



# NORTH CLAYMONT AREA MASTER PLAN

## **Report on Task 1:**

## Identify Issues, Opportunities and Constraints

Wilmington Area Planning Council  
(WILMAPCO)

New Castle County

Claymont Renaissance Development  
Corporation (CRDC)

Delaware Office of State Planning  
Coordination (OSPC)

Delaware Department of Transportation  
(DelDOT)

Delaware Transit Corporation (DTC)

Delaware Department of Natural Resource  
and Environmental Control (DNREC)

Delaware Economic Development Office  
(DEDO)

[www.wilmapco.org/ncamp](http://www.wilmapco.org/ncamp)

[www.facebook.com/northclaymont](https://www.facebook.com/northclaymont)

1/04/2016

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# Introduction

## Project Purpose

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The North Claymont Area Master Plan (NCAMP) will examine the potential for redevelopment to support economic development, access to jobs, retail and services, and transportation by road, rail, water, transit, walking and bicycling. The analysis will assess the potential for a mixed use residential, commercial and industrial area designed to promote economic activity, make public transit successful, walking and bicycling convenient and safe, and provide for a vibrant, livable community. NCAMP seeks to contribute to the revitalization of an older shopping center in northern New Castle County, reuse of vacant industrial sites, and improvement of transportation connections for residents, employees, visitors and freight within the area.

This report details the findings of **Task 1: Identify Issues, Opportunities and Constraints**. Task 1 included a comprehensive review existing and planned land use, transportation, and demographics for the north Claymont area. This review contained in this report includes analysis and mapping of existing conditions data including:

- Land Use including existing zoning regulations, existing land use, currently planned land use, and other state and county land use policies.
- Real estate / economic development assessment.
- Demographics including current and projected population, employment and households.
- Transportation circulation maps and data including roads, sidewalks, bicycle, bus, rail. Transportation data includes traffic and congestion, safety and planned projects.
- Freight analysis drawn from the 2013 Global Insight Freight and Chemical Supply Chain report.
- Environmental features maps and data including parks, wetlands, brownfields, floodplain, sea-level rise.

Task 1 has been completed to inform future planning phases of existing conditions within the study area. Future tasks will merge this initial analysis with extensive community and stakeholder outreach, and technical assessment. The NCAMP seeks to develop recommendations that best support creating a more vibrant mix of land uses, while supporting the need for multimodal accommodations, freight movement, and industrial development to create a more attractive, safe, and livable Claymont, better connected to adjacent transportation corridors and neighborhoods.

## Project Area

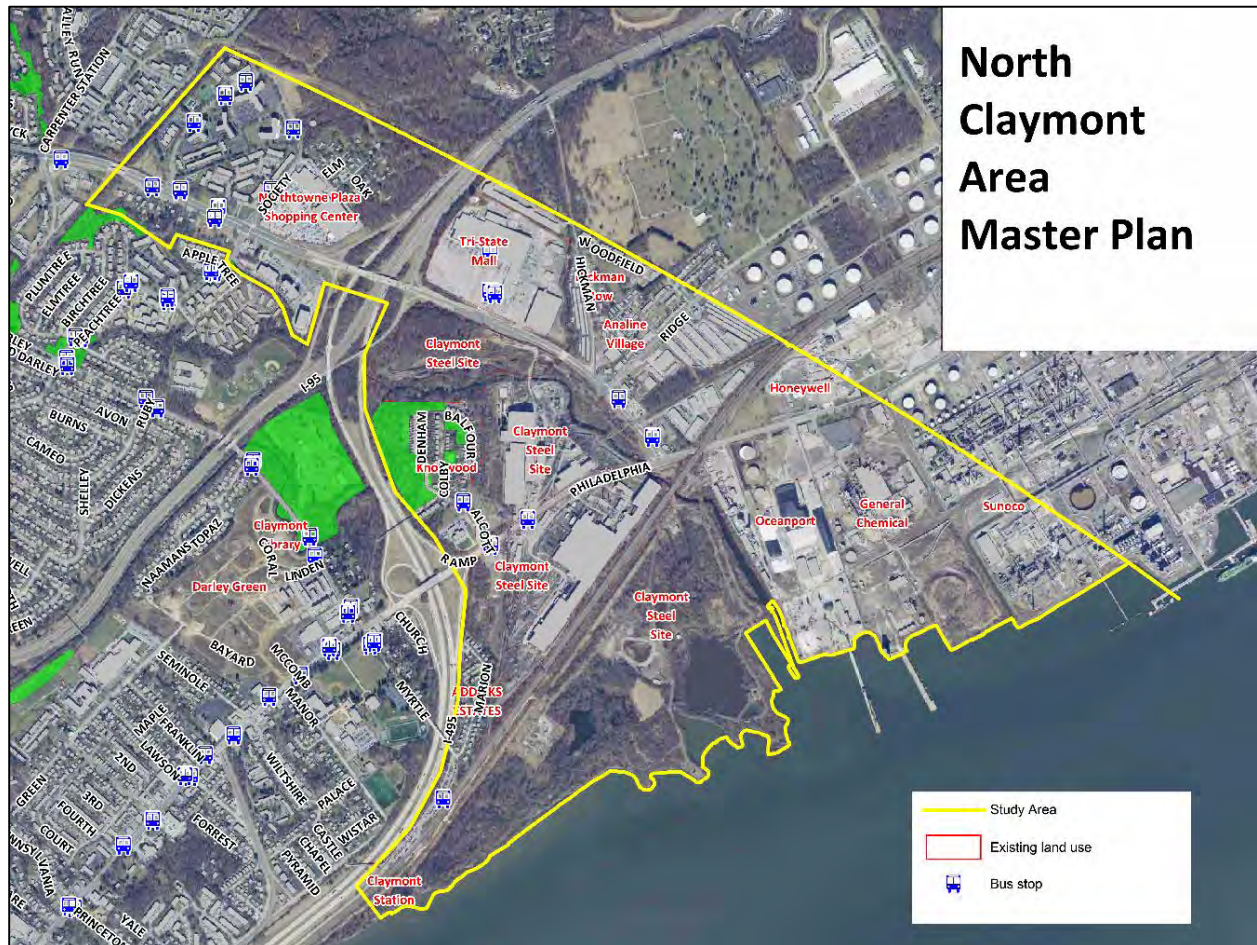
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The North Claymont Master Plan Area has a mix of industrial, commercial, residential, open space and is located to the north and east of the Claymont Hometown Overlay District. Much of the planning area is currently underutilized and represents a tremendous opportunity for economic development due to its easy access to I-95, I-495, Amtrak Northeast Corridor, public transit including DART and SEPTA, the Delaware River and available utilities.

Notable sites for redevelopment include the Tri-State Mall (41 acres) and former Claymont Steel (425 acres). Tri-State Mall is an older shopping center that opened in 1970 and currently has 513,896 square feet, one of the largest malls in Delaware. In recent years business activity and occupancy at the mall have declined and resulted in an underutilized commercial center that has significant potential for redevelopment. Currently



SEPTA and DART bus routes enter the Mall site and serve two bus stops. The former Claymont Steel Mill shut down in 2013 and the site is currently undergoing demolition and environmental cleanup to prepare it for redevelopment.



Map 1 North Claymont Area Master Plan Study Area

## Planning Partners

As a master plan, this study will evaluate and make recommendations about a broad range of issues including land use, transportation, economic development and the environment. Thus, the study is a collaborative effort between:

- **Wilmington Area Planning Council (WILMAPCO)**—WILMAPCO is the regional transportation planning agency for New Castle County, DE and Cecil County, MD. As the federally designated Metropolitan Planning Organization (MPO), WILMAPCO is charged with planning and coordinating transportation investments for the region based on federal policy, local input, technical analysis, and best practices. WILMAPCO will provide overall coordination for project including public outreach, providing demographics information, producing maps and developing the final report.
- **New Castle County**—The North Claymont Study Area falls within unincorporated New Castle County. The Department of Land Use regulates all new and existing development in unincorporated New Castle

County and enforces the laws governing property maintenance. The mission is to create a common vision for the future of New Castle County through a proactive community, civic and business planning effort that involves all stakeholders in a consensus-building process. This vision will bring vitality to our County by linking land use with transportation, enticing desired investment and ensuring the protection of our neighborhoods, and the revitalization of our commercial corridors. Land Use has conducted a real estate potential and economic development assessment of the area as part of Task 1, and will help to coordinate with commercial property owners, and provide land use data and relevant plans and code information. The main priority of the New Castle County Office of Economic Development is to provide new, developing, and existing businesses with the resources they need to grow, remain successful, and contribute to our vibrant local economy. The County's Office of Economic Development will help assess economic development strategies and help align planning with the New Castle County Economic Development Strategic Plan.

- **Claymont Renaissance Development Corporation (CRDC)** — CRDC's mission is to develop and implement strategies that will increase the economic vitality of the Claymont community, enhance Claymont's reputation as an attractive and desirable place to live, and build on Claymont's unique history and character to strengthen its role as an area of cultural and social activity. They are a public/private funded, nonpartisan, nonprofit organization, that partner with the state and local officials, and with private, public and not-for-profit organizations that support economic development of the Claymont Community. CRDC is assisting with community stakeholder outreach, legislative briefings, and local assessment of economic development priorities.
- **Delaware Office of State Planning Coordination (OSPC)** — OSPC works to improve the coordination and effectiveness of land use decisions made by state, county, and municipal governments while building and maintaining a high quality of life in Delaware. They are assisting with coordination between state agencies, and will review land use change proposals and provide guidance on land use planning best practices.
- **Delaware Department of Transportation (DelDOT)**— DelDOT is responsible for planning, designing, building and managing Delaware's statewide transportation system. DelDOT provides transportation and freight data, and will assist with development of transportation recommendations.
- **Delaware Transit Corporation (DTC)** —DTC, an operating division of DelDOT, seeks to design and provide the highest quality public transportation services that satisfy the needs of the customer and the community. Bus service in the area is provided by DART First State. DTC will provide input on existing transit conditions and potential improvements. As a parallel planning project to NCAMP, DTC is developing plans for a Claymont Train Station relocated to within the study area.
- **Delaware Department of Natural Resource and Environmental Control (DNREC)**—DRNEC seeks to protect and manage the Delaware's vital natural resources, protect public health and safety, provide quality outdoor recreation and to serve and educate about the wise use, conservation and enhancement of the environment. DNREC administers the Coastal Zone Act, and will assist with providing information regarding redevelopment opportunities and constraints as they relate to state environmental policy.
- **Delaware Economic Development Office (DEDO)**—DEDO is the state's lead economic development organization. They are assisting with alignment of planning with state economic development plans and incentives.

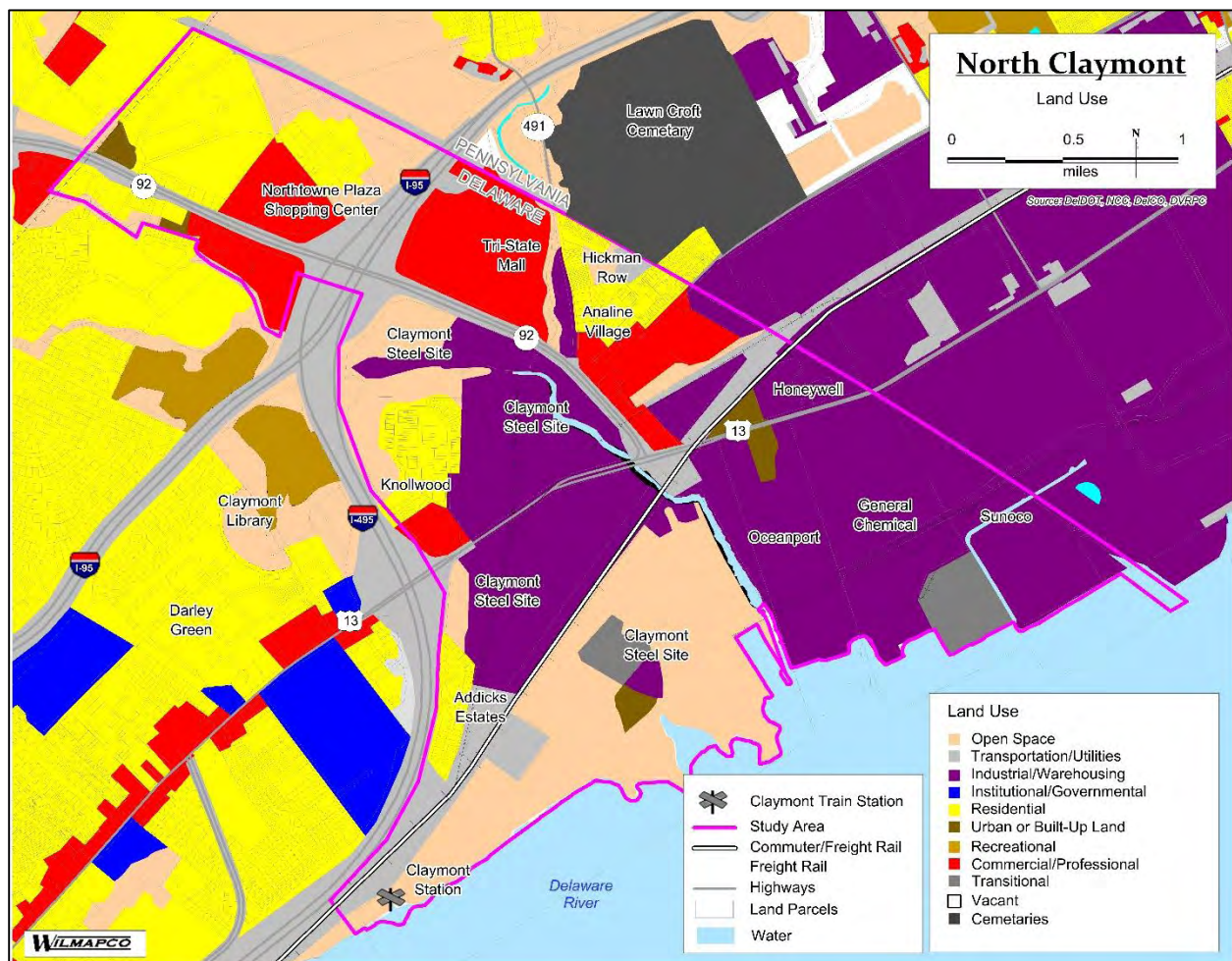
These planning partners, as implementing agencies, form the Project Management Committee. An Advisory Committee of community stakeholders will shape issues, opportunities and constraints and draft scenarios during future phases of the NCAMP.



