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RESOLUTION

BY THE WILMINGTON AREA PLANNING COUNCIL (WILMAPCO) ENDORSING THE CITY OF NEW CASTLE TRANSPORTATION PLAN UPDATE

WHEREAS, the Wilmington Area Planning Council (WILMAPCO) has been designated the Metropolitan Planning Organization (MPO) for New Castle County, Delaware and Cecil County, Maryland by the Governors of Delaware and Maryland, respectively; and

WHEREAS, the WILMAPCO Council recognizes that comprehensive planning for future land use, transportation, sustainable economic development, environmental protection and enhancement, and community health and livability are necessary actions to implement the goals and objectives in the 2050 Regional Transportation Plan (RTP); and

WHEREAS, the City of New Castle submitted a Unified Planning Work Program (UPWP) request for WILMAPCO to assist the City in an update to the 2009 City of New Castle Transportation Plan; and

WHEREAS, the Plan assessed roadway, transit, bicycle, pedestrian, parking, and other surface transportation; and

WHEREAS, the Plan employed continuous and thorough public engagement with the community and stakeholders throughout the planning process, including four public workshops; and

WHEREAS, the Plan evaluates a variety of concepts and makes recommendations based on technical analysis and stakeholder feedback; and

WHEREAS, the City of New Castle supports the planning process and final report to move forward to additional analysis with community discussion;

NOW, THEREFORE, BE IT RESOLVED that the Wilmington Area Planning Council does hereby endorse the final report and recommendations of the City of New Castle Transportation Plan Update.

9/8/2022

Date:



John Sisson, Chairperson
Wilmington Area Planning Council

Appendix A: City of New Castle Transportation Plan Task 1: Identify Issues, Opportunities and Constraints

City of New Castle

Transportation Plan

Task 1

Identify Issues, Opportunities and Constraints

www.wilmapco.org/cityofnewcastle
February 10, 2021

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Introduction

Project Purpose

The Wilmington Area Planning Council (WILMAPCO), City of New Castle, Delaware, and the Delaware Department of Transportation (DelDOT) are developing the City of New Castle Transportation Plan Update to update the 1999 City of New Castle Transportation Plan and will further analyze issues raised in the City of New Castle Comprehensive Development Plan. The study area includes the entire municipality, and will also consider transportation transitions to surrounding areas within New Castle County as appropriate.

The purposes of this Plan are to:

- Improve the multimodal transportation network, provide connectivity to communities and trails, enhance health and livability, reduce illegal truck traffic, and improve safety.
- Address flooding and sea-level rise impacts on land use and access to major transportation corridors.
- Improve gateways to the historic city.
- Develop a shared-parking analysis.

In addition, this Plan will develop recommendations to address transportation goals identified in the City of New Castle Comprehensive Plan, which include:

- Enhance bike and pedestrian connections and facilities throughout the City.
- Clarify regional and local traffic patterns throughout the City.
- Redesign streets and intersections to reduce speeding and cut-through traffic, while improving pedestrian safety in all City neighborhoods.
- Formalize and optimize the existing parking supply.

Additional relevant goals address land use and redevelopment, urban design standards, gateways, pedestrian-oriented commercial district design, and drainage and stormwater. While the 2009 Comprehensive Plan is currently being updated, public comments indicate that these goals are still largely relevant.

This project will include a Planning and Environmental Linkages (PEL) Study. PEL Studies are a collaborative and integrated approach to transportation decision-making that considers environmental, community, and economic issues early in the planning process. This information and analyses can then be utilized to inform the National Environmental Policy Act (NEPA) review process. PEL Studies are an Federal Highway Administration (FHWA) initiative used to help make better-informed project-level decisions and to shorten project delivery time, and they follow provisions set forth in 23 U.S.C. 168(b)(1)(A) and associated regulations under 23 CFR 450.212(d) and 450.313(e).

This report details the findings of Task 1: Identify Issues, Opportunities and Constraints. Task 1 included a comprehensive review of existing and planned conditions. The 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.
- 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.
- Environmental and cultural features maps and data including historic resources, parks, wetlands, 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.

Planning Partners

The Plan will evaluate and make recommendations about a broad range of issues. Thus, the study is a collaborative effort between:

- **Wilmington Area Planning Council (WILMAPCO)**—WILMAPCO is the regional transportation planning agency for New Castle County, Delaware and Cecil County, Maryland. 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 this project including public outreach, providing demographics information, producing maps, and developing the final report.
- **City of New Castle**-- Founded in 1640, the historic City of New Castle is situated along the Delaware River in New Castle County, Delaware with a current population of approximately 5,392. The City of New Castle provides transportation services such as local roads, parking, pathways, and sidewalks. In addition, the City is responsible for regulating land use and providing public works, police, and recreational services.
- **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.

