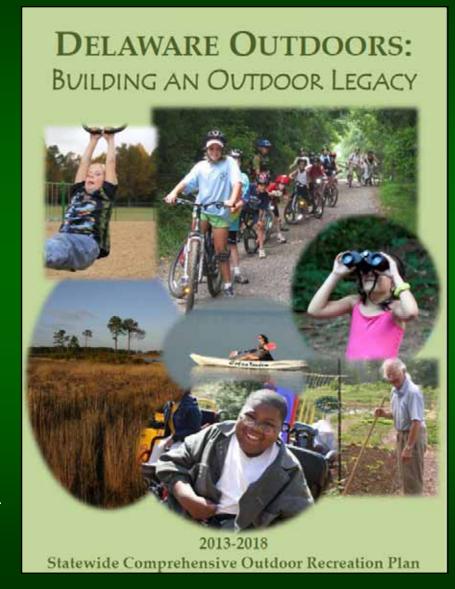




- ldentifies public recreation use patterns and preferences as well as the public's landscape perception.
- Analyzes the supply and demand of outdoor recreation throughout the state
- Directs future recreational investments

### **Production Timeline**

- Outdoor Recreation Participation Survey-Summer 2011
- Technical Advisory Committee-2011-2012
- Draft Report- TAC and Internal Review-Fall 2012
- Public Comment- December 2012-January 2013
- Final Document for Governor's Signature-January 2013
- Final Approval from National Park Service-May 2013



### **Components of the SCORP**

**Demographics**- Where are the people?

**Supply**- What facilities already exist?

**Demand-** How do we know what facilities are needed?

**Distribution**- Are the facilities in the same areas as the people? Where should new facilities be placed?

#### **Outdoor Recreation Issues & Recommendations-**

Identification of recreation concerns with recommended actions to enhance outdoor recreation in Delaware



### **SCORP Highlights**

- 1. Improving Public Health
- 2. Getting Children Outdoors
- 3. Statewide Trails and Pathways Initiative
- Partnerships for Conservation,
   Recreation & Tourism
- Protecting Lands for Conservation and Recreation
- 6. Accessible Recreation

DELAWARE OUTDOORS: BUILDING AN OUTDOOR LEGACY
Statewide Comprehensive Outdoor Recreation Plan

4D.14

#### Statewide Trails & Pathways Initiative

Goal #1: Make Delaware walkable and bikeable by creating a premier interconnected network of multi-use bicycle and pedestrian trails and pathways.

Goal #2: Design, construct and maintain a sustainable network of trails and pathways

RECOMMENDATIONS	<b>IMPLEMENTERS</b>	AGO
Increase the system of interconnected trails and pathways by extending existing tail hubs within municipalities and state parks.	DNREC, DelDot, local parks and recreation departments, County and Municipal planners	歌歌
<ol><li>Develop concept plans with focus on identifying new trail and pathway corridors that extend existing trails into county regions.</li></ol>	DelDOT, DNREC, county partners, trail users, bike commuters	
<ol> <li>Allocate a steady and reliable funding stream for trails and pathways that builds on and extends the existing network.</li> </ol>	DNREC, DelDot, local parks and recreation departments, County and local officials, trail advocates	
Coordinate planning efforts to connect neighborhoods with places of work, schools, businesses, park and other community facilities.	DNREC, DelDot, Office of State Planning & Coordination, County and Municipal planners	物質

## Statewide Trails and Pathways Initiative

### Goal #1:

Make Delaware walkable and bikeable by creating a premier interconnected network of multi-use bicycle and pedestrian trails and pathways.



Design, construct and maintain a sustainable network of trails and pathways.

14 Recommendations







### **Fourteen Recommendations**

### Support Increase Mileage of Trails

- Increase the system of interconnected trails and pathways by extending existing trail hubs within municipalities.\*
- Develop concept plans that extend existing trails into county regions.

### **Funding**

- Allocate a steady and reliable funding stream for trails and pathways.
- Advocate and identify funding sources to conduct local walkability and bikability analyses.





### **Trail Planning**

- Coordinate planning efforts to connect neighborhoods with places of work, schools, businesses, parks and other community facilities.\*
- Identify gaps in trail and pathway systems to prioritize critical community connections.\*
- Identify needed land and support the development of future trail extensions and connections.\*
- Conduct a detailed spatial analysis to determine geographical representation of trail, pathway and sidewalk related needs.



### Trail Use Data and Research

- Conduct trail volume and use surveys to better understand and enhance trail use.
- Promote and support bicycle and shared-use trail safety campaign.



- Develop a unified statewide trail classification and marking system.
- Identify unsustainable and inaccessible trail sections.
- Adopt universal sustainability and trail maintenance standards for design & construction
- Share trail standards and design knowledge with local agencies and volunteer organizations.







### Using the SCORP and existing data to inform decisions...

**Demographics**- Where are the people?

**Demand-** How do we know what facilities are needed?

Supply- What facilities already exist?

**Distribution**- Are the facilities in the same areas as the people? Where should new facilities be placed?



## Delaware's *O*utdoor *R*ecreation *I*nventory *ORI*

Spatial and tabular data set of protected land and public parks

Initially developed in 1993 and continually updated

Intensive assessment of all publicly accessible lands and recreation amenities- 2011