# Land Use

## Existing Land Use

The study area contains a mix of land use (Map 2), dominated by industrial, with business/trade, open space, residential. Active and recently vacated industrial land uses account for the largest share with 429 acres. Forest, parks and other open space are 262 acres, residential is 203 acres, business and trade is 108 acres, and utilities and other uses are 51 acres. Residential is the primary land use bordering the study area to the south.



Map 2 Existing Land Use

## Existing Zoning

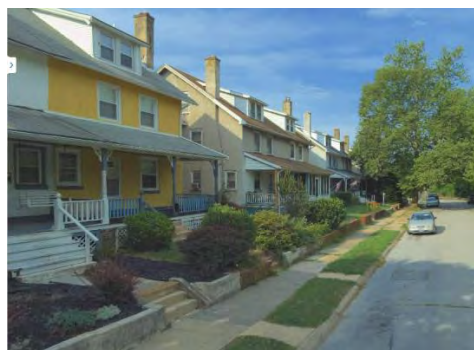
The study area is zoned for industrial, residential and commercial uses (Map 3).

Industrial and heavy industry account for 801 acres. Industrial zoning districts retain older industrial areas and the character of these areas is suburban transition; many are existing industrial parks. In keeping with evolving employment trends, New Castle County allows a wider range of uses and requires views from roads be screened. Heavy industry districts are principally for larger heavy industrial developments not suited to other industrial districts, and the uses that support those types of developments. Heavy industry districts typically has access to rail lines or navigable marine waterways in addition to roadway access, as demonstrated by industrial parcels within the study area. New Castle County Code requires districts to be located to minimize adverse effects from neighboring districts such as noise, air pollution, and unsightly structures.

Residential and manufactured zoning districts make up 242 acres. Residential in the study area is zoned Neighborhood Conservation (NC). NC districts are intended to protect the residential character of existing neighborhoods, and as development standards continue to evolve, these districts avoid making older developments non-conforming. NC zoning districts are sub classified based on housing type and former zoning; those within the study area are shown below.

<b>Neighborhood Conservation (NC) Districts within Study Area</b>		
<b>Zoning Designation</b>	<b>Former Zoning District</b>	<b>Former Dwelling Unit Types</b>
NC21	R-2	Single-family detached
NC6.5	R-1-C, R-3, R-3-G, R-3-SD, R-4	Single-family detached
NC5	R-1-C, R-3-SD, R-3-G, R-3, R-4 nonconforming	Single-family detached, single-family attached, apartment conversion
NCap	R-4	Single-family detached, single-family attached, multi-family residential, apartments
NCth	R-3-G, R-3, R-4	Townhouses, single-family detached, semi-detached
NCmm	R-MM	Mobile homes parks

Source: New Castle County Code

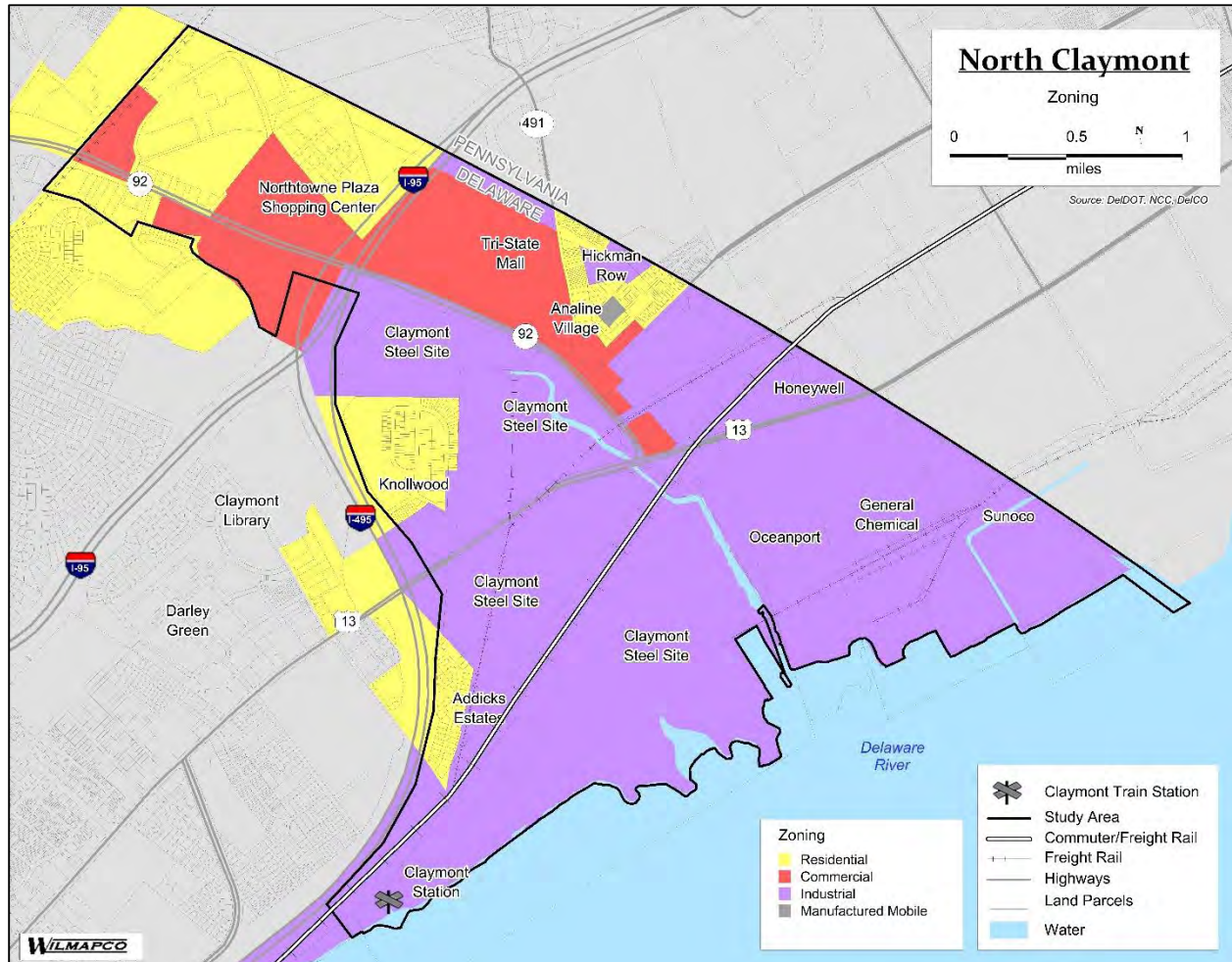


*Knollwood (left) and Addicks Estates (right) are two examples of existing residential communities in the study area.*



Commercial zoning districts make up 153 acres. These zoning districts include Office Neighborhood (ON), intended to provide for professional and administrative offices in a park-like setting, Commercial Regional (CR), intended to provide for community and regional commercial services with a suburban transition character to promote circulation by foot and automobile within contiguous commercial or office areas, and allow mixed uses, and Commercial Neighborhood (CN), intended to ensure that uses primarily serve the surrounding neighborhoods and reflect their suburban character.





Map 3 Zoning



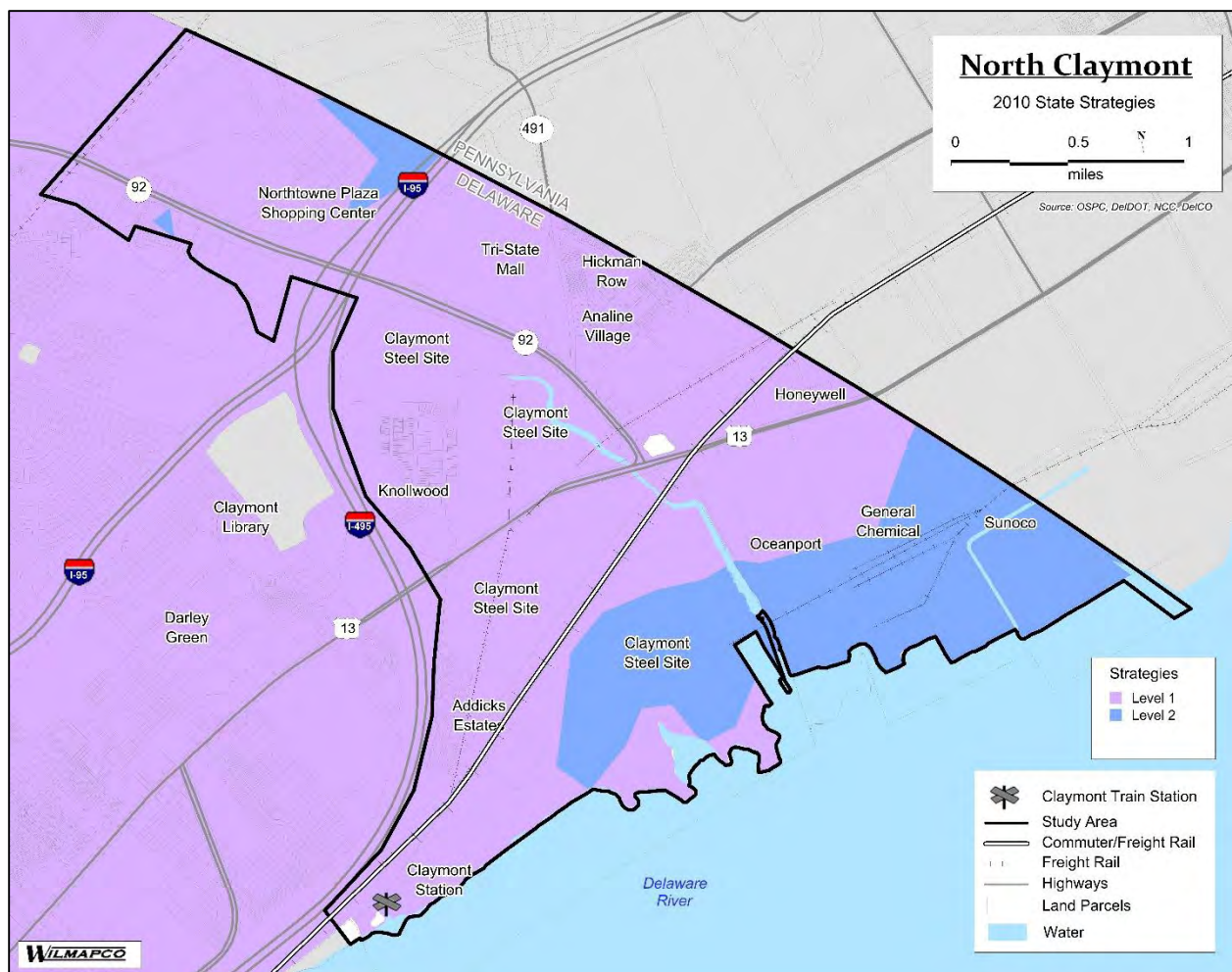
*Northtowne Plaza is a suburban style shopping center with adjacent high density residential areas.*