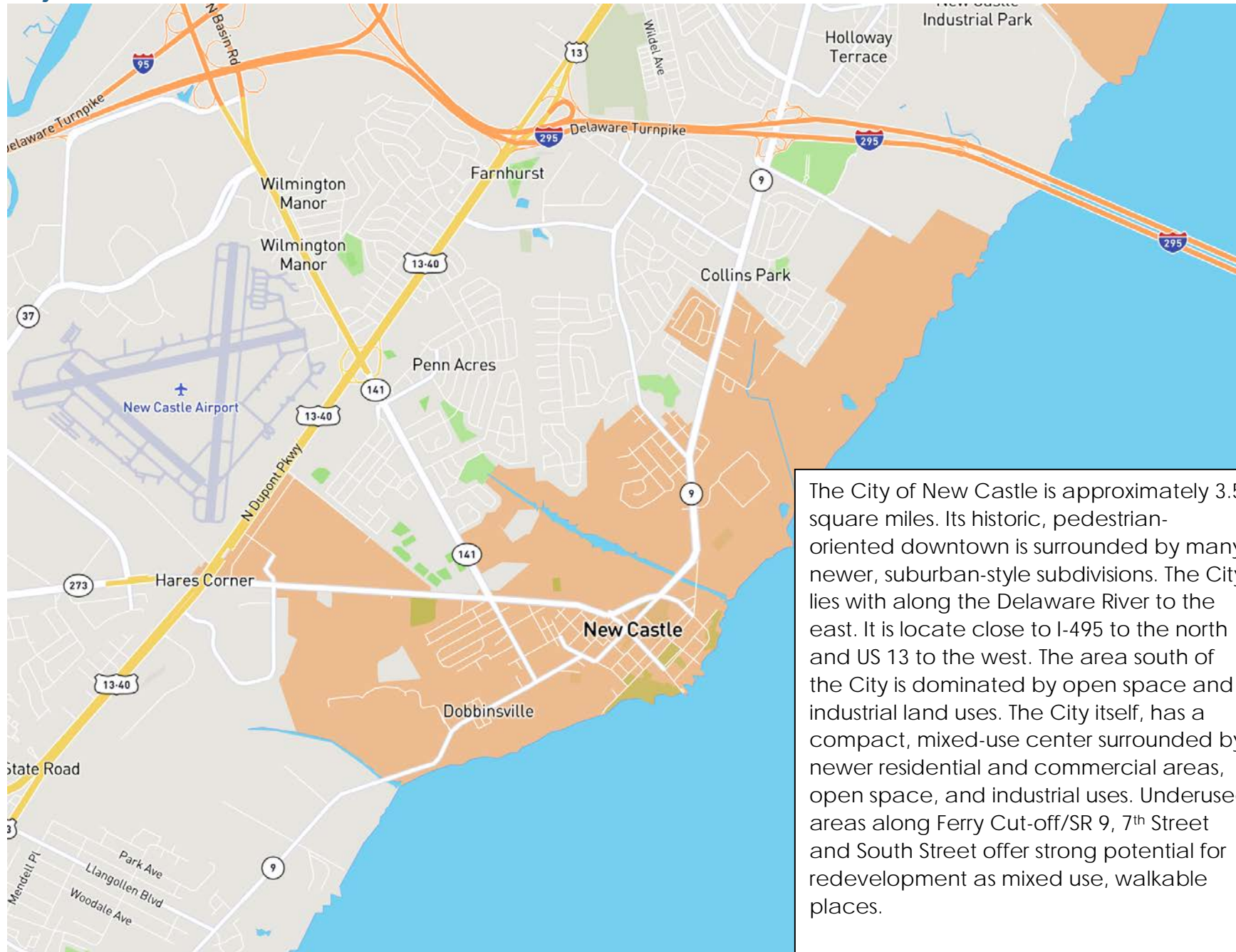
An Advisory Committee of civic and business stakeholders will provide input on issues, opportunities and constraints, and draft scenarios. Membership on the Advisory Committee might include:

- Land owners, businesses, civic entities and elected officials
- Trustees of The New Castle Common

- New Castle County
- Delaware Department of Natural Resources and Environmental Control
- Delaware Office of State Planning Coordination

Other Advisory Committee member may be identified as part of early outreach to the community, and all Advisory Committee meetings are open to all interested stakeholders and members of the public.

Project Area



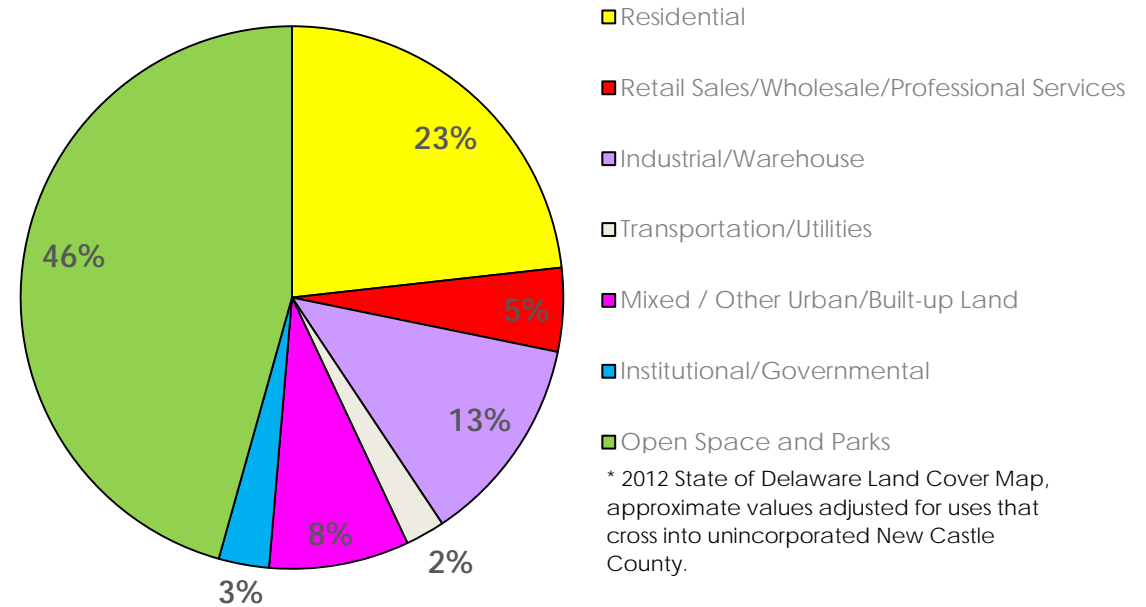
The City of New Castle is approximately 3.5 square miles. Its historic, pedestrian-oriented downtown is surrounded by many newer, suburban-style subdivisions. The City lies with along the Delaware River to the east. It is locate close to I-495 to the north and US 13 to the west. The area south of the City is dominated by open space and industrial land uses. The City itself, has a compact, mixed-use center surrounded by newer residential and commercial areas, open space, and industrial uses. Underused areas along Ferry Cut-off/SR 9, 7th Street and South Street offer strong potential for redevelopment as mixed use, walkable places.