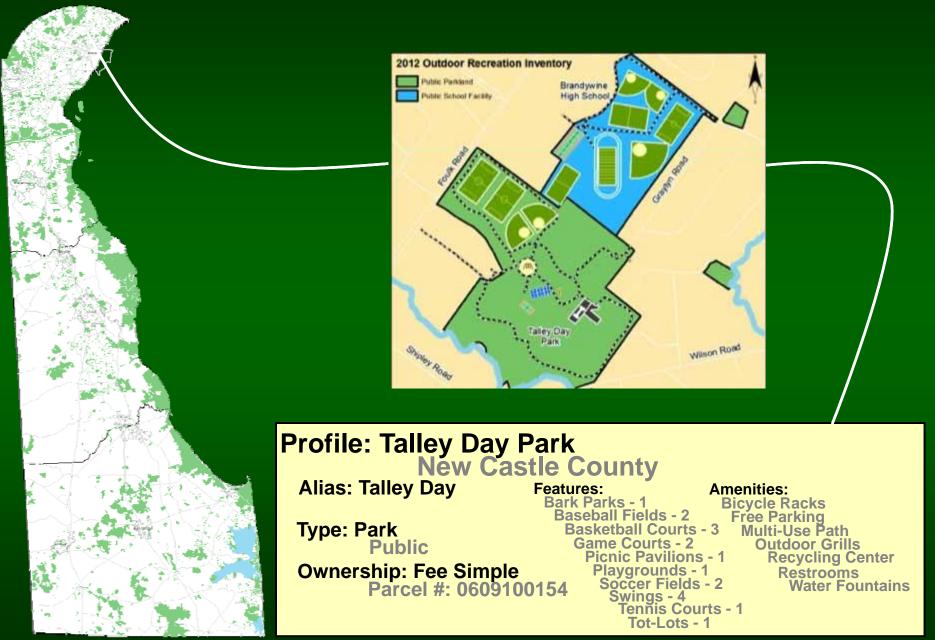




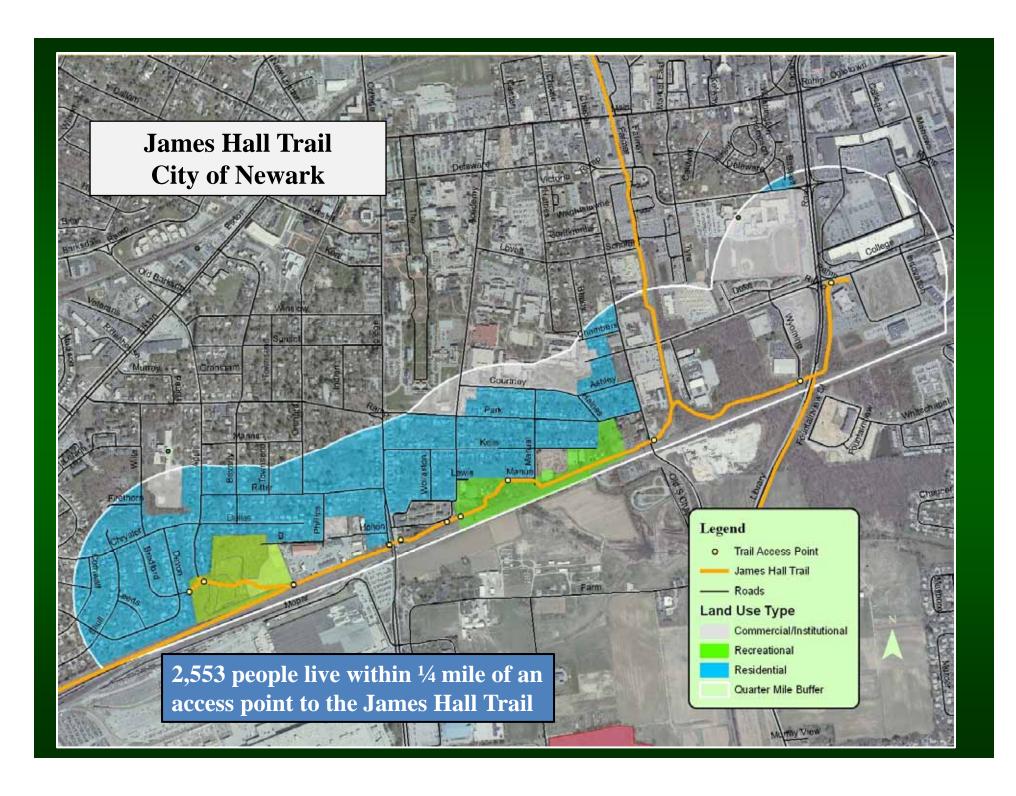


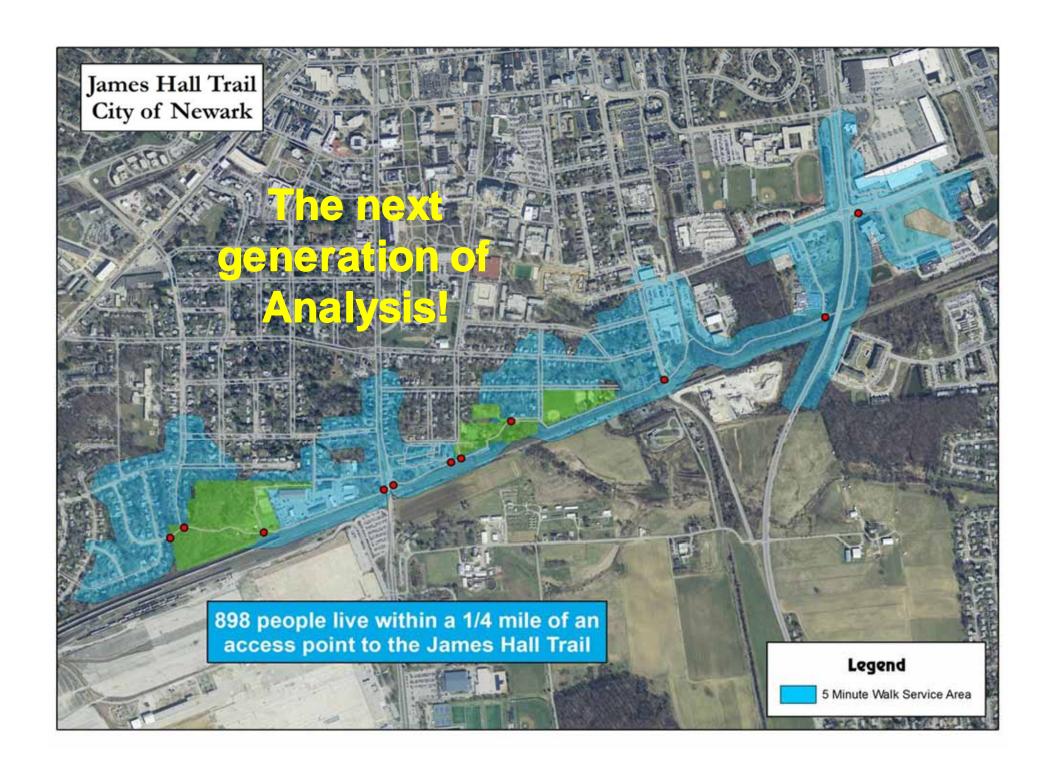


### Tabular Data & Spatial Coverage- Tying it all Together



## City of Dover- Playgrounds **Dover Population= 35,912** Population within ½ mile radius of a playground= 22,874 (64%) Legend 1/2 mile buffer Playgrounds in Dover Dover





# Recreational Investment Planning The Power of GIS Modeling

- Models developed by Azavea
- Use ArcGIS software to estimate "Service Areas" for Recreational Facilities
- Identify the recreational "Deserts"
- Locate the best location for new facilities







### **Service Area Models**

- The Service Area Models use ArcGIS with the Spatial Analyst and Network Analyst extensions.
- Models look at actual travel networks for bicyclist and pedestrians.
- Travel Networks include
  - Neighborhood streets 25 mph without sidewalks
  - Roads with sidewalks or pedestrian facilities
  - Multi-use trails and pathways
  - Share the road lanes (bicycle network only)
- Models ran for two modes of travel
  - Walking average walking pace of 3.0 mph
  - Bicycling average riding pace of 8.5 mph
- Population Estimates and Housing Unit numbers are based on the 2010 U.S. Census Data.