## Potential Use

### Strategies for State Policies and Spending

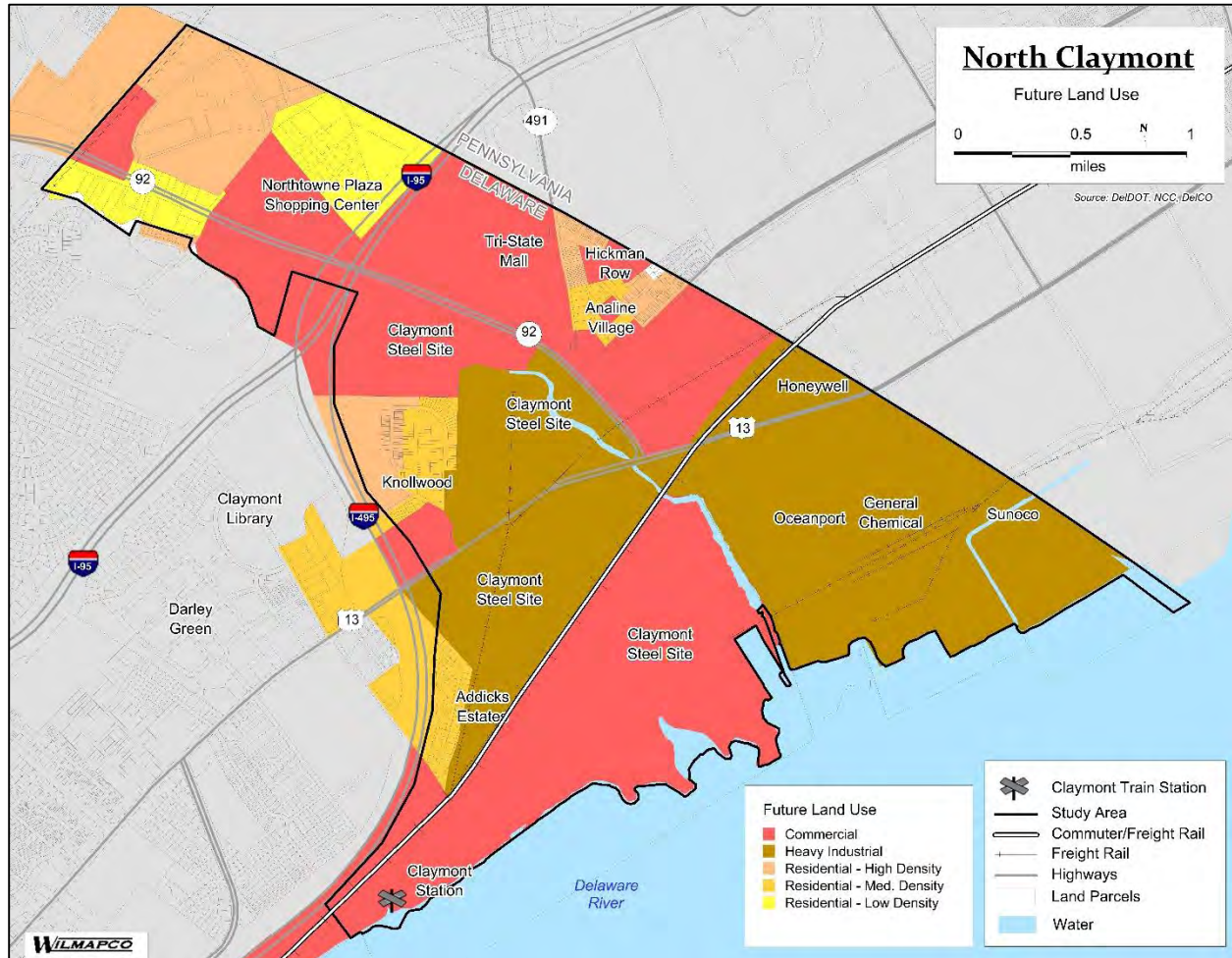
Required by Delaware code, the Strategies for State Policies and Spending (Map 4) purpose is to coordinate land-use decision-making with the provision of infrastructure and services in a manner that makes the best use of natural and fiscal resources. The study area is designated as Investment Levels 1 and 2, the areas where state policies will support growth and economic development activities. Level 1 areas are municipalities, towns, or urban/urbanizing places with higher density, transportation choices and mixed land uses. Level 2 has diverse characteristics and can be composed of less developed areas within municipalities, rapidly growing areas in the counties that have or will have public water and wastewater services and utilities, and areas that are generally adjacent to or near Level 1 areas; they serve as transition areas between Level 1 and the state's more open, less populated areas.



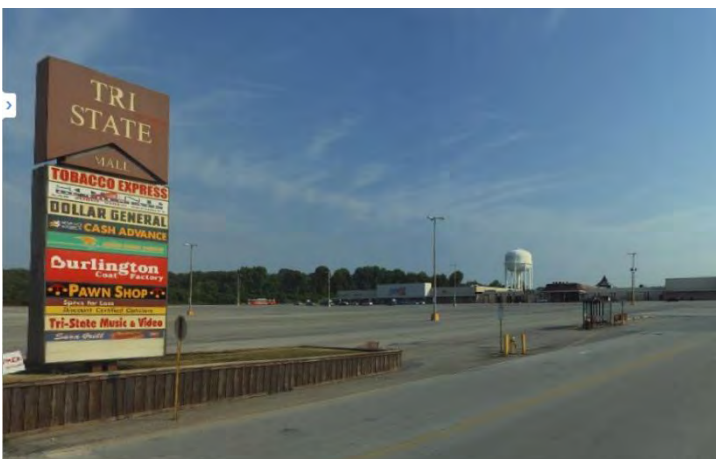
Map 4 Delaware Strategies for State Policies and Spending

## New Castle County Future Land Use

The 2012 Comprehensive Development provides the blueprint for future development and redevelopment in New Castle County. The Comprehensive Plan show future land use (Map 5) as a mix of heavy industrial, commercial/office/industrial development, and residential with a mix of densities.



Map 5 2012 New Castle County Comprehensive Development Plan, Future Land Use



*Tri-State Mall is an older, underused commercial center for which future redevelopment is sought.*

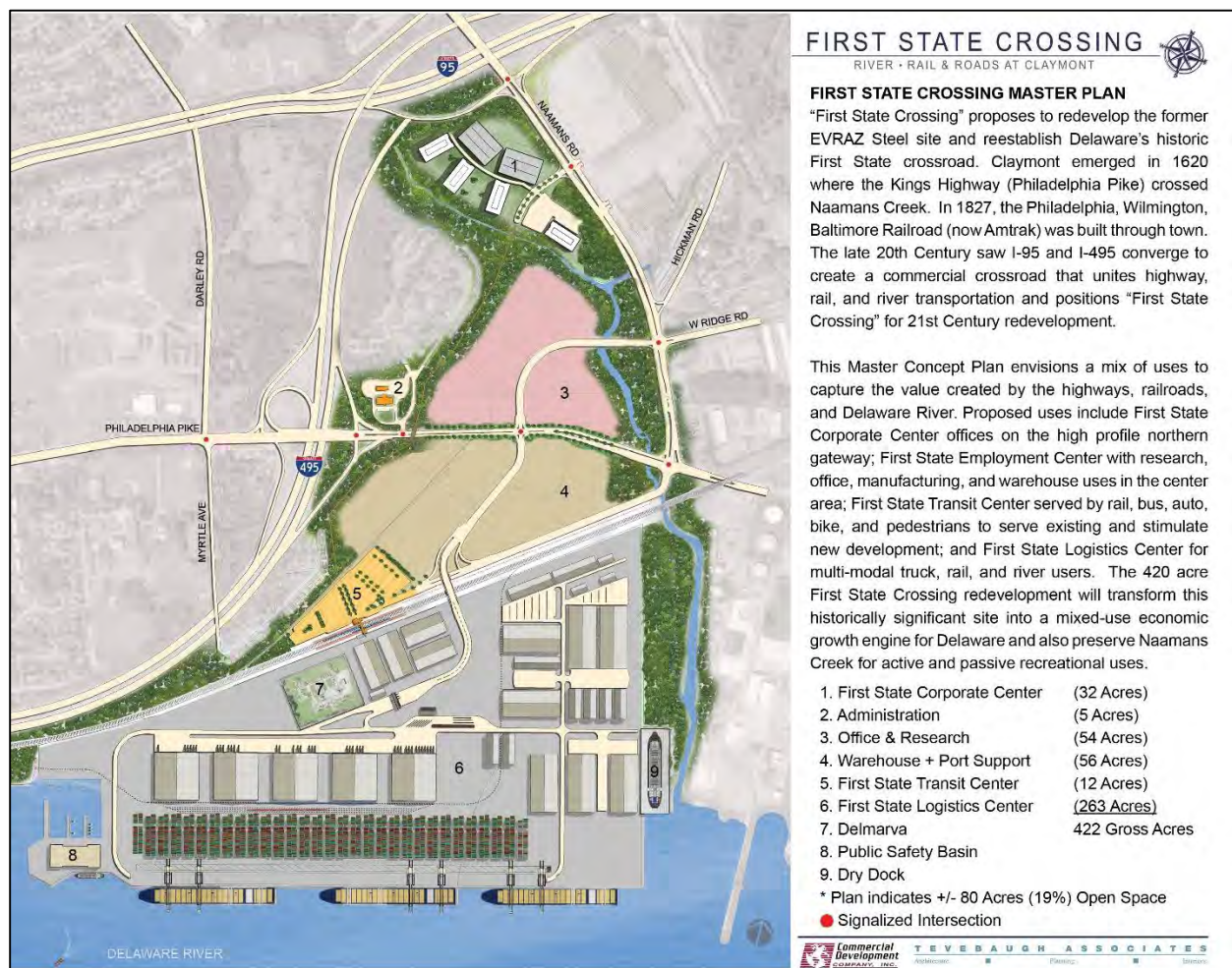


## First State Crossing

The Claymont Steel and EVRAZ site ceased operations in 2013 and was acquired by the Commercial Development Company Inc. (CDC) in early 2015. Demolition of the steel mill's buildings and clean-up of environmental contamination is currently underway by CDC-affiliated companies Environmental Liability Transfer, Inc. and EnviroAnalytics Group. Clean-up is expected to go on for two years.

July of 2015, CDC released concept plans for the site known as "First State Crossing" (Map 6). The concept includes four main components, subject to formal application by CDC and approval by New Castle County:

- First State Corporate Center (1) is a 32-acre corporate campus with 600,000 square feet of office buildings and trails along Naamans Creek that connect it to a relocated Claymont Train Station.
- First State Employment Center (3-4) is a 110 acre site with research and office uses north of Philadelphia Pike and manufacturing, logistics and warehouse uses to the south.
- First State Transit Center (5) is a multimodal transit center proposed for a 12-acre site proposed for a relocated Claymont Train Station. The First State Crossing concept also shows new roads and trails internal to the property and road improvements along Philadelphia Pike.
- First State Logistics Center (6), 263 acres, to promote development of a one-mile bulkhead and a logistics center for port, rail, and trucking.



Map 6 First State Crossing Source: Commercial Development Corporation



# Economic Development

## Real Estate and Economic Assessment

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New Castle County retained W-ZHA to conduct a market assessment for the study area and inform the master planning process. The analysis examined industrial, office, residential and retail for existing conditions, trends and future market dynamics. Highlights of the assessment are summarized as follows.

### Industrial Development Potential

- The market has the potential to support 300,000 to 600,000 square feet of warehouse and distribution space in the study areas, with the higher end of the range only realistic if a container port is developed.
- The market has the potential to support 120,000 to 180,000 square feet of flex space.
- With the growth of Sunoco, there will likely be interest from manufacturing companies over the next decade.

### Office Development Potential

- With a relocated train station, the study area can support between 100,000 and 200,000 square feet of office space over the next 10 years.

### Residential Development Potential

- Allowing for Darley Green to build out, the market has the potential to support 380-580 multi-family and 60-210 for sale dwelling units over the next 10 years.

### Retail Market Potential

- Naamans Road near the I-95 interchange can support between 300,000 and 500,000 square feet of new retail and eat/drink space.
- Only a limited amount of transit-oriented retail development (3,000-7,000 square feet) will likely be developed in the southern portion of the study area. Optimally, transit oriented development would be on Philadelphia Pike to complement the commercial district of Downtown Claymont.

## Chemical Supply Chain

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The 2013 Delmarva Chemicals Supply Chain Study evaluated opportunities for increased chemical manufacturing activities made possible by oil and gas development in the Marcellus shale. The study synthesized industry forecasts/insight to evaluate potential opportunities, and identify transportation priorities and needs.

The study found that petroleum/chemicals industry in Marcus Hook, PA, directly impacts chemicals and transportation industries in Greater Wilmington. Besides NGL/natural gas pipelines, no single transportation investment will necessarily induce increased regional chemicals manufacturing, nor should chemicals interests alone justify public investments. Challenges and priorities identified that are outside the scope of transportation policy include energy costs, skilled workforce constraints, Coastal Zone Management regulations, and other tax and regulatory issues.

A revival of regional basic chemicals and derivatives manufacturing is possible if NGL/natural gas pipeline are developed towards the Delaware Bay and manufacturers see cost benefits to locating production near potential markets and the Northeast US, Europe, and (possibly) Asia. Four scenarios were analyzed, shown from best to worst in terms of regional economic benefits:



**Scenario 1A:** An **ethylene cracker facility is developed near Marcus Hook** and/or propane- or methane-based derivative plants, reviving regional basic chemicals manufacturing.

**Scenario 1B:** If **Shell builds an ethylene cracker in Western PA**, the Delaware River/ Bay region could see increased downstream chemicals manufacturing and limited basic chemicals growth.

**Scenario 1C:** If **no ethylene units are built in the Northeast**, there may be some opportunities for chemicals industry growth in energy-intensive industries which will still benefit from low-cost natural gas such as chlor-alkali, as well as NGL transportation activities centered on export.

**Scenario 2:** Either **production levels do not materialize** or nearly all activities and benefits accrue to the US Gulf Coast, Canada, or North Dakota. Delmarva area chemicals manufacturing would then likely resume previous trends favoring specialized chemicals and R&D but off-shoring or relocation of other chemicals manufacturing.

Table 1 shows the perceived benefit of suggested transportation policy priorities for each of the scenarios evaluated.

**Table 1 Evaluation of Transportation Policy Priorities**

Scenario	1A	1B	1C	2
Coordination with DVRPC on planning/marketing				
Chesapeake Connector				
Rail congestion alleviation in New Castle County				
Highway capacity and congestion mitigation				
Secondary rail service to Lower Delmarva				
Delaware Bay dredging to 45+ feet				
Port of Wilmington strategic investment				
New Castle airport cargo operations*				

Key	
High Benefit	
Moderate Benefit	
Minimal Benefit	

- Note: seaport and airport freight access are important to Delmarva chemicals manufacturing, but the analysis suggests current market, facilities, and community constraints to cargo operations at New Castle. The study adopts the position that efficient roadway connectivity to BWI or PHL is more viable.