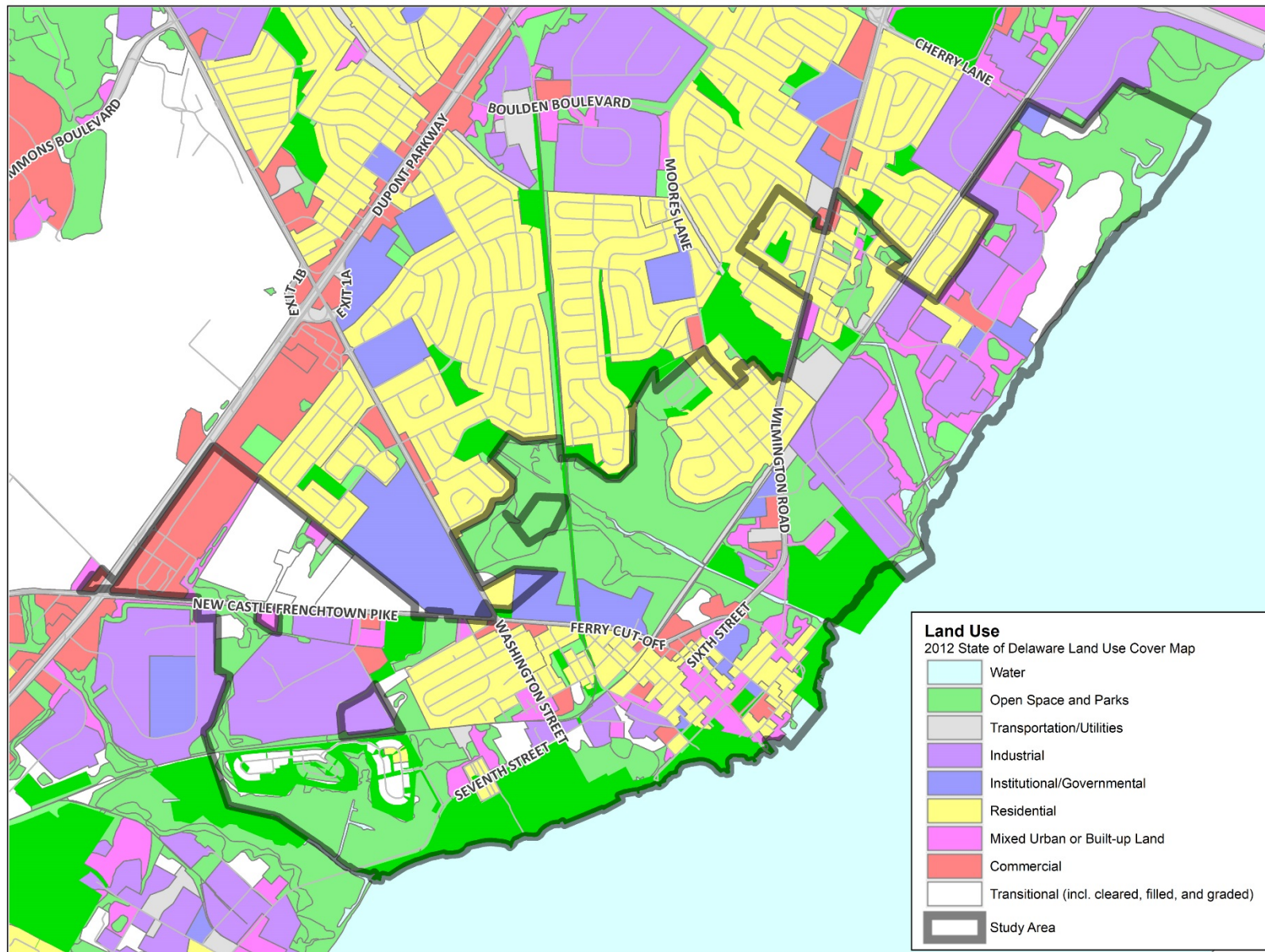
Land Use

Existing Land Use

The City of New Castle contains a mix of land uses, dominated by open space, residential, and industrial. Approximately 46 percent of the City's land cover, open space includes wetlands, forest, agriculture and parks, contributing to its character as a green, waterfront community. With approximately 23 percent of the land cover, residential uses range from modern apartments, historic row homes, and single family homes which account for the largest share of 43 percent. The remaining 31 percent of the City is a mix of mixed use, industrial, commercial, institutional, and utility uses.

Existing Land Use, City of New Castle*



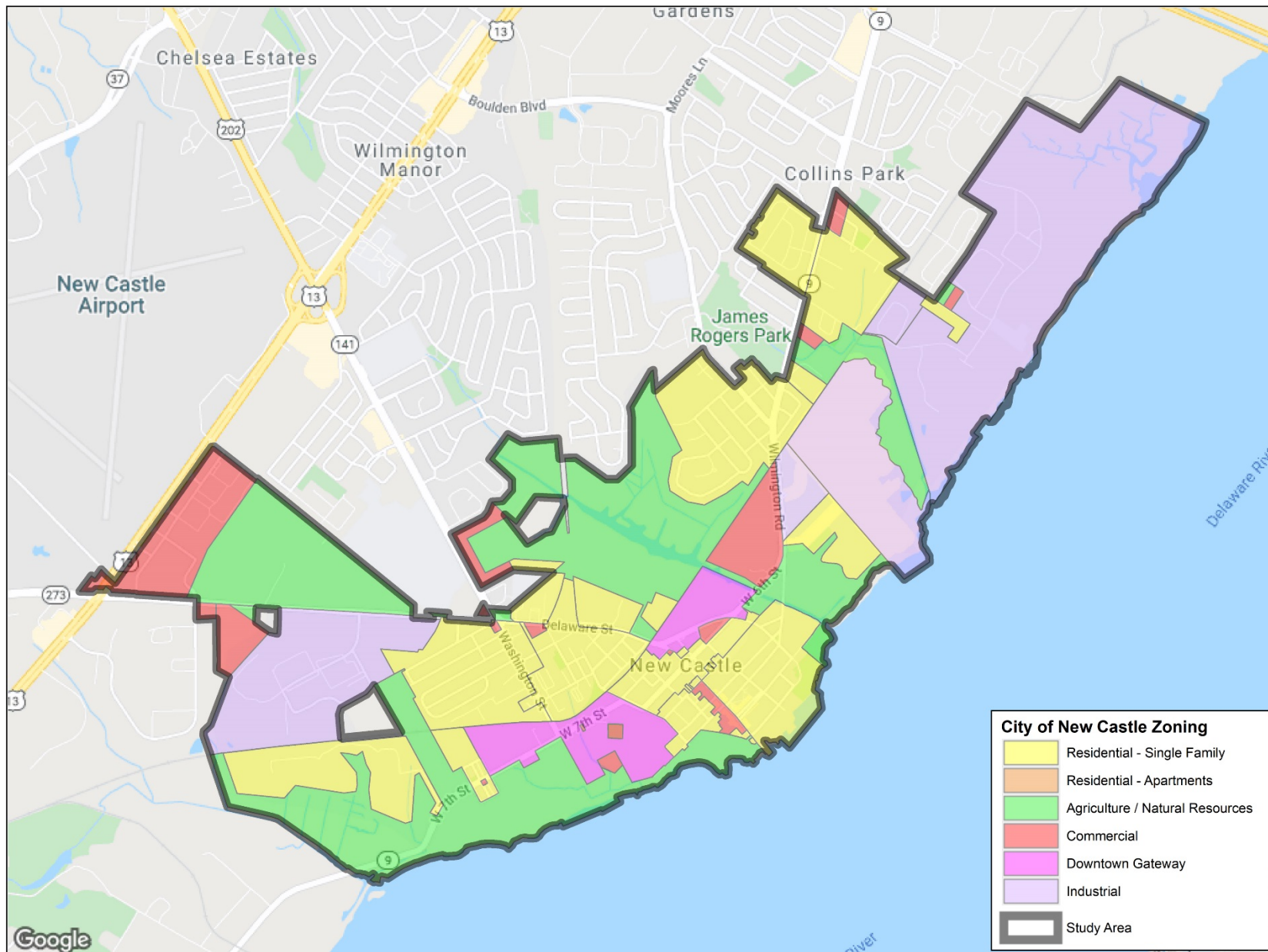


Existing Land Use for City of New Castle and the Surrounding Area

Existing Zoning

The official City Zoning Code can be found at: <https://ecode360.com/8875539> which includes a detailed map and descriptions of each district. Zoning districts by category are summarized below.