# Service Area Models *Advantages*

- More accurate estimates of how people are distributed within census blocks
- Uses actual travel networks
- Can model different modes of travel
- Provides better estimates of the number of people served by a facility







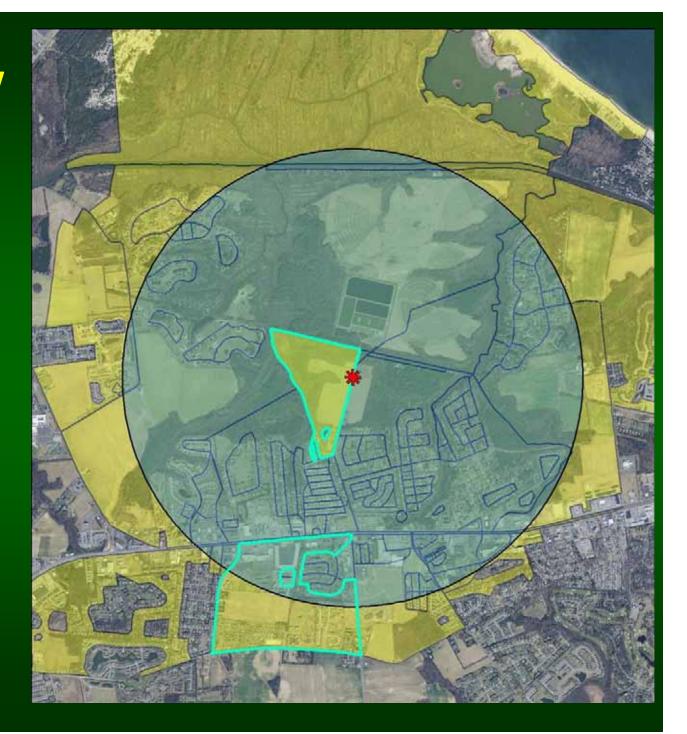
## How Do We Know Who to Include

### **The Old Method**

Percent Area Method

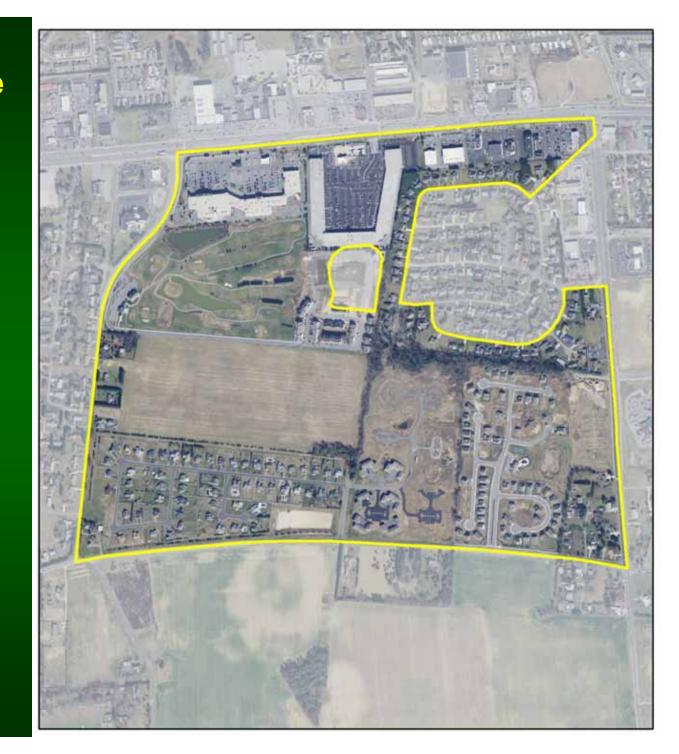
### **The New Method**

Population Interpolation



## Where the People Really Live

- Better estimates of where people really reside within a census block
- The model distributes the population within the residential areas of the census block
- Factors in the density of the road network