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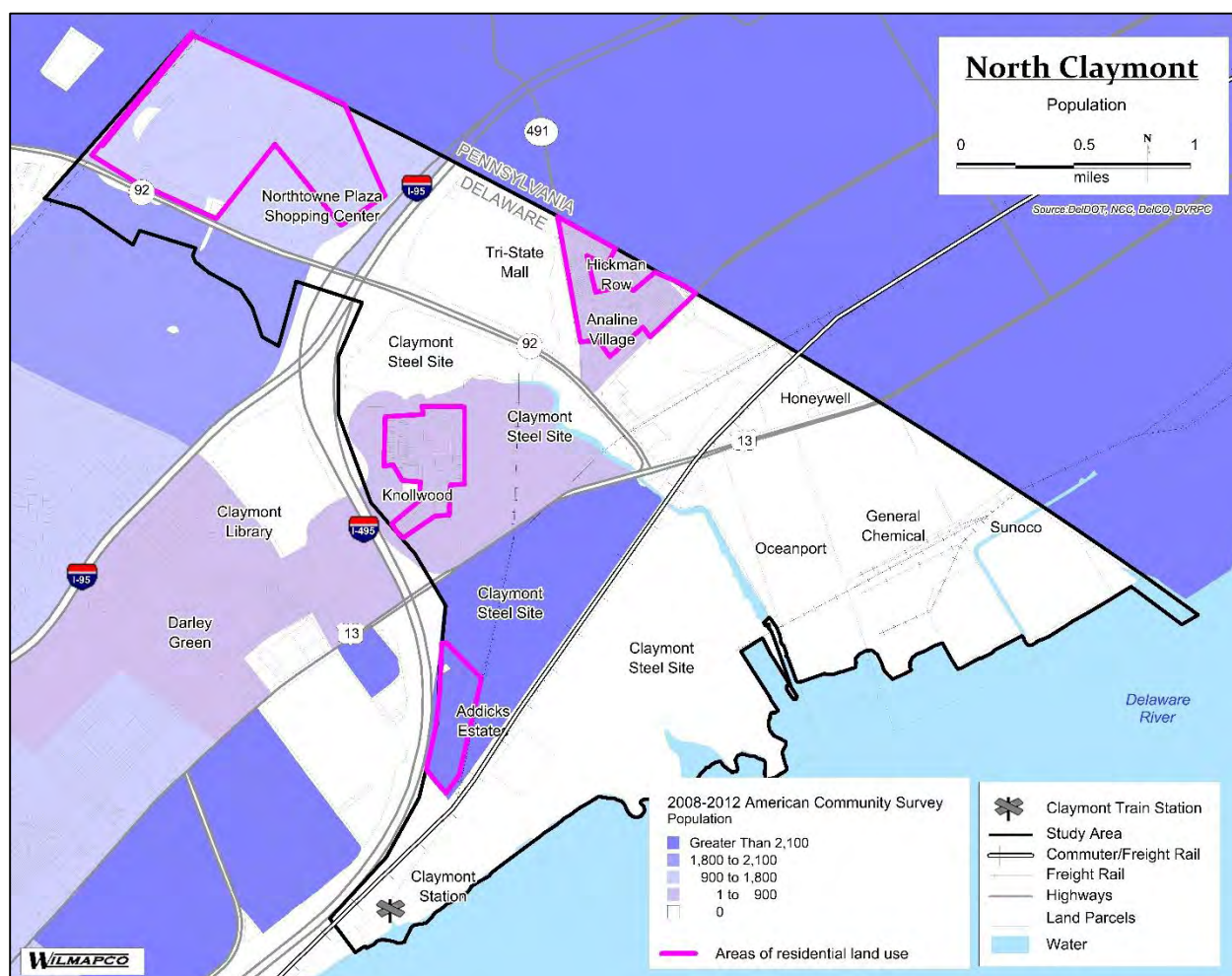
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Source: 2013 Delmarva Chemicals Manufacturing Supply Chain Study

# Demographics

## Population

Map 7 shows population for the four U.S. Census block groups that are located in and adjacent to North Claymont in Delaware, and represents a total population of 6,737. Dwelling units within the four block groups are 62% rentals, 21% owner-occupied, and 17% vacant. Within residential areas of the study area alone, there are 983 dwelling units within multifamily residential buildings and 371 single family residents with average densities of 16.1 and 5.3 dwelling units per acre respectively.

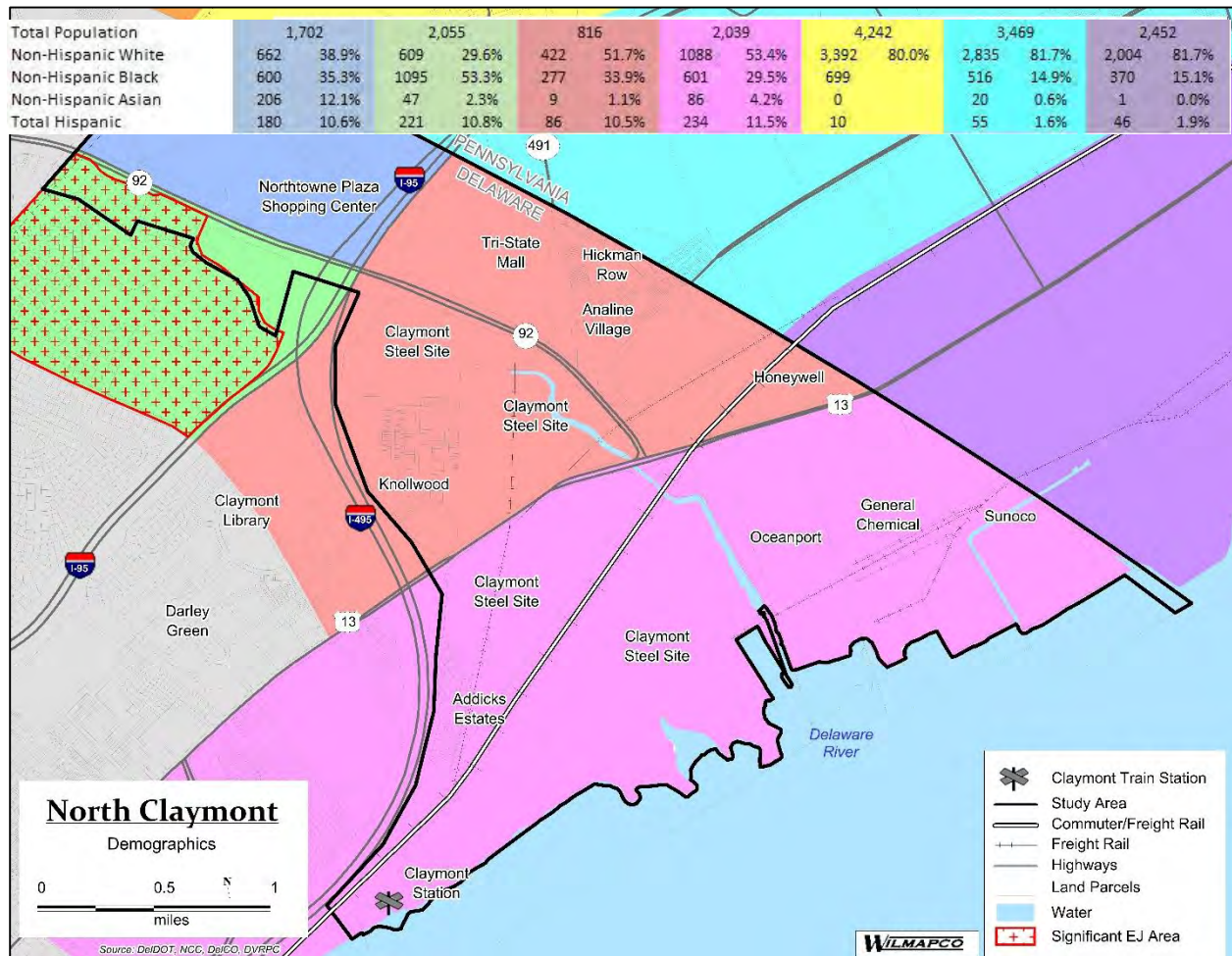


Map 7 Population



## Demographics

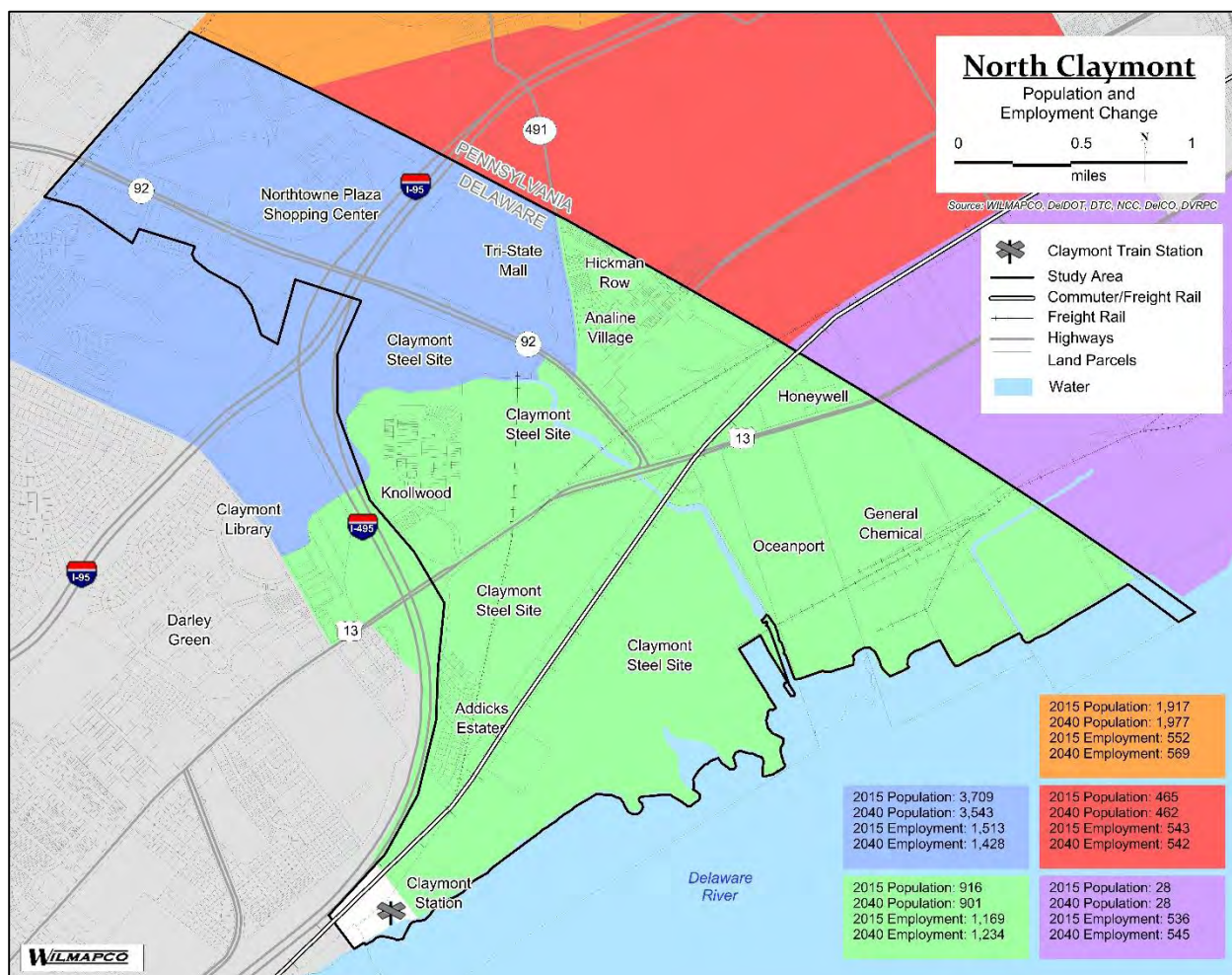
Map 8 shows the demographic makeup of the four U.S. Census block groups that are located in and adjacent to North Claymont in Delaware. The area is racially diverse with 43% White, 40% Black, 11% total Hispanic and 5% Asian populations. Environmental Justice (EJ) Areas identify locations with concentrations of low income and minority populations. One EJ Area is located in the western portion of the study area.



Map 8 Demographics

## Population and employment projections

WILMAPCO prepares population and employment projections by Transportation Analysis Zones (TAZ) using countywide data developed by the Delaware Population Consortium. Projected population for the two TAZs that make up the study area anticipate a slight decrease in both population and employment between 2015 and 2040. These projections were adopted in July 2014 using the best available data at the time, and projections are updated annually. As plans for redevelopment of Claymont Steel site and other underused properties in the area progress, forecasted demographics will be revisited for the study area.