- Agriculture and Open Space
 - Open Space and Recreation District (OS&R) –provides for and protects permanent open spaces.
 - Agricultural – Horticultural District (AH) –provides for agricultural and horticultural activities, while protecting agricultural lands.
- Commercial
 - Historic Commerce District (HC) –preserves, promotes and protects the historic commercial heart of the City. Allows for mixed-use including small shops, bakeries, banks, restaurants, club and lodges, tourist homes, and a diversity of housing.
 - Retail Commercial District (RC) –provides areas in which the daily shopping and business requirements of nearby residents can be met. These areas are to be exclusively commercial.
 - Service Commercial District (SC) –provides for a wide range of commercial and service needs, usually with access to a main roadway.
 - General Commercial District (GC) –provides for local and regional shopping, office and business needs along a main roadway. Permitted uses include a variety of more intense commercial uses, offices, and institutional uses.
 - Downtown Gateway District (DG) –seeks to create a pedestrian-oriented neighborhood commercial district providing primarily local goods and services and presenting an attractive gateway worthy with the built form, character and scale of the historic district. Uses include a variety of commercial uses and residential dwelling unit types.
- Residential
 - Residential District (R-1) –provides and protects areas for single-family detached residential development for a pleasant, quiet, hazard-free residential environment.
 - Residential District (R-2) –permitted uses include single-family semidetached dwelling, two-family dwelling units and corner stores are allowed.
 - Residential District (R-3) –permitted uses include two-family semidetached dwellings, single-family attached dwellings, two-family attached dwellings and multiple dwellings.
 - Historic Residence District (HR) –preserves, promotes and protects the historic area, now predominantly residential. Development is subject to architectural review. Permitted uses include single family (detached, semidetached and attached), two-family dwellings (detached, semidetached and attached), tourist homes, and parks and playgrounds.
- Industrial
 - Light Industrial – Office District (LIO) –uses include offices, laboratories, and industrial research or testing facilities.
 - Industrial Office Park (IOP) –uses include offices, manufacturing, warehouse and distribution facilities, laboratories, retail and personal services, restaurants, and a variety of commercial uses.
 - Industrial District (I) –uses include offices, manufacturing, printing, truck terminals, and laboratories.
 - Telecommunications District (TD) –uses include telecommunication facilities.



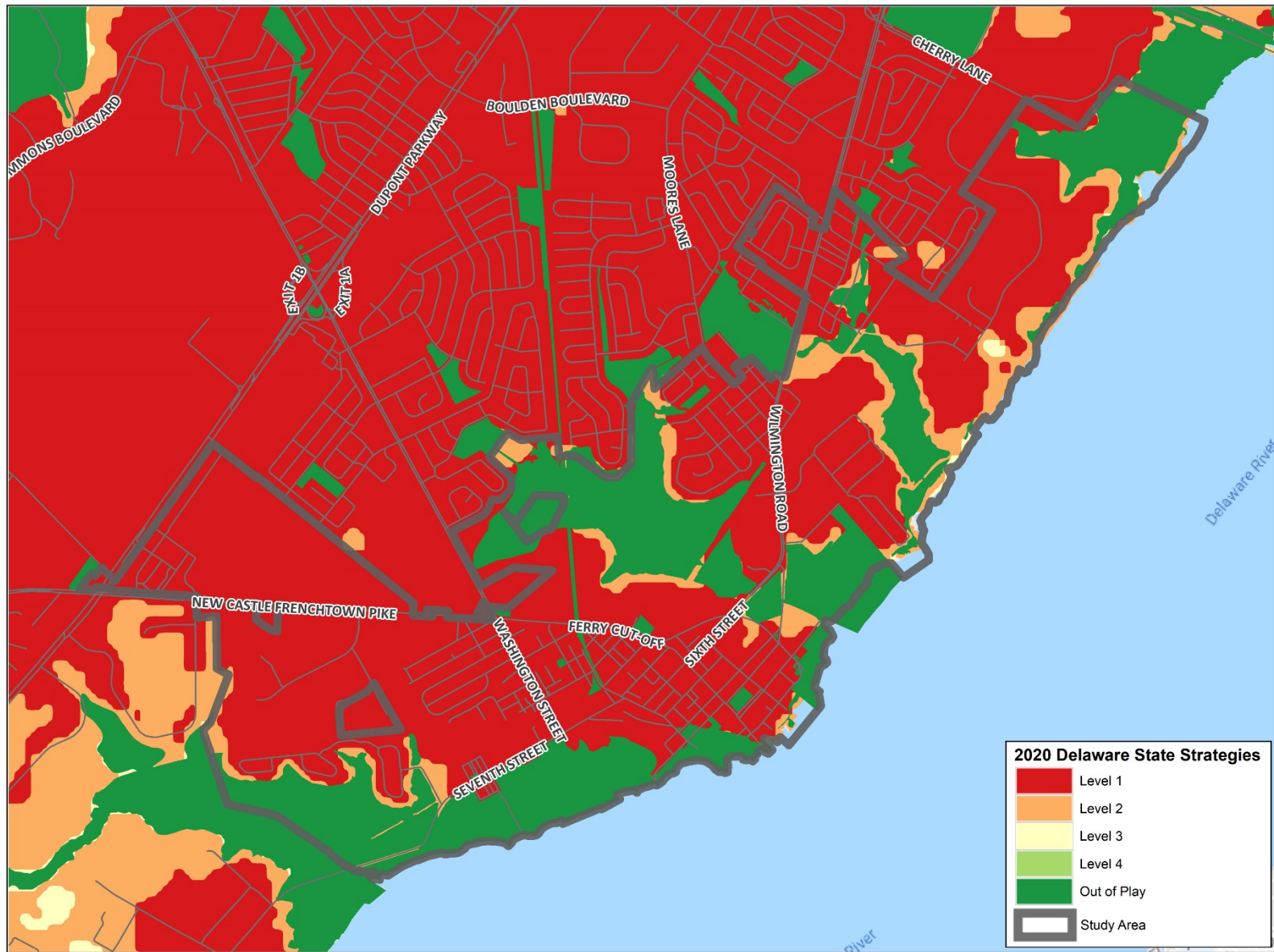
Potential Use

Strategies for State Policies and Spending

Required by Delaware code, the Strategies for State Policies and Spending 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 mostly designated as Investment Levels 1 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.