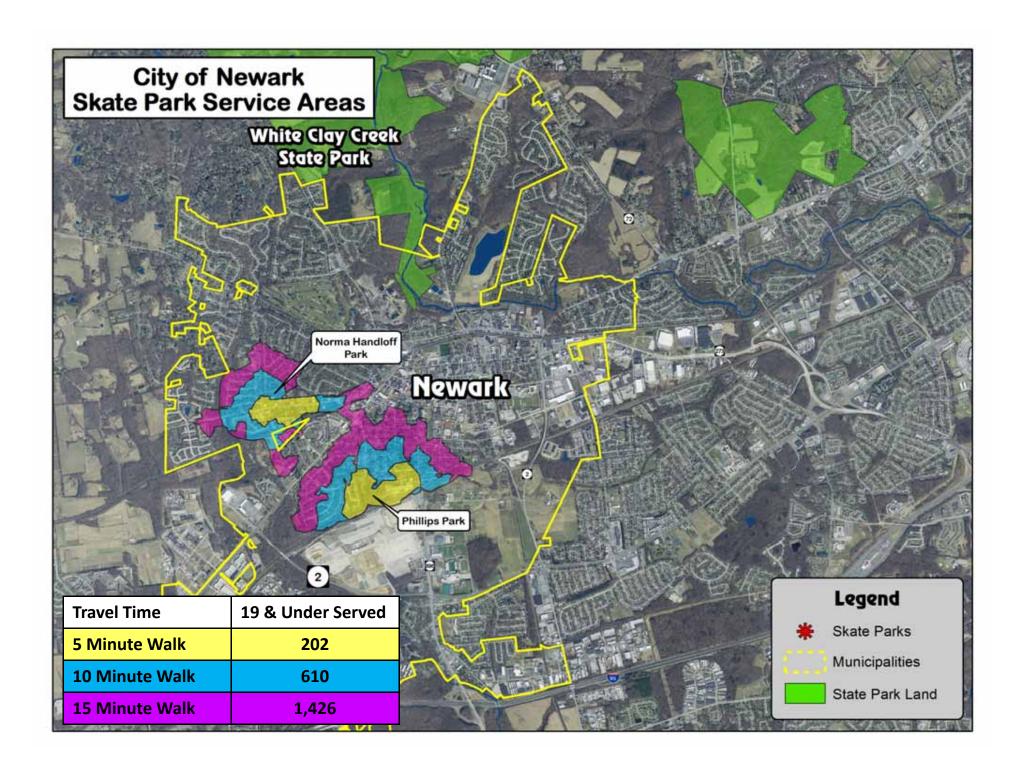


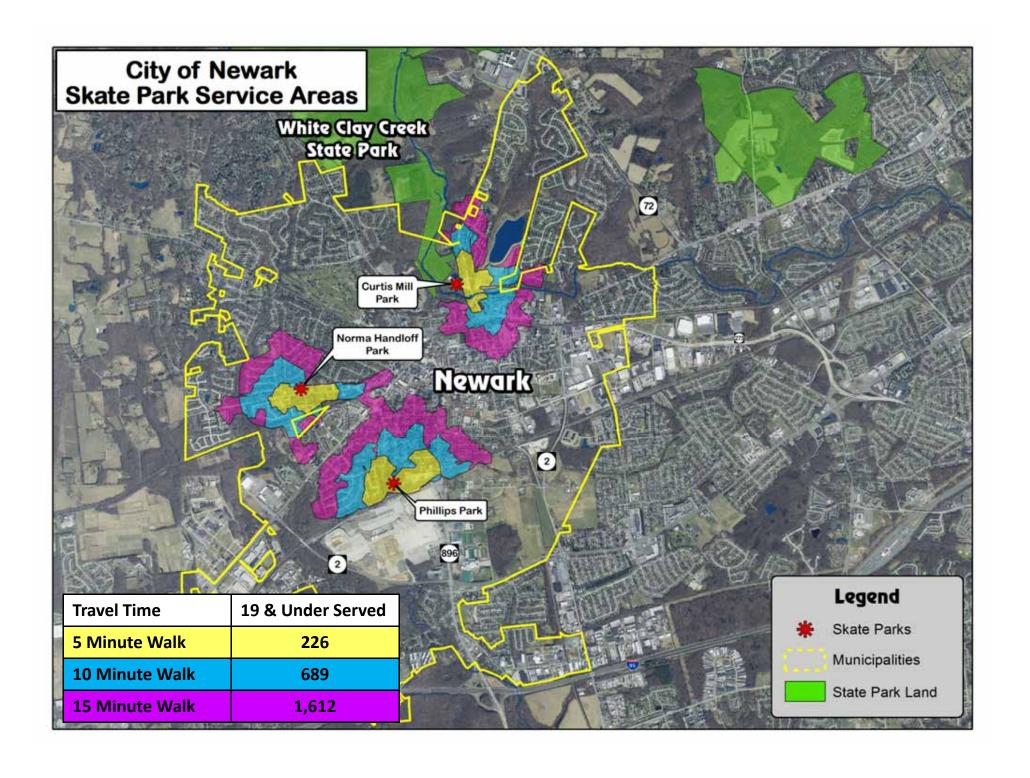
### Buffer Analysis Distance covered at 2.5 mph

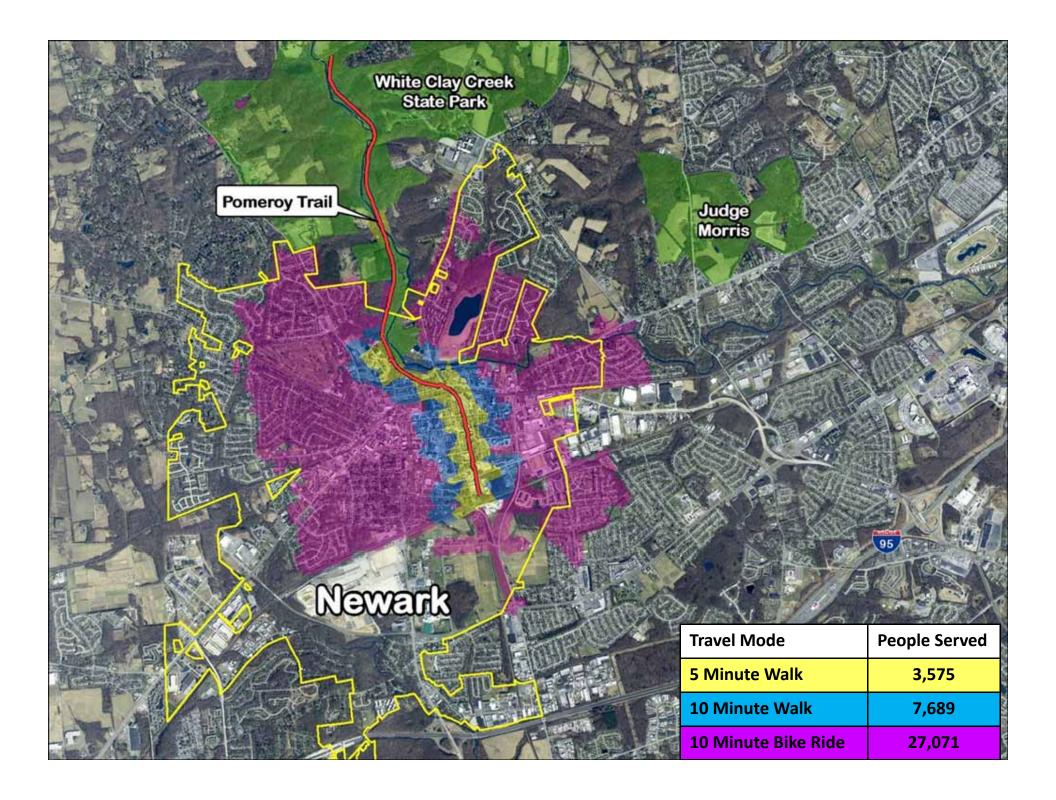
Buffer	People Served
5 Minute Radius	2,533
10 Minute Radius	8,289
15 Minute Radius	15,148