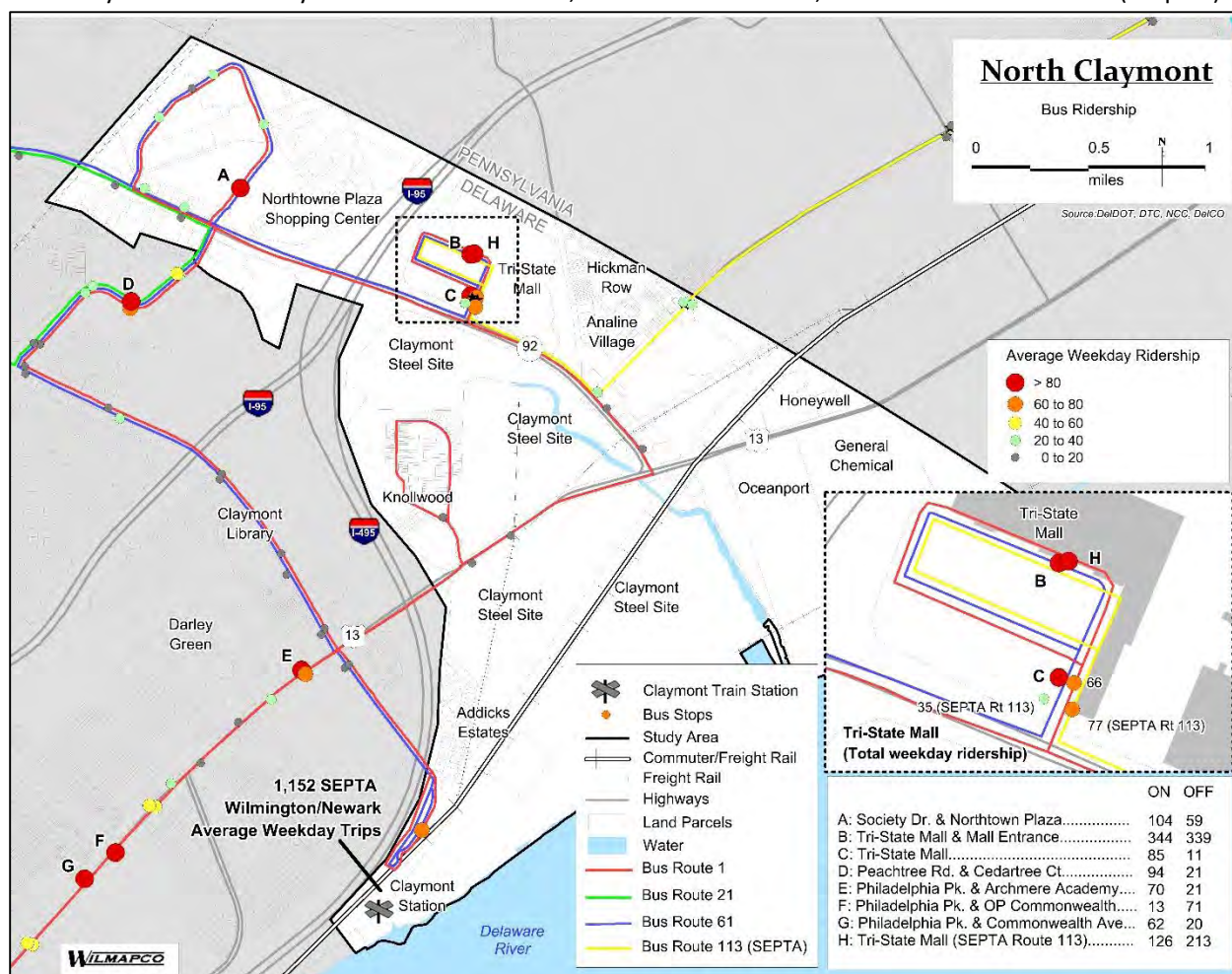
Map 9 Population and Employment Projections



# Transportation

## Transit

The study area is served by three DART bus routes, one SEPTA bus route, and SEPTA commuter rail (Map 10).



**Map 10 Transit**

DART Route 1 serves downtown Wilmington to Tri-State Mall along Philadelphia Pike. With 3,153 daily boardings<sup>1</sup>, Route 1 is DART's busiest route in New Castle County. DART Route 21 serves downtown Wilmington to the Carpenter Road Park & Ride along Foulk Road. Route 21 averages 582 weekday boardings. DART Route 61 serves Claymont Train Station to Concord Mall along Naamans Road. Route 113 is SEPTA's busiest suburban bus route, and serves Tri-State Mall from the 69<sup>th</sup> Street Transportation Center west of Philadelphia via Darby, Chester and Marcus Hook; it has 6,384 average daily riders<sup>2</sup>, with 480 of those trips taken to and from New Castle County. In fact, many of these trips are transfers to/from DART Routes 1 or 61.

<sup>1</sup> Delaware Department of Transportation, 2014 New Castle County Transit Origin / Destination Study

<sup>2</sup> 2015 SEPTA Route Statistics, SEPTA Service Planning Department, <http://www.septa.org/strategic-plan/reports/route-statistics.pdf>



SEPTA commuter rail serves Newark to Philadelphia via Wilmington and Claymont. There are 1,152 average weekday trips from the Claymont Station, representing 25 percent of Delaware's commuter rail ridership.



The New Castle County Transit Origin / Destination Study completed in 2014 observed numerous transfers being made at Tri-State Mall, and identified it as a potential Suburban Transit Center (Map 11).

Map 11 DeIDOT New Castle County Transit Origin / Destination Study



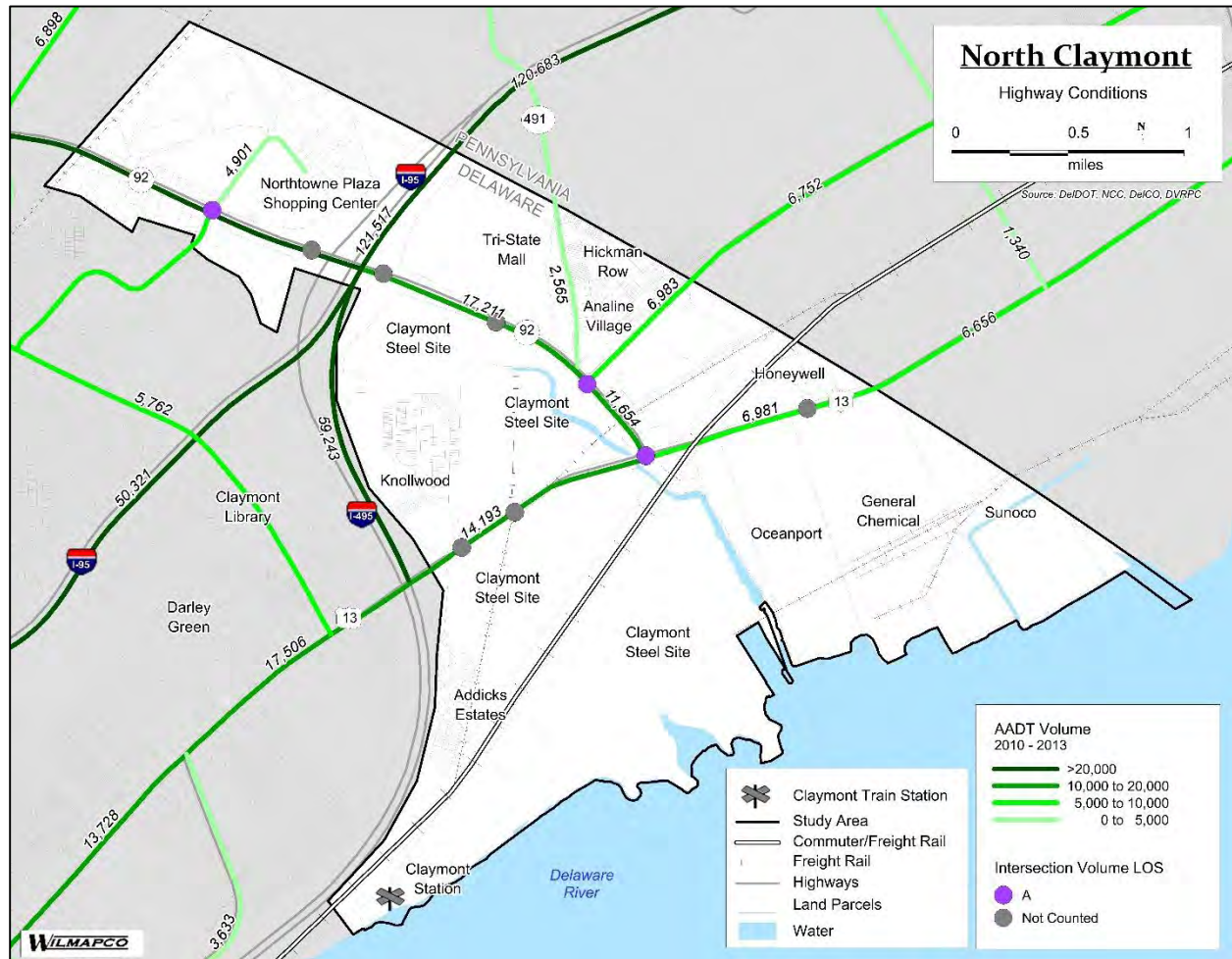
Tri-State Mall is served by SEPTA and DART fixed-route service.



The existing Claymont SEPTA Station has insufficient parking, poor ADA access, and is located on a curve along the railroad.

## Roads

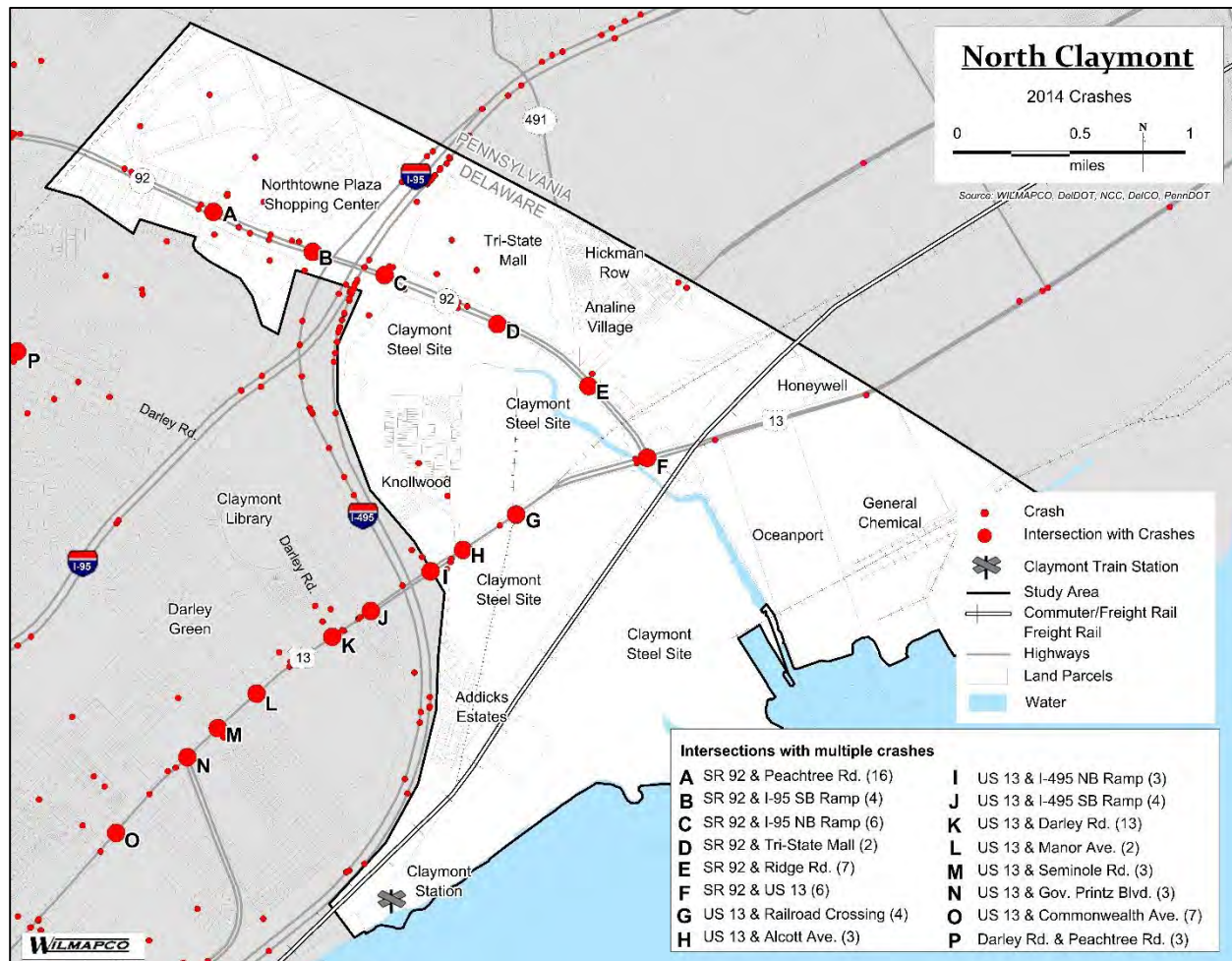
Intersections and roads in the study area (Map 12) are typically free from reoccurring traffic delays and have sufficient capacity to accommodate the amount of traffic<sup>3</sup>. According to WILMAPCO's intersection analysis, all intersections with recent count data within the study area perform at LOS A based upon evening traffic volumes, and the Congestion Management System (CMS) does not identify any corridors as areas of concern. Traffic responsive signalization is a method of signal management that uses advanced technology to adjust timing to meet the needs of current traffic volume; WILMAPCO and DelDOT have identified Naamans Road as a moderate priority and Philadelphia Pike as a low priority of responsive signals.