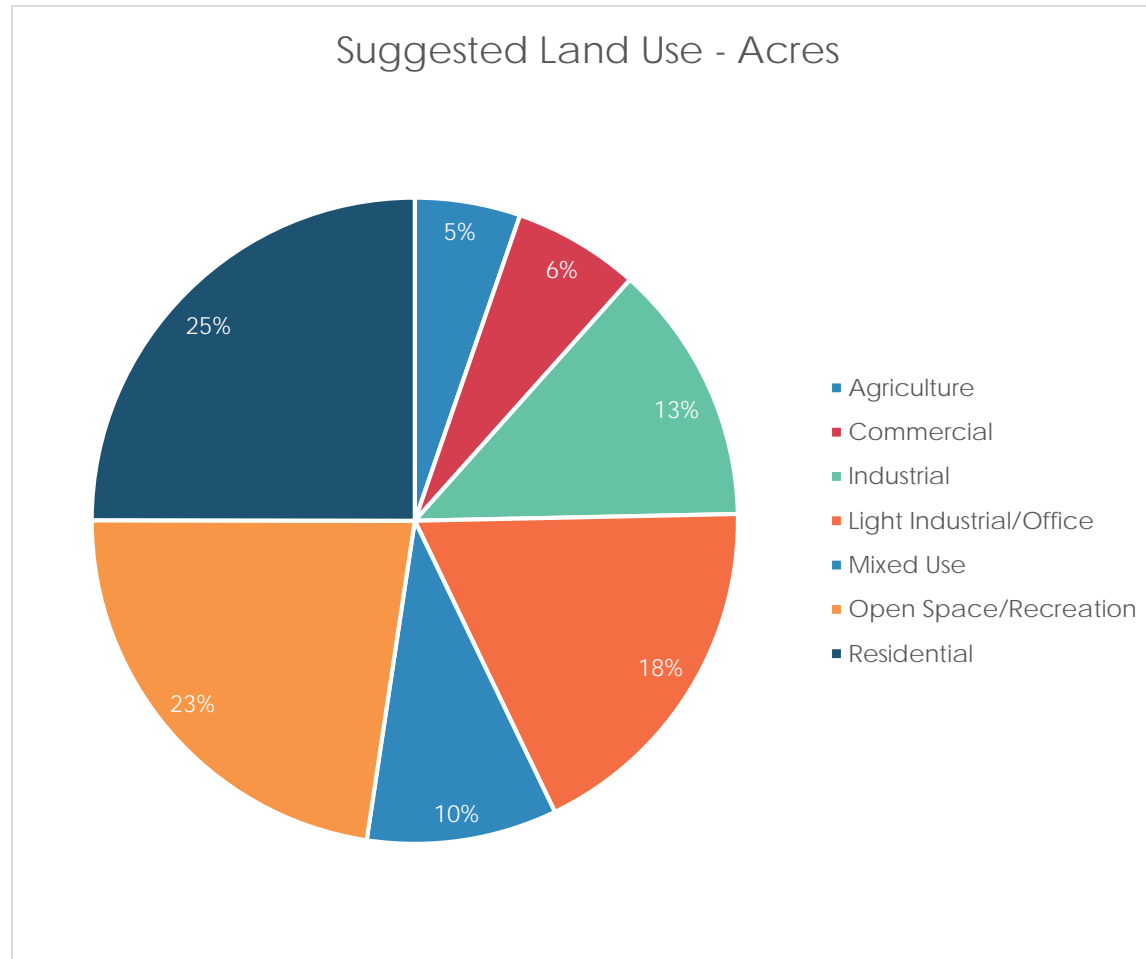
Level 2 areas provide a border between Level 1 and Out of Play land, and has diverse characteristics and can be composed of less developed areas within municipalities, rapidly growing areas in the counties that have or will have public water and wastewater services and utilities, and areas that are generally adjacent to or near Level 1 areas; they serve as transition areas between Level 1 and the state's more open, less populated areas.

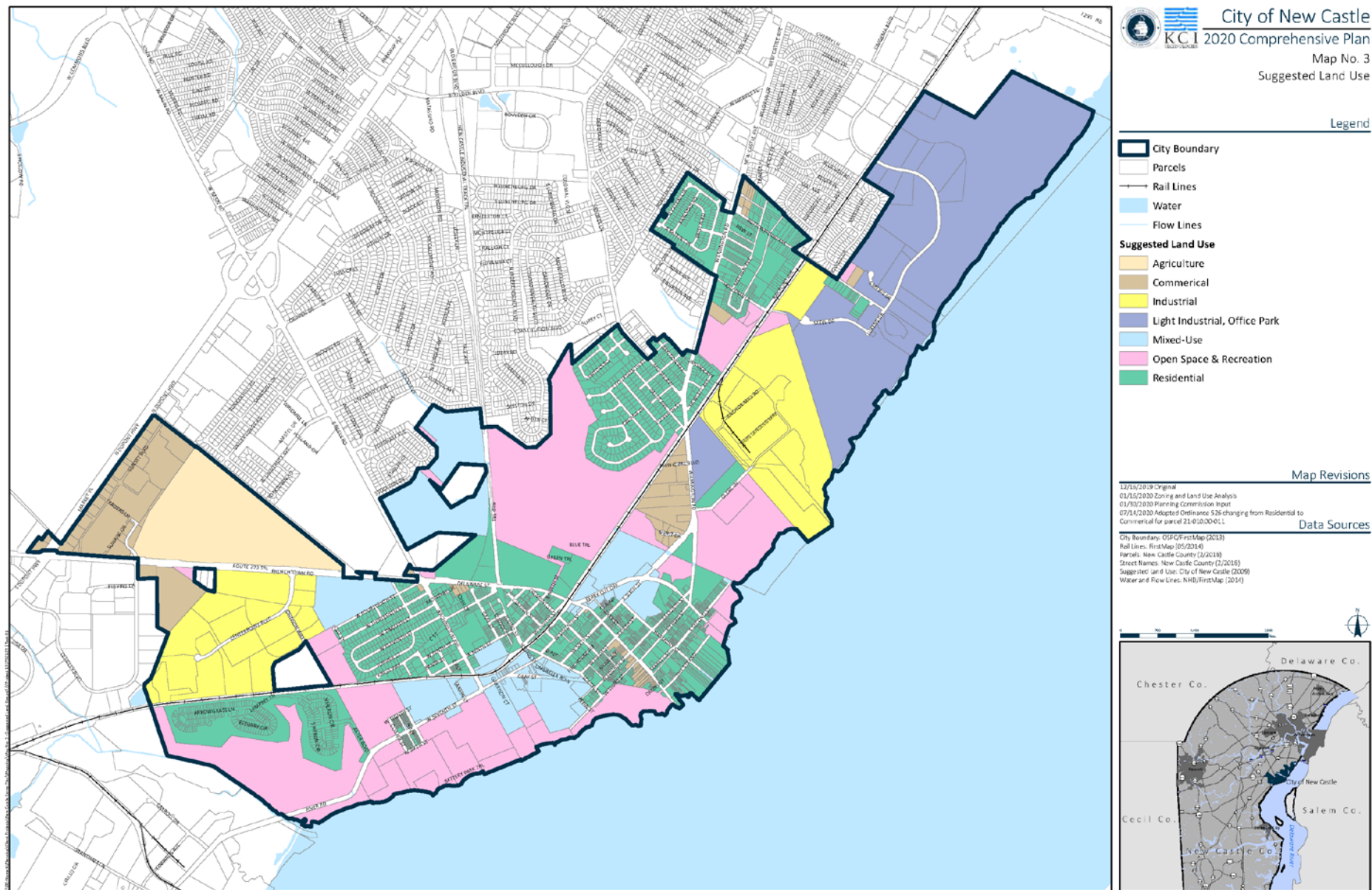
Other areas of the City are Level 4, or Out of Play. Out of Plan Areas are agricultural or opens space areas not well suited for significant redevelopment. These areas include natural habitats that are important for providing “ecosystem services” such as improving water quality and reducing flood risk.