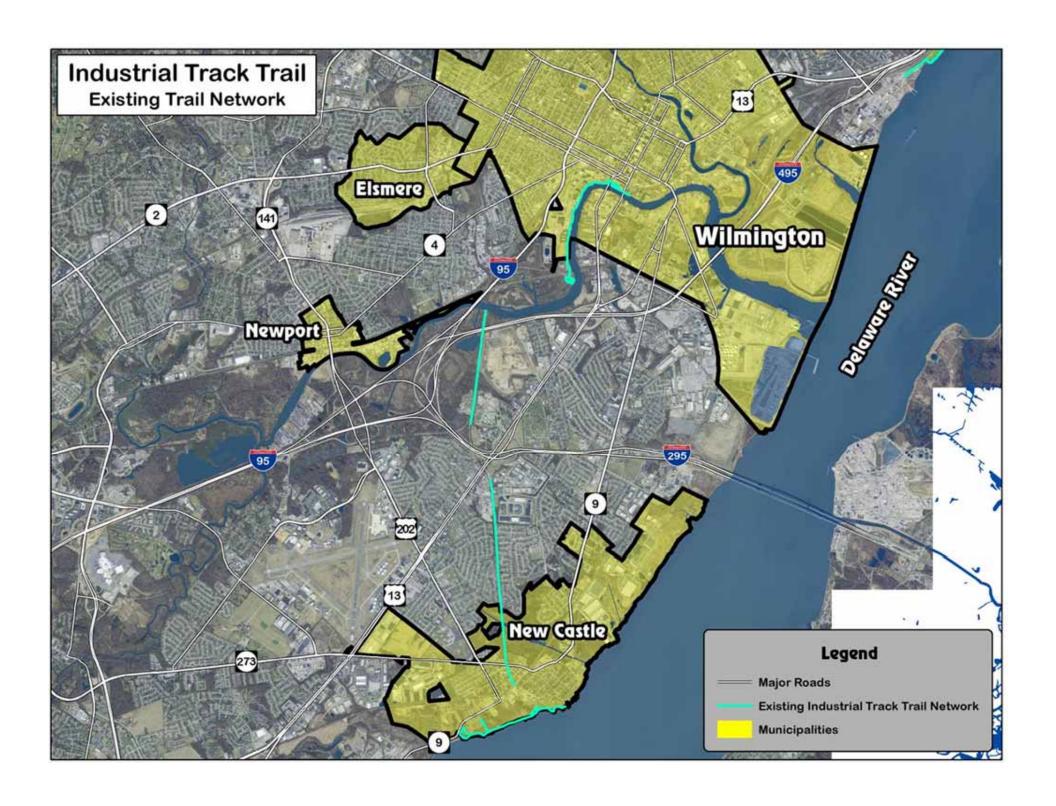
### Walkable Route Analysis 2.5 mph walking pace

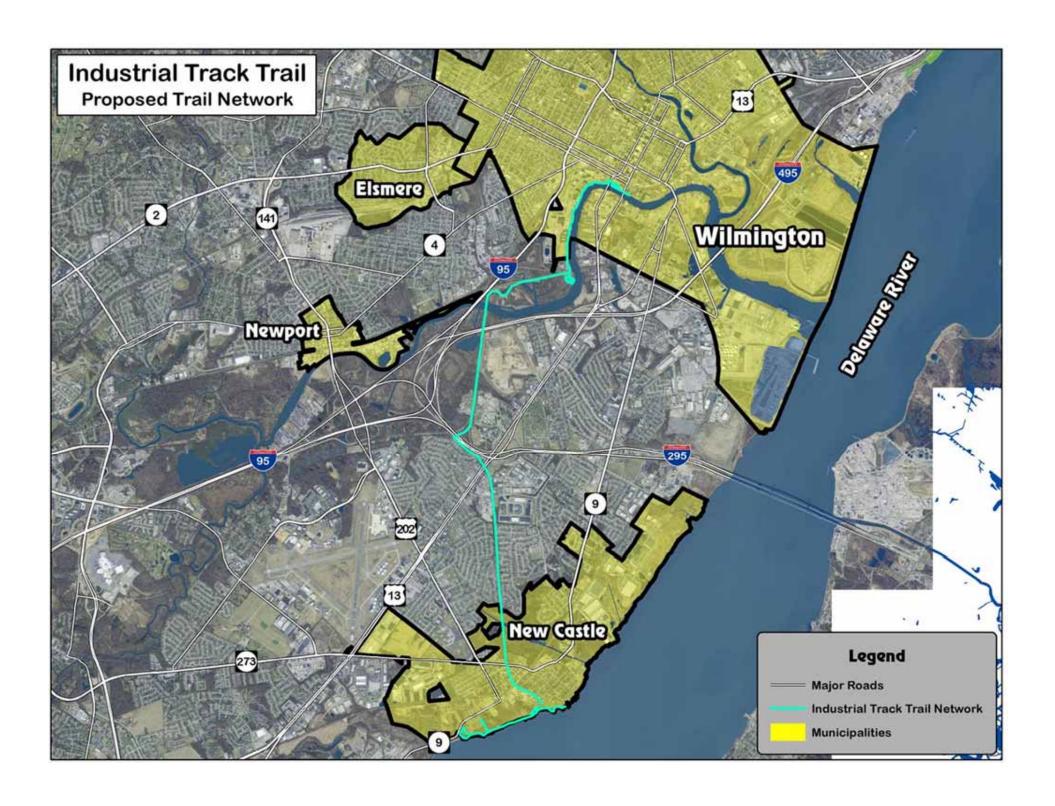
Walk Time	People Served
5 Minute	1,355
10 Minute	5,542
15 Minute	10,023