### Map 12 Roads

<sup>3</sup> WILMAPCO 2014 Intersection Operations Analysis and 2012 Congestion Management System Summary

In 2014, there were 108 crashes in the study area. Most occurred along Philadelphia Pike from Naamans Road intersection south, and along Naamans Road. Twelve of the crashes resulted in injuries and one crash involved a pedestrian. Fortunately, no fatalities occurred during 2014.

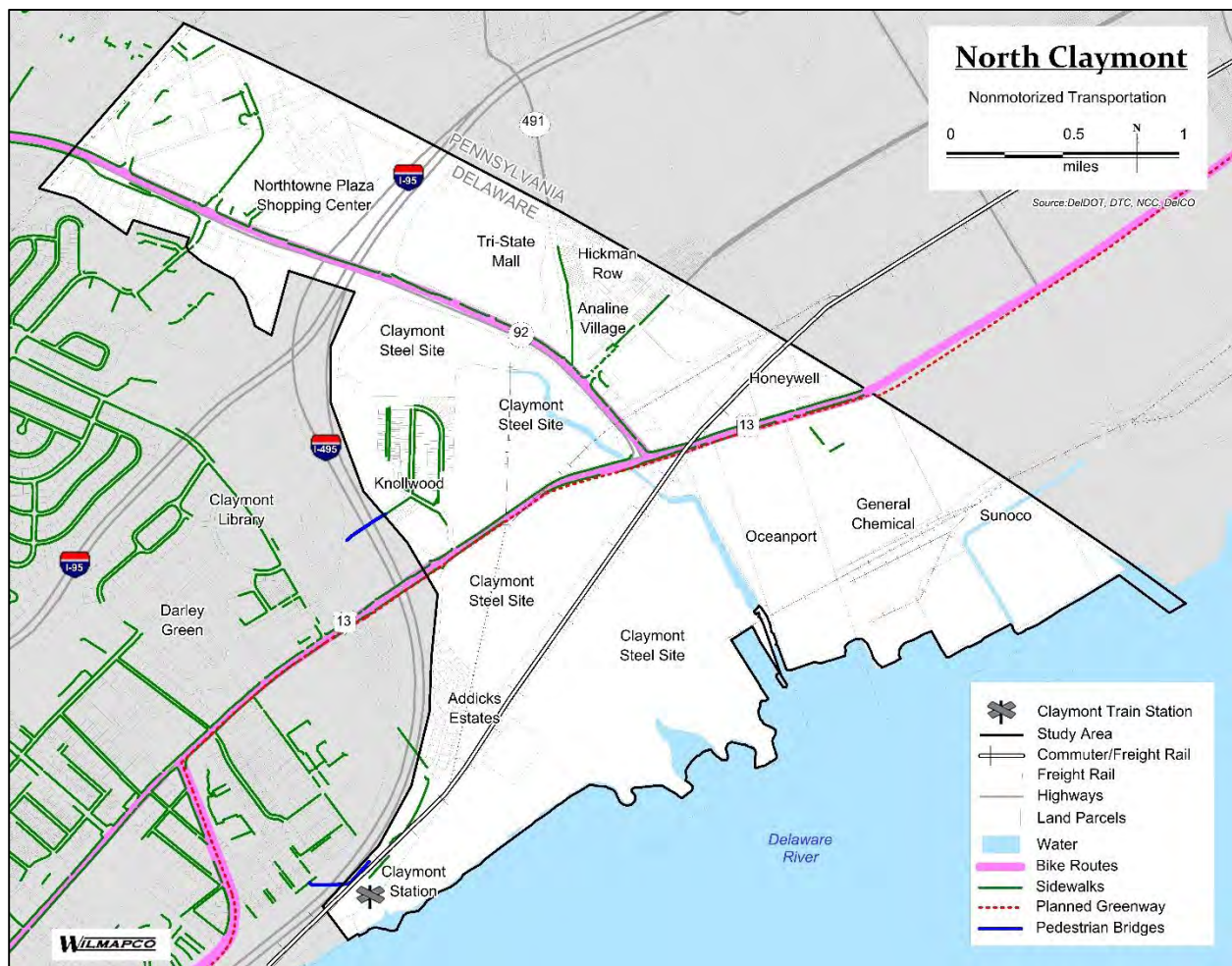


Map 13 Crashes



## Nonmotorized

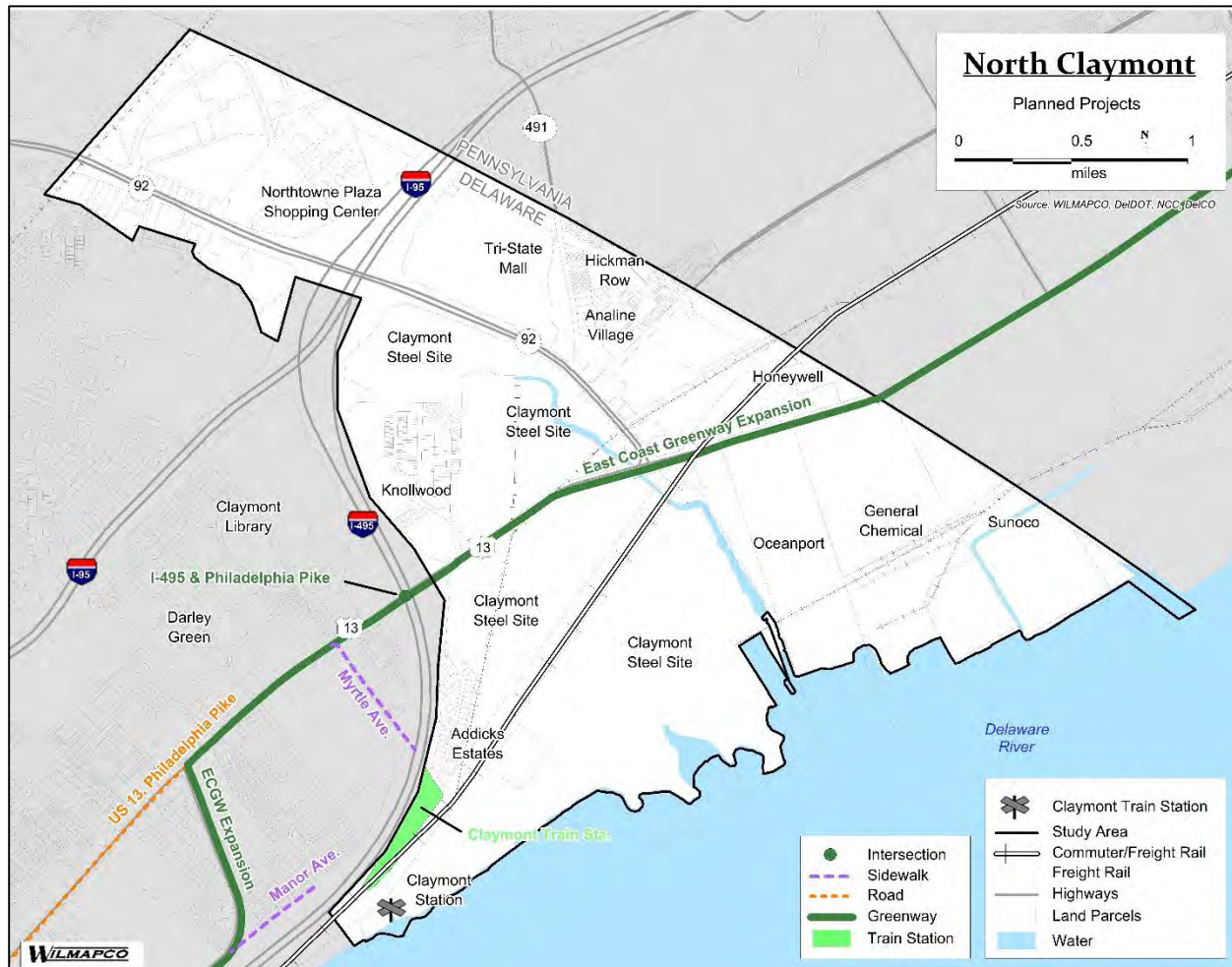
Few pedestrian or bicycle facilities are available within the study area, aside from along the major arterial roads (Map 14). Large industrial parcels, interstates and railroad all obstruct pedestrian travel. Sidewalks connect the study area to Wilmington and Marcus Hook along both sides of Philadelphia Pike. Sidewalks are also in place along the north side of Naamans Road and sections of the south side. Two pedestrian bridges connect across I-495, one at Knollwood and the second at the Claymont Train Station. Knollwood, Analine Village and Hickman Row also have some sidewalks. Existing state bike routes are along Philadelphia Pike and Naamans Road, and the East Coast Greenway is a planned pedestrian/bicycle path through the study area.



Map 14 Nonmotorized Transportation

## Planned Transportation

The WILMAPCO FY 2016-19 Transportation Improvement Program lists four anticipated short-term transportation projects near the study area (Map 15).



**Map 15 Planned Transportation Projects**

These include:

- **US 13, Philadelphia Pike, Claymont Transportation Plan Implementation:** This project will focus on the area of Claymont from Perkins Run (south of Harvey Road) to I-495. Improvements will consist of safety improvements, streetscaping, pedestrian/bicycle improvements and on-street parking in desirable areas. This area was originally identified through the DeIDOT Highway Safety Improvement Program (HSIP). Construction is currently not funded.
- **Manor Avenue and Myrtle Avenue Sidewalk Improvements:** The project consists of proposed sidewalk construction along Manor Avenue from the Governor Printz Boulevard to the I-495 pedestrian overpass and along Myrtle Avenue from the Philadelphia Pike to the I-495 overpass. The project will provide a safer pedestrian route from the Philadelphia Pike to the Claymont Train Station. Construction is anticipated for FY 2017-18.

- HSIP, I-495 at Philadelphia Pike: Project involves adding a left-turn lane on the NB I-495 off ramp onto Philadelphia Pike, signal phase changes, and other geometric improvements. Construction is anticipated for FY 2017.
- Claymont Train Station: Funds are to finance a study of the Claymont Rail Station for Federal Americans with Disabilities Act (ADA) compliance, to relieve parking demands and other site related issues. Project will examine designs for a relocated station to within the study area. The current station was last upgraded in 1996. This station is heavily used and needs to be updated to properly accommodate the volume of passengers safely and efficiently. Construction is anticipated for FY 2019-21.

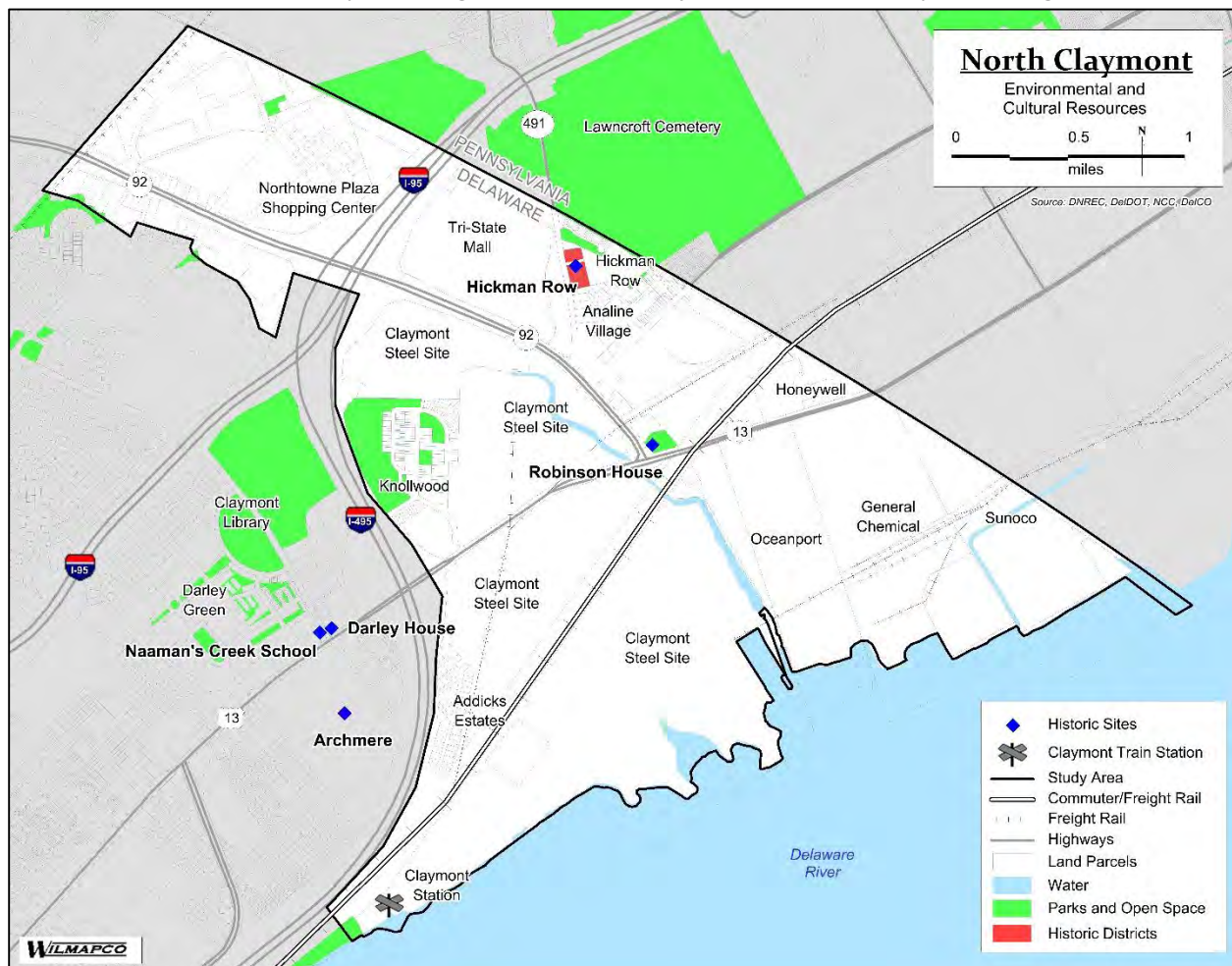
The East Coast Greenway is not currently funded but is included in WILMAPCO's Regional Transportation Plan. The East Coast Greenway is a partially constructed off-road bicycle and pedestrian route between Maine and Florida. From Philadelphia, the route travels along US 13 to Claymont, before connecting with the Claymont Train Station and traveling south to the completed Northern Delaware Greenway.