2020 Comprehensive Development Plan (Draft)

The Draft 2020 Comprehensive Plan is currently out for public review and is expected to be adopted in 2020. The Comprehensive Plan documents the City's municipal development strategy including future population and housing growth within the jurisdiction, expansion of its boundaries, development of adjacent areas, redevelopment potential, community character, and the general uses of land within the community, and critical community development and infrastructure issues. The document is reviewed at least every five years and updated every ten years. The future Suggested Land Use map serves as the basis for future changes to land use and zoning.





Demographics

Population

According to American Community Survey data from the U.S. Census, the City of New Castle has a total population of 5,359 and 7,650 jobs. Compared with New Castle County overall, the City has a smaller share of youth population and a larger share of people aged 60 or older. Moderately dense suburban subdivisions surround the City.

WILMAPCO population projections show a small change is expected between 2020 and 2050 (1.8% increase) for the City and its surrounding area. WILMAPCO's employment projections for this period show a slight decrease in the greater City of New Castle area's number of jobs (-3.6% decrease).

Demographic Makeup - ACS 2014-2018

Population

Total population	5,359
Total housing units	2,740

Race

White alone	62.7%
Black or African American alone	24.8%
Hispanic or Latino (of any race)	8.5%
Asian alone	1.8%
American Indian and Alaska Native alone	0.4%
Two or more races	1.5%

Age

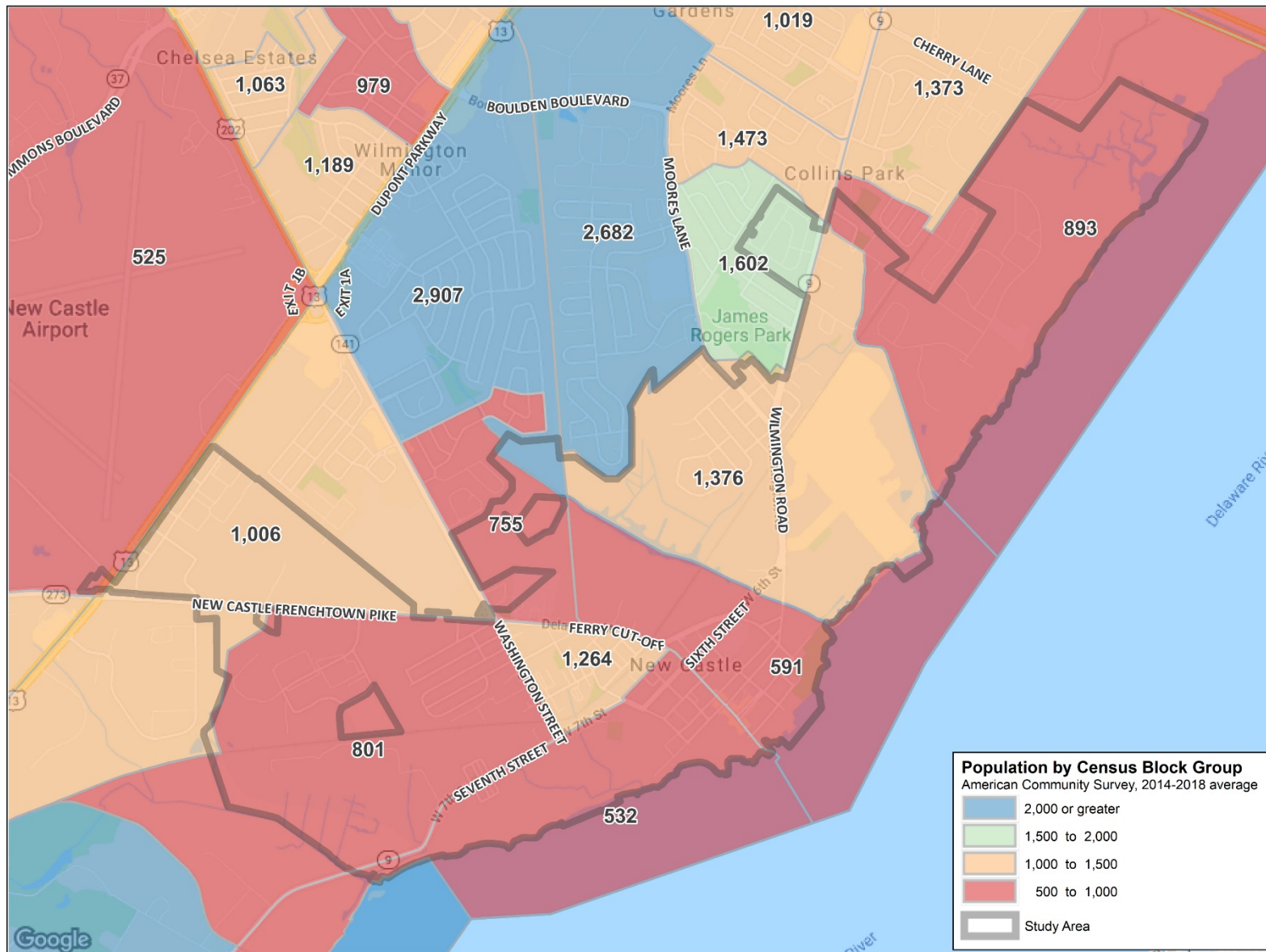
19 years and younger	12.1%
20 to 59 years	60.7%
60 years and older	27.2%