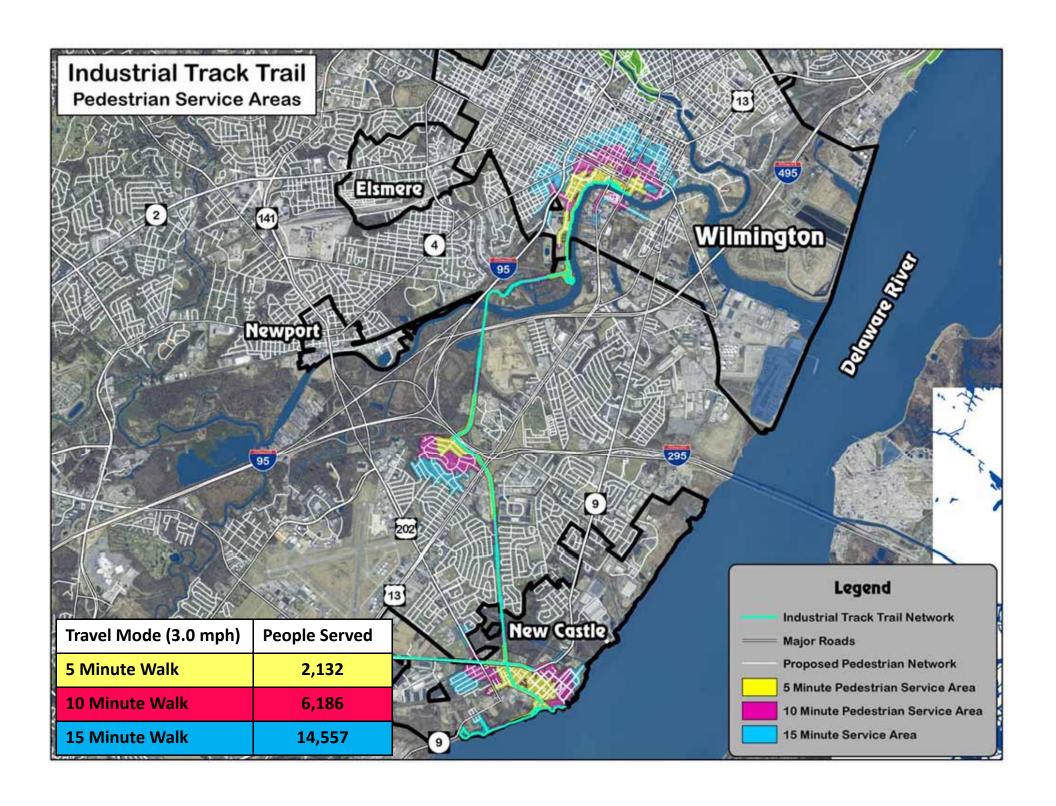


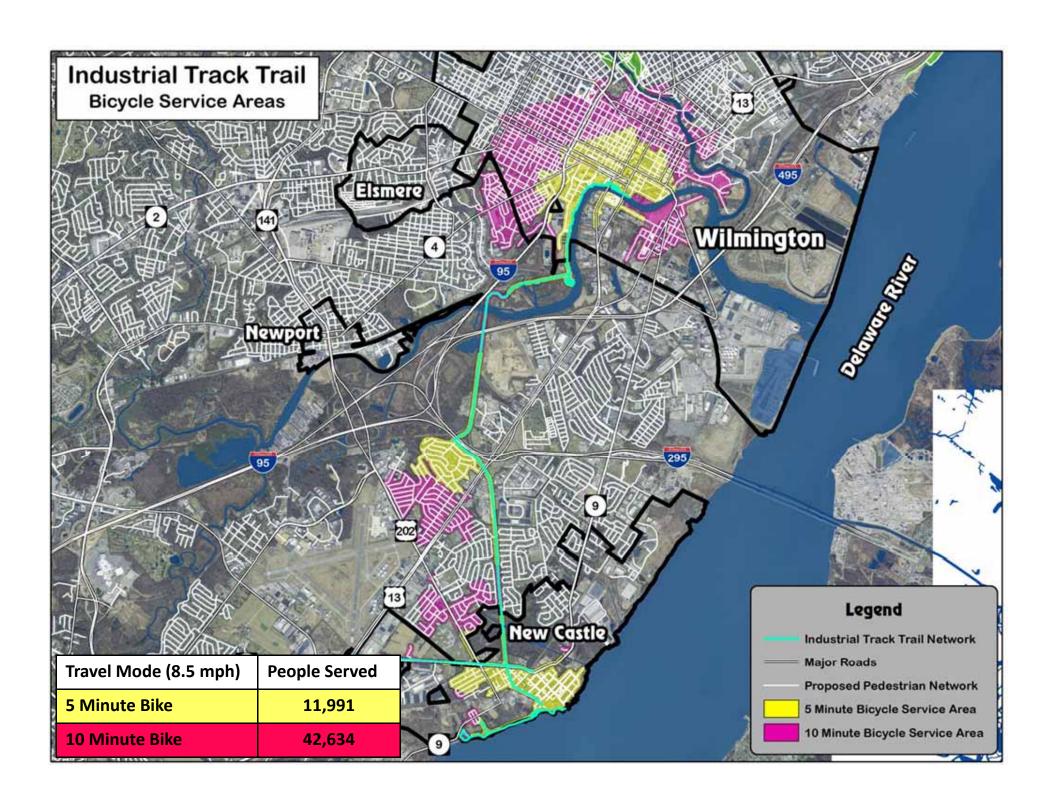


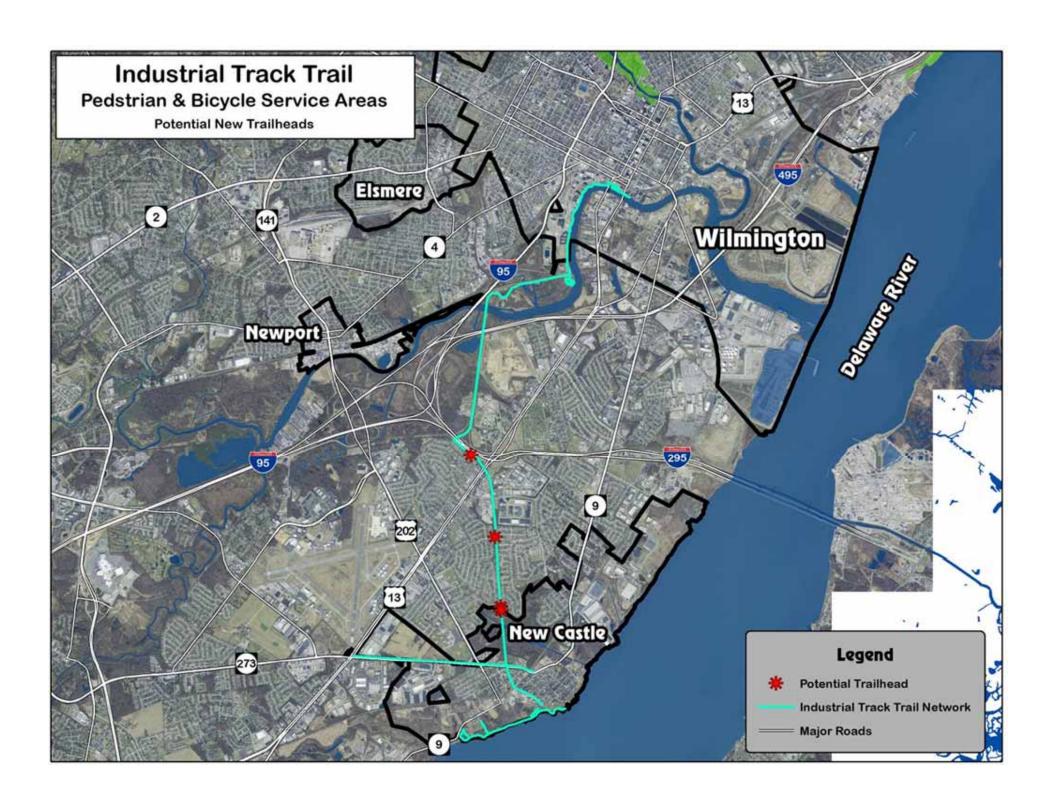


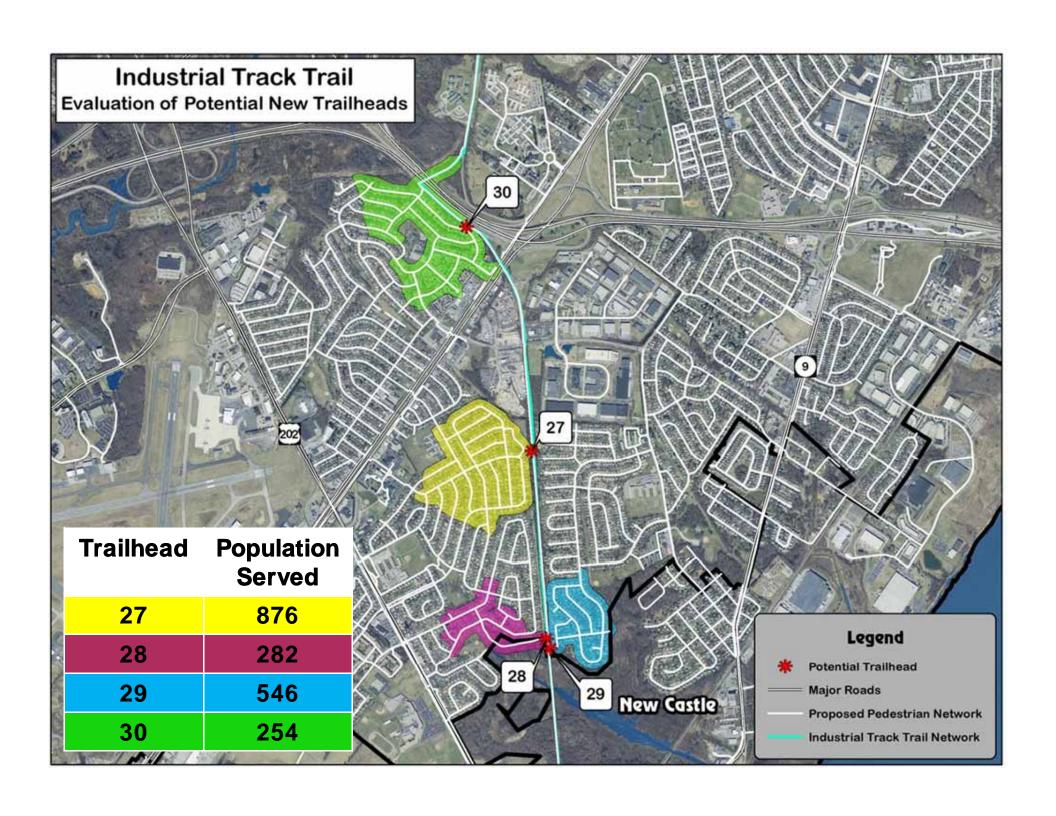


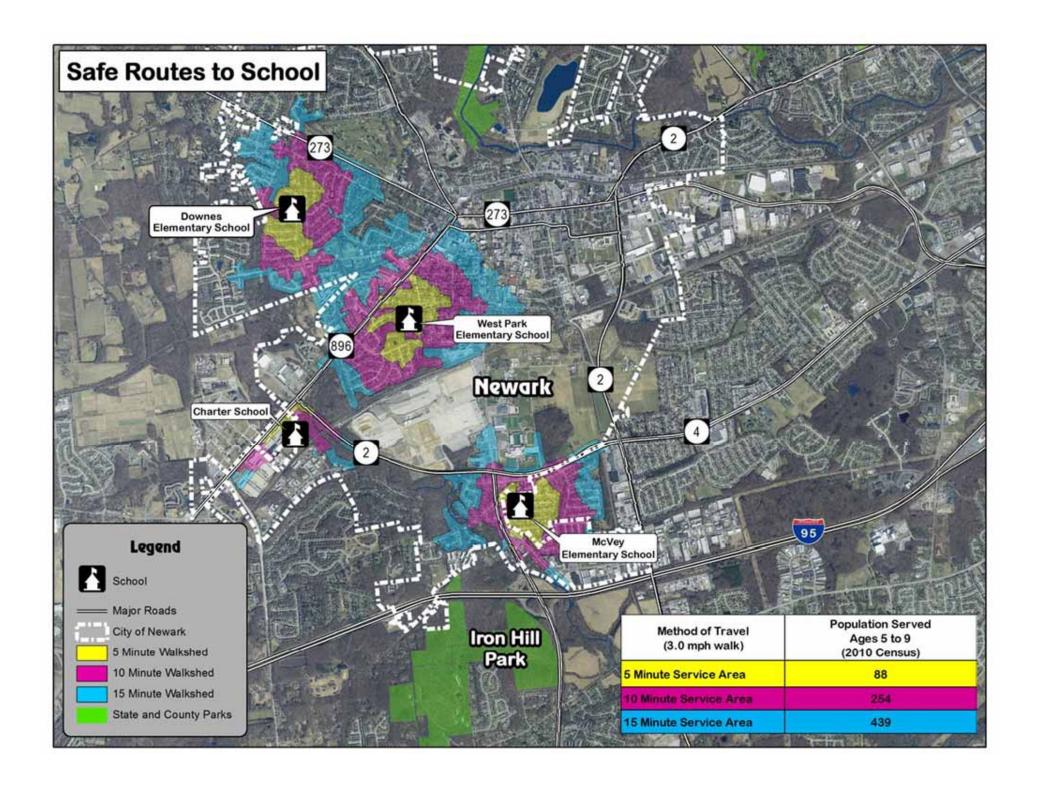