# Environmental and Cultural Resources

## Assets

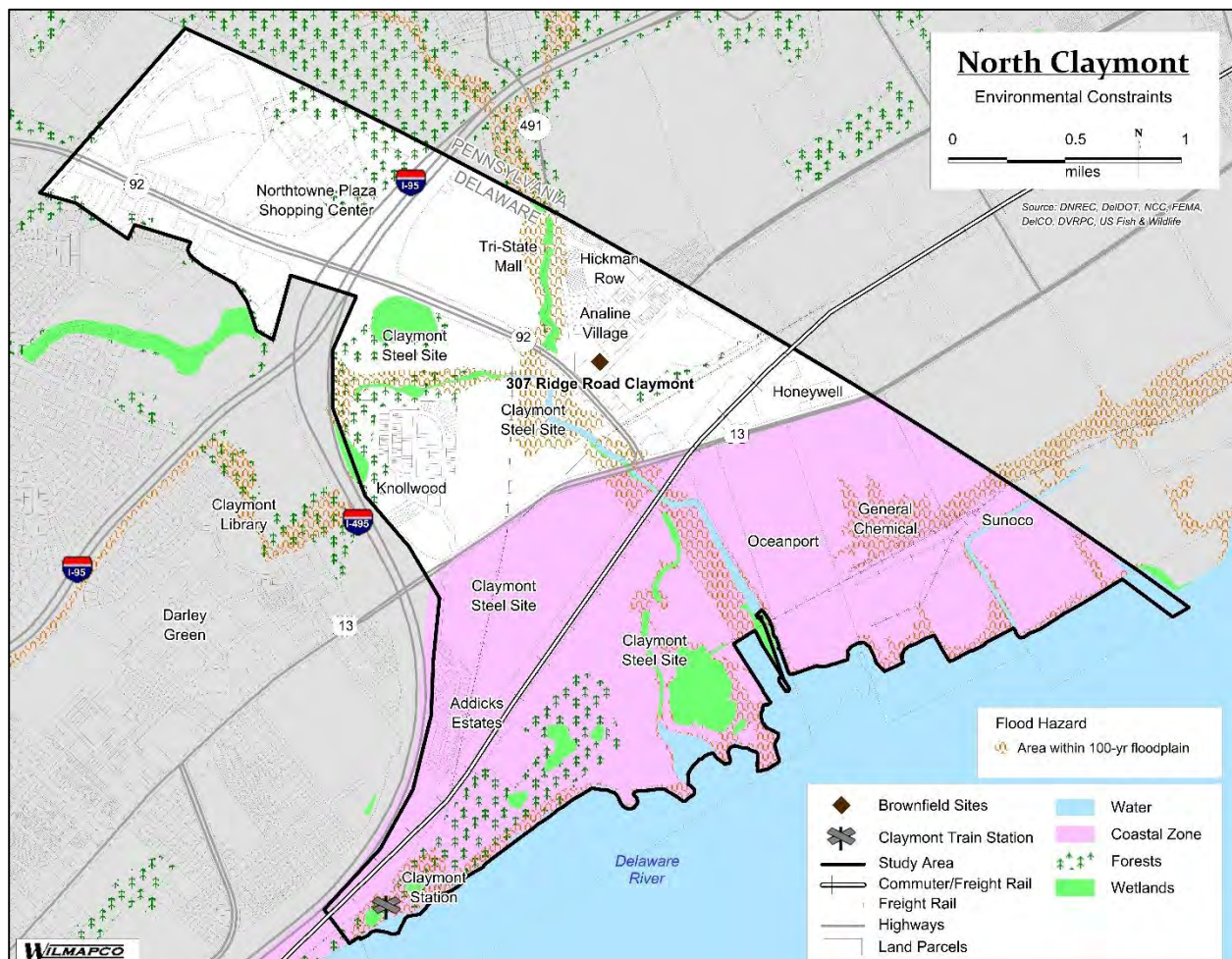
A handful of parks and open space can be found in North Claymont, along with two historic places. The Knollwood neighborhood is nestled within a forested park and has a small internal playground. Formal parks are absent elsewhere in the study area. The Robinson House, constructed around 1723, was home to Colonel Thomas Robinson. Robinson was a decorated Revolutionary War officer. Hickman Row, a set of brick townhomes completed in 1919, served as segregated housing for area African-Americans steel workers and their families through midcentury. Nearby the study area, Woodshaven Kruse Park, near the Claymont Library, features a looping recreational trail. Naamans Creek School (Claymont Stone School), the Darley House, and Archmere Academy are recognized historic sites just south of the study area along US 13.



Map 16 Environmental and Cultural Resources

## Constraints

Environmental constraints are present throughout much of the study area. Wetlands, floodplains, and forests occupy lands bordering the Delaware River and the south and main branches of Naamans Creek. The eastern half of the study area – all land east of US 13 – is protected by Delaware's Coastal Zone Act. This restricts the type of redevelopment which can occur here. In 2014, a 0.40 acre site at 307 Ridge Road, was certified as a brownfield. Hazardous substances are suspected to be here, as a result of past use as a gas station and automotive repair facility.

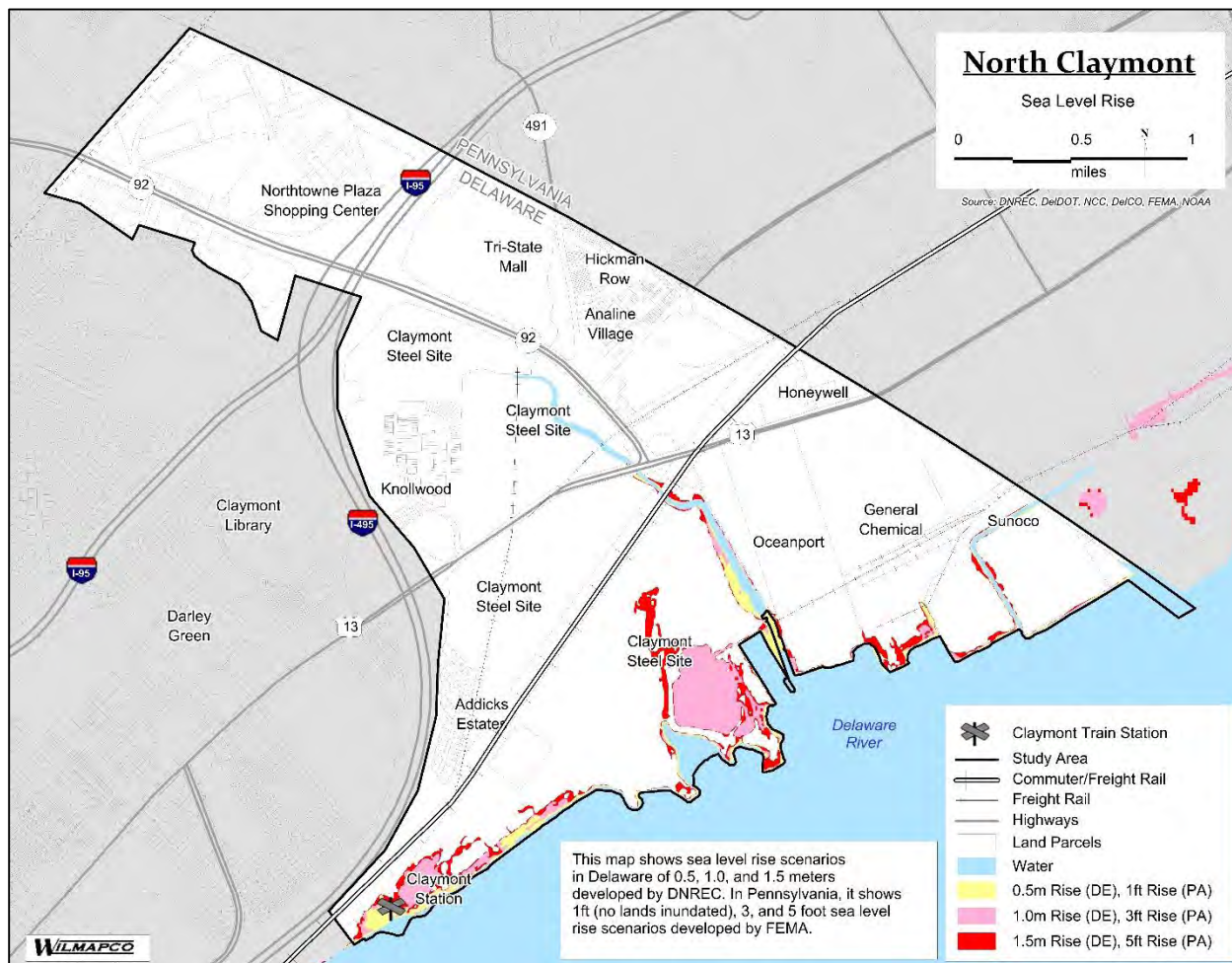


Map 17 Environmental Constraints



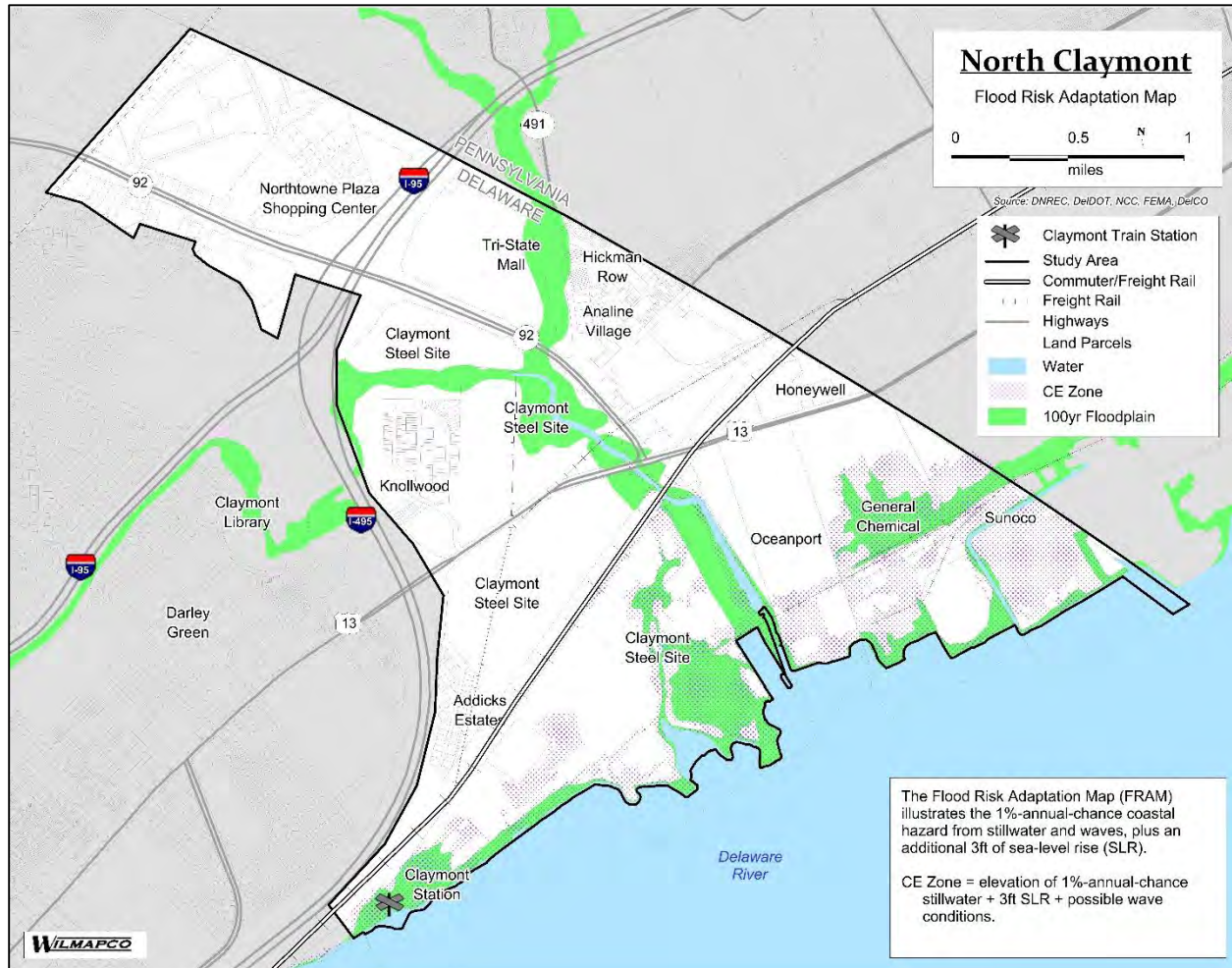
## Sea Level Rise

Portions of the study area east of the Northeast Corridor railroad may be impacted by sea level rise and storm surge events, according to DNREC scenarios. The area around the Claymont Train Station and coastal frontage at the General Chemical site would be impacted by as little as 0.5 m of sea level rise, while forested portions of the Claymont Steel site will be impacted at 1.0 m. Large swaths of the area around the Claymont Train Station, the Claymont Steel Site, Oceanport, the General Chemical site, Sunoco, and a stretch of the Northeast Corridor railroad are at risk of inundation during a flooding event after 3 feet of sea level rise.