Income

Below 100 percent of the poverty level	4.1%
100 to 149 percent of the poverty level	5.7%
At or above 150 percent of the poverty level	90.2%

Commute

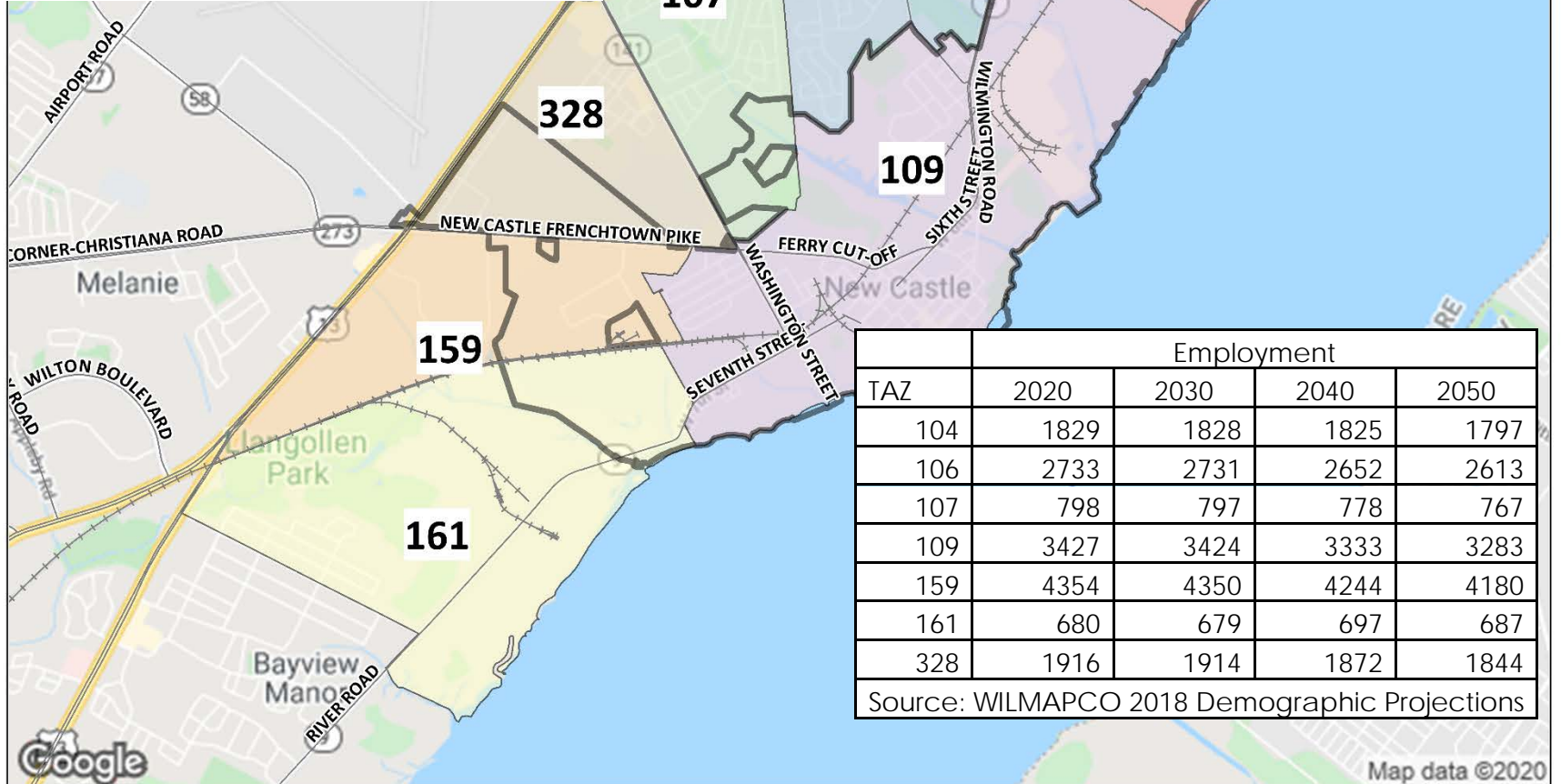
Drove alone	83.80%
Carpooled	9.40%
Public transportation	4.10%
Walked	1.60%
Bicycle	0%
Other	0.40%
Worked at home	0.70%



Population and Employment Projections

	Population			
TAZ	2020	2030	2040	2050
104	2257	2198	2200	2197
106	6237	6036	6024	6012
107	3513	3404	3399	3393
109	5065	5306	5500	5516
159	25	41	49	50
161	1177	1362	1472	1484
328	1289	1255	1256	1254