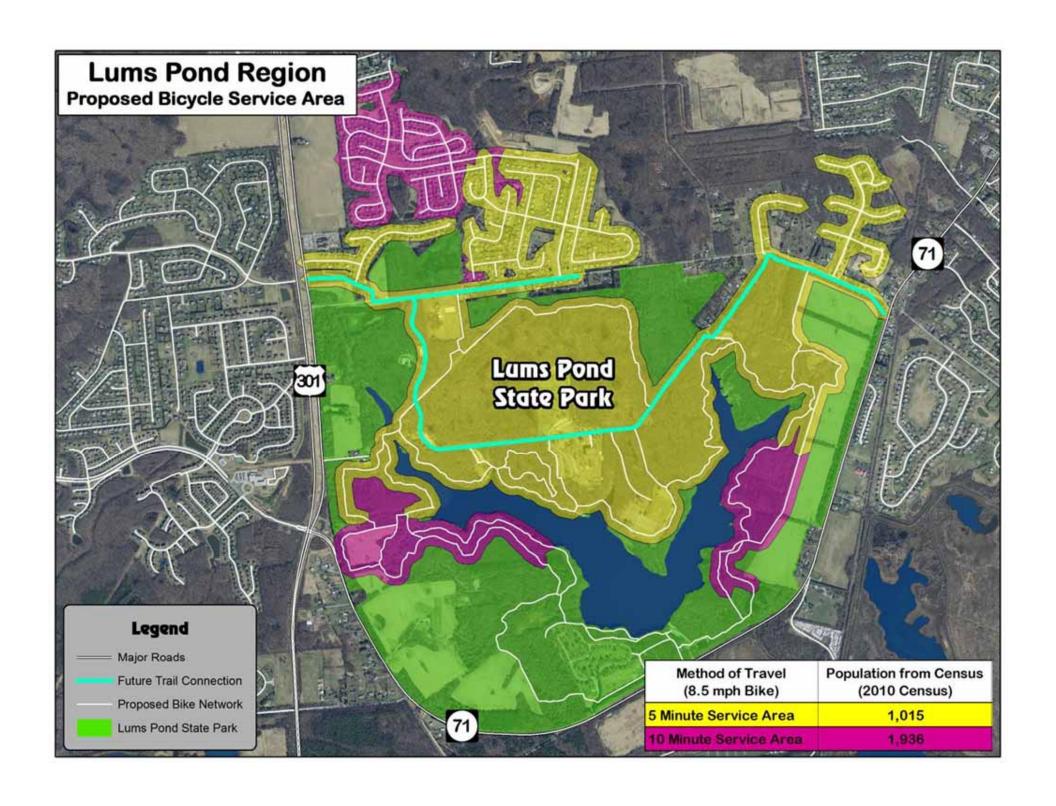


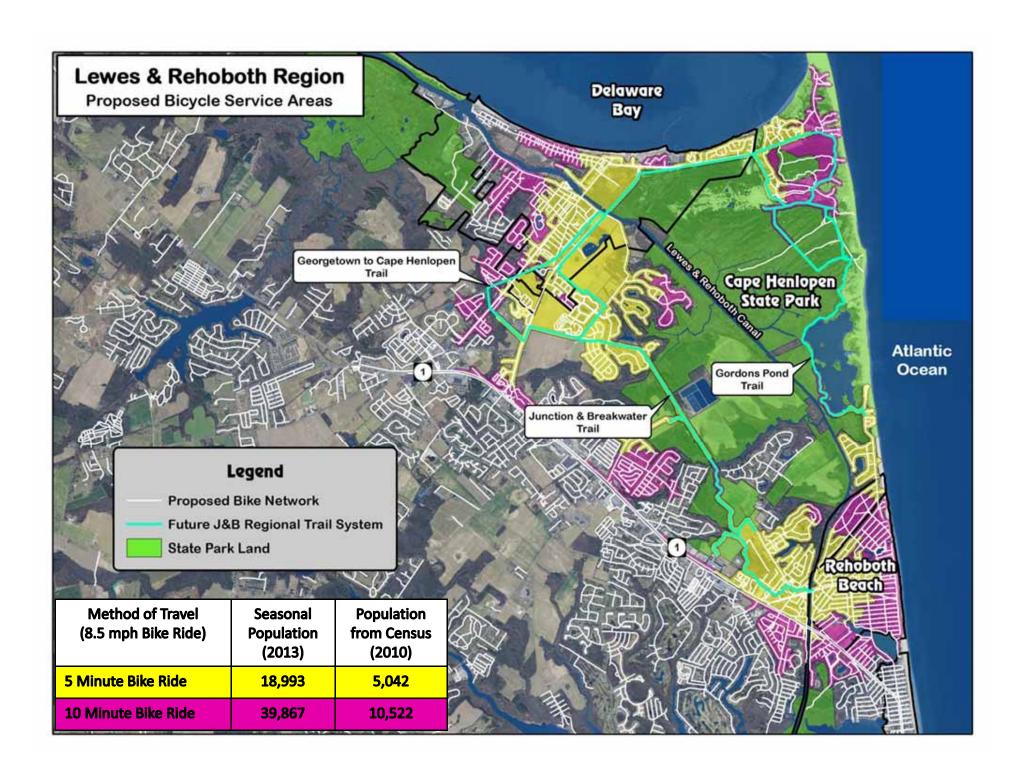


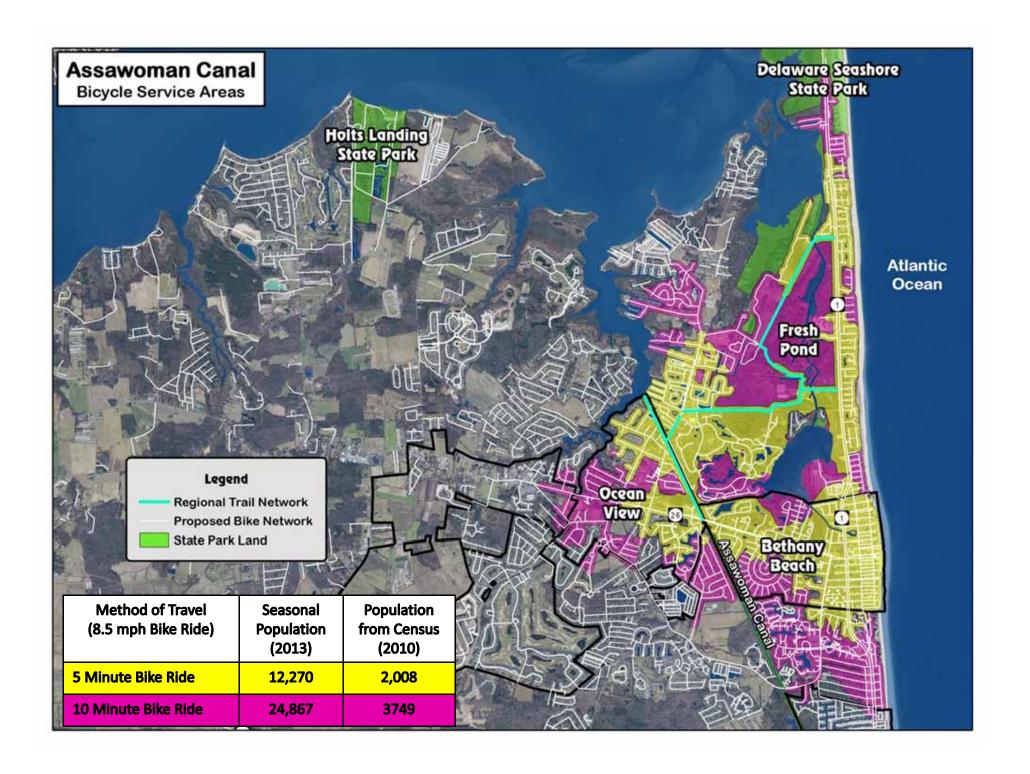












### **Future Steps**

- Work with the counties and municipalities to provide GIS modeling assistance
- Work with Healthy Eating and Active Living (HEAL) to perform a statewide analysis
- Create an online user friendly portal where users can find close to home facilities to recreate