Map 18 Sea Level Rise





Map 19 Flood Risk Adaptation

## Coastal Zone Regulations

The Coastal Zone Act (CZA) Program regulates existing heavy industrial activities, as well as new and existing manufacturing activities in Delaware's coastal zone. In the northern portion of the study area, the coastal zone consist of the area southeast of US 13 from the Pennsylvania border. In the southern portion of the study area, the coastal zone consists of the area east of I-495. Certain new activities, such as the bulk transfer of raw materials, are not allowed in the coastal zone, which runs the length of the state.

Delaware's coastal zone was established with the adoption of Title 7, Delaware Code, Conservation, Part VII, Natural Resources, Chapter 70, Coastal Zone Act. The CZA was adopted in recognition that the coastal areas of Delaware are the most critical areas for the future of Delaware in terms of the quality of life. To better protect the natural environment of the Delaware River and Bay, and safeguard their use for recreation and tourism, the CZA establishes the location, extent and type of industrial development that may occur in Delaware's coastal areas. Specifically, the CZA prohibits construction of new heavy industry in its coastal areas.

Through the CZA, Delaware seeks to balance development with protection of the environment, natural beauty and recreation. An application for a coastal zone status decision is necessary if there is question as to whether a proposed activity is considered heavy industry, or to determine if the proposed activity is exempt from having to obtain a coastal zone permit. A permit is necessary for any new or expanded manufacturing activity that will have an impact on the environment, the economy, the aesthetics or neighboring land uses.

According to the CZA, offshore bulk product transfer facilities represent a significant danger of pollution to the coastal zone and generate pressure for the construction of industrial plants in the coastal zone, which construction is declared to be against public policy. For these reasons, prohibition against bulk product transfer facilities in the coastal zone is deemed imperative.

Uses prohibited, exempt, and allowed with permit are as follows:

### 4.0 Prohibited Uses

The following uses or activities are prohibited in the Coastal Zone:

- 4.1 Heavy industry use of any kind not in operation on June 28, 1971.
- 4.2 Expansion of any non-conforming uses beyond their footprint(s) as depicted in Appendix B of these regulations.
- 4.3 Offshore gas, liquid, or solid bulk product transfer facilities which were not in operation on June 28, 1971.
- 4.4 The conversion of an existing unregulated, exempted, or permitted facility to a heavy industry use.
- 4.5 Bulk product transfer facilities and pipelines which serve as bulk transfer facilities that were not in operation on June 28, 1971.
- 4.6 The conversion or use of existing unregulated, exempt, or permitted docking facilities for the transfer of bulk products.
- 4.7 The construction, establishment, or operation of offshore gas, liquid, or solid bulk product transfer facilities which were not in operation on June 28, 1971.
- 4.8 Individual pipelines or sets of pipelines which are not associated with a use that obtains a permit but which meet the definition of bulk product transfer facilities.
- 4.9 Any new tank farm greater than 5 acres in size not associated with a manufacturing use is prohibited as a new heavy industry use.

### 5.0 Uses Not Regulated

The construction and/or operation of the following types of facilities and/or activities shall be deemed not to constitute initiation, expansion or extension of heavy industry or manufacturing uses under these regulations:

- 5.1 The raising of agricultural commodities or livestock.
- 5.2 Warehouses or other storage facilities, not including tank farms.
- 5.3 Tank farms of less than five acres.
- 5.4 Parking lots or structures, health care and day care facilities, maintenance facilities, commercial establishments not involved in manufacturing, office buildings, recreational facilities and facilities related to the management of wildlife.
- 5.5 Facilities used in transmitting, distributing, transforming, switching, and otherwise transporting and converting electrical energy.
- 5.6 Facilities used to generate electric power directly from solar energy.
- 5.7 The repair and maintenance of existing electrical generating facilities providing such repair or maintenance does not result in any negative environmental impacts.
- 5.8 Back-up emergency and stand-by source of power generation to adequately accommodate emergency industry needs when outside supply fails.
- 5.9 The continued repair, maintenance and use of any non-conforming bulk product transfer facility where that facility transfers the same products and materials, regardless of the amount of such products or materials, as those transferred on June 28, 1971.
- 5.10 Bulk product transfer operations at dock facilities owned by the Diamond State Port Corp.(DSPC), or acquired by the DSPC at any time in the future, and which are located within the Port of Wilmington as shown in Appendix B.
- 5.11 Docking facilities used as bulk product transfer facilities located on privately owned lands within the Port of Wilmington which have been granted a status decision extending the bulk product transfer exemption prior to the effective date of these regulations.
- 5.12 Docking facilities which are not used as bulk product transfer facilities.
- 5.13 Any pipeline that originates outside the Coastal Zone, traverses the Coastal Zone without connecting to a manufacturing or heavy industry use and terminates outside the Coastal Zone.
- 5.14 Maintenance and repair of existing equipment and structures.
- 5.15 Replacement in-kind of existing equipment or installation of in-line spares for existing equipment.
- 5.16 Installation and modification of pollution control and safety equipment for nonconforming uses within their designated footprint providing such installation and modification does not result in any negative environmental impact over and above impacts associated with the present use.
- 5.17 Any facilities which have received, prior to the promulgation of these regulations, a status decision which provided an exemption for the activity in question.
- 5.18 Research and development activities within existing research and development facilities.
- 5.19 Any other activity which the Secretary determines, through the status decision process outlined in Section 7.0 of these regulations, is not an expansion or extension of a nonconforming use or heavy industry use.
- 5.20 Public Sewage Treatment Plants subject to regulation by the Federal Water Pollution Control Act, 33 U.S.C. § 1251, et. seq. and/or the Delaware Environmental Protection Act, 7 Del.C., Chapter 60.

5 DE Reg. 930 (10/01/01)



#### 6.0 Uses Requiring a Permit

The following uses or activities are permissible in the Coastal Zone by permit. Permits must be obtained prior to any land disturbing or construction activity.

6.1 The construction of pipelines or docking facilities serving as offshore bulk product transfer facilities if such facilities serve only one on-shore manufacturing or other facility. To be permissible under these regulations, the materials transferred through the pipeline or docking facilities must be used as a raw material in the manufacture of other products, or must be finished products being transported for delivery.

6.2 Any recycling plant or sewage treatment plant not excluded by Section E(20) of the Regulations.

6.3 Any new activity, with the exception of those listed in Section 5.0 of these regulations proposed to be initiated after promulgation of these regulations by an existing heavy industry or a new or existing manufacturing facility that may result in any negative impact on the following factors as found in 7 Del.C. §7004 (b):

6.3.1 Environmental impact, including but not limited to, items 8.2.1 through 8.2.10 of these regulations.

6.3.2 Economic effect, including the number of jobs created and the income which will be generated by the wages and salaries of these jobs in relation to the amount of land required, and the amount of tax revenues potentially accruing to state and local government.

6.3.3 Aesthetic effect, such as impact on scenic beauty of the surrounding area.

6.3.4 Number and type of supporting facilities required and the impact of such facilities on all factors listed in this subsection.

6.3.5 Effect on neighboring land uses including, but not limited to, effect on public access to tidal waters, effect on recreational areas and effect on adjacent residential and agricultural areas.

6.3.6 County and municipal comprehensive plans for the development and/or conservation of their areas of jurisdiction.

Figure 1 shows a flowchart of the CZA permitting process. If a project requires other permits from DNREC, the coastal zone permit generally takes precedence, although related permit applications may be processed concurrently.

# Coastal Zone permit process

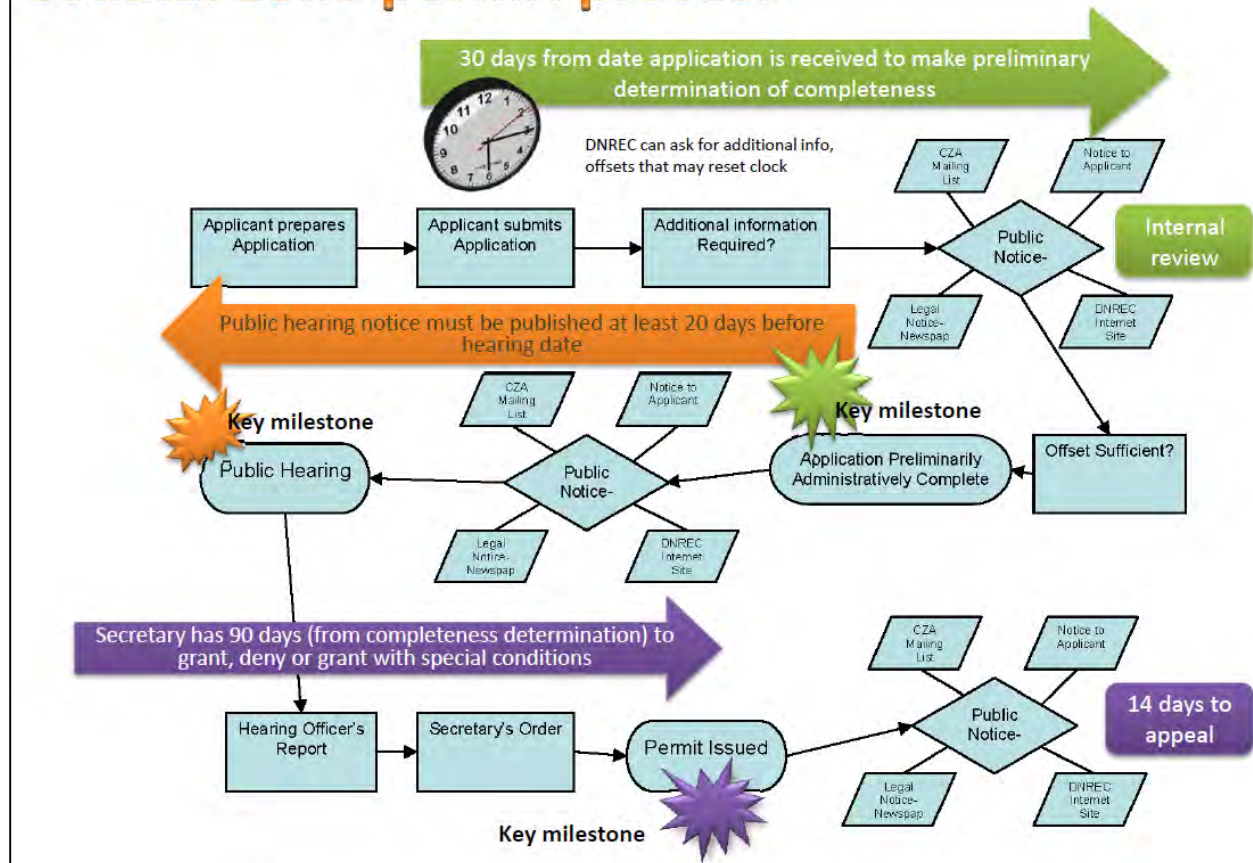


Figure 1 Source: DNREC <http://www.dnrec.delaware.gov/Admin/CZA/Pages/default.aspx>

# Next Steps

The remaining tasks for the development of NCAMP will include extensive community and stakeholder outreach. An Advisory Committee will be formed, and will include elected officials, civic associations, property owners, businesses, and community organizations. Future tasks for the study include:

## Task 2: Community Visioning

Following completion of Task 1, extensive community and stakeholder outreach will begin. The initial engagement process—community visioning—will gather community input about the issues and opportunities that they see within the study area. Strategies to elicit local feedback will include on-the-ground outreach, online interaction, and coordination with committees.

## Task 3: Define Assumptions and Potential Land Use and Transportation Scenarios for Analysis

Planning partners will define scenarios for analysis. In addition to the base case scenario, potential scenarios will be developed based on public outreach, identified economic, land use, transportation and environmental issues, opportunities and constraints, and existing plans including the Claymont Train Station Plan. Up to four alternatives for redevelopment may be identified. Alternatives will vary by development program, configuration, intensity, and transportation improvements.

## Task 4: Model Land Use and Transportation Scenarios and Compare Results of Analysis

A comparison of the land use, demographic, environmental and transportation impacts of the scenarios will be developed and presented to Planning Partners, Advisory Committee, WILMAPCO and New Castle County. A Land Use and Transportation Model will be used to evaluate the effect of identified land use and transportation scenarios. Model results will be reviewed at an Advisory Committee meeting and Public Workshop.

## Task 5: Select Preferred Alternative and Prepare Final Report

Based on evaluation criteria, committee preferences, community input, and technical analyses, the team will select a preferred alternative. A report will include strategies for implementing the preferred alternative, including phasing strategies. A third Public Workshop will seek feedback on the draft report and recommendations.