Source: WILMAPCO 2018 Demographic Projections



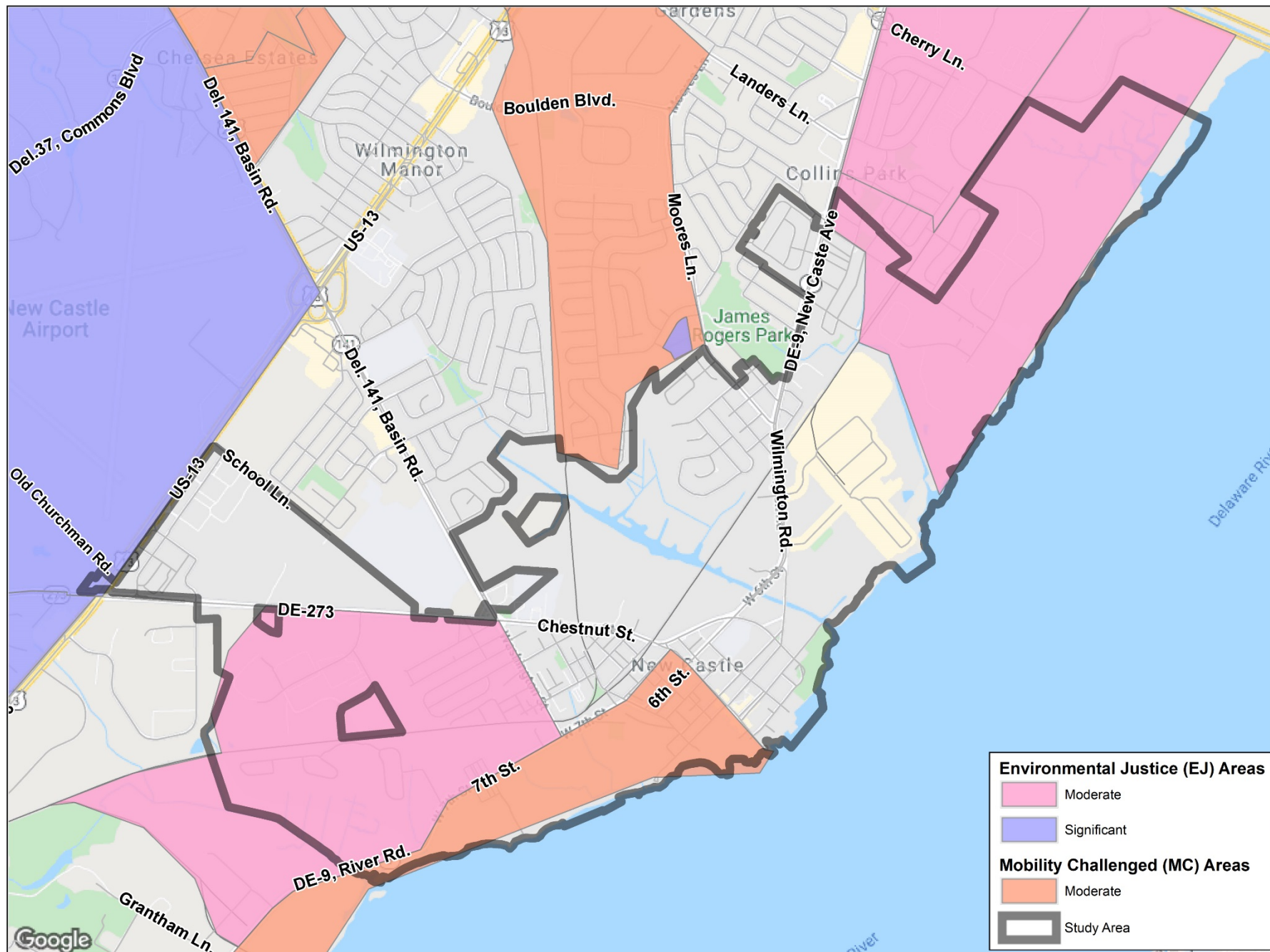
Transportation Justice

The WILMAPCO 2019 Transportation Justice Analysis identified areas with concentrations of population which benefit from enhanced planning for and provision of transportation to promote equity.

Environmental Justice areas have concentrations of Blacks, Hispanics, Asians, Whites and people living in poverty. EJ neighborhoods also include affordable housing developments, as well as school feeder zones with high concentrations of low income or minority students. The City of New Castle has two Census Block Groups which have moderate concentrations of EJ populations. The southwestern EJ area is also identified as a food desert with weak transit access to grocery stores.

Mobility Challenged neighborhoods represent concentrations of seniors, people with disabilities, and households without vehicles. The City has one Census Block Group with moderate concentrations of MC populations.

For more information, visit www.wilmapco.org/tj.



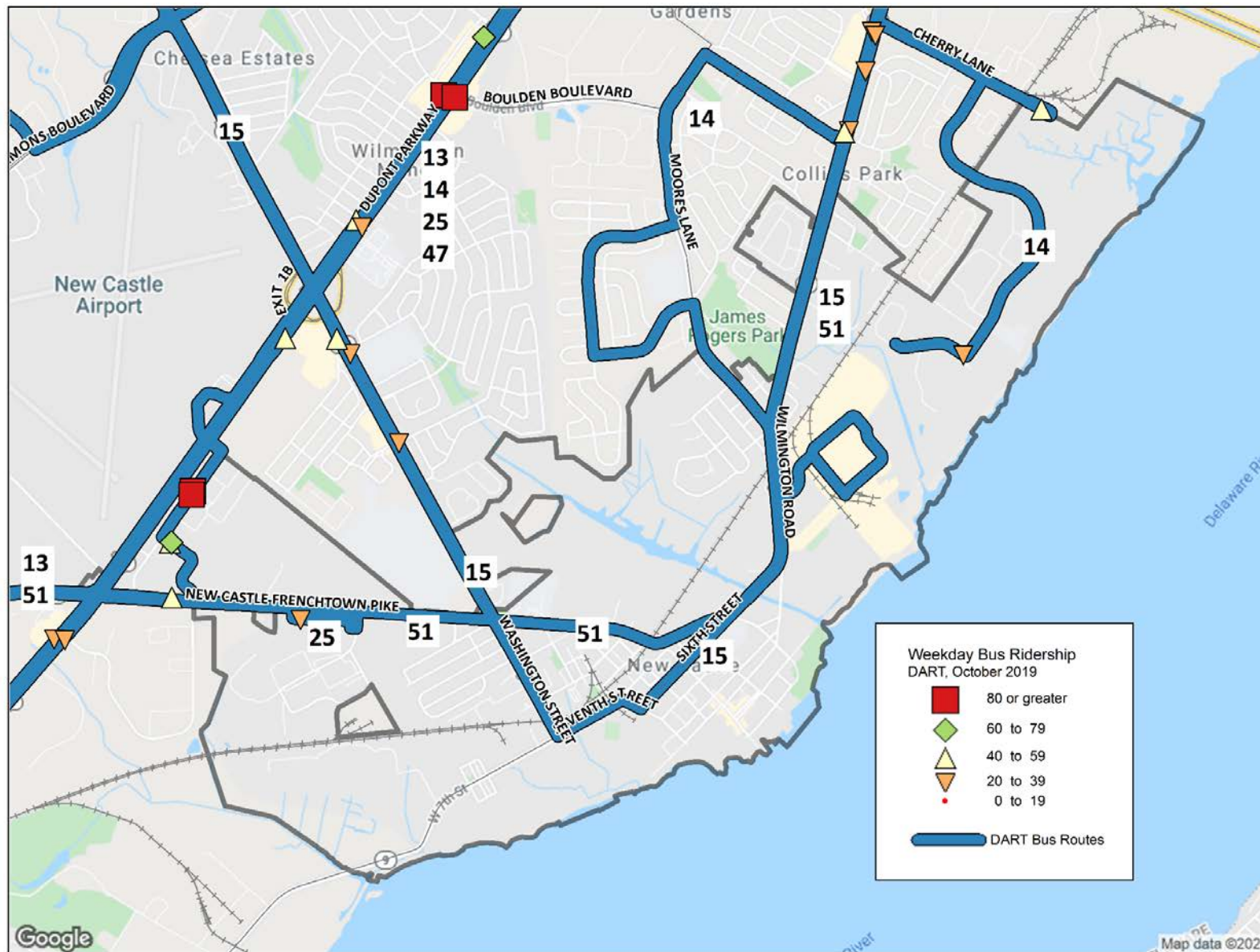
Transportation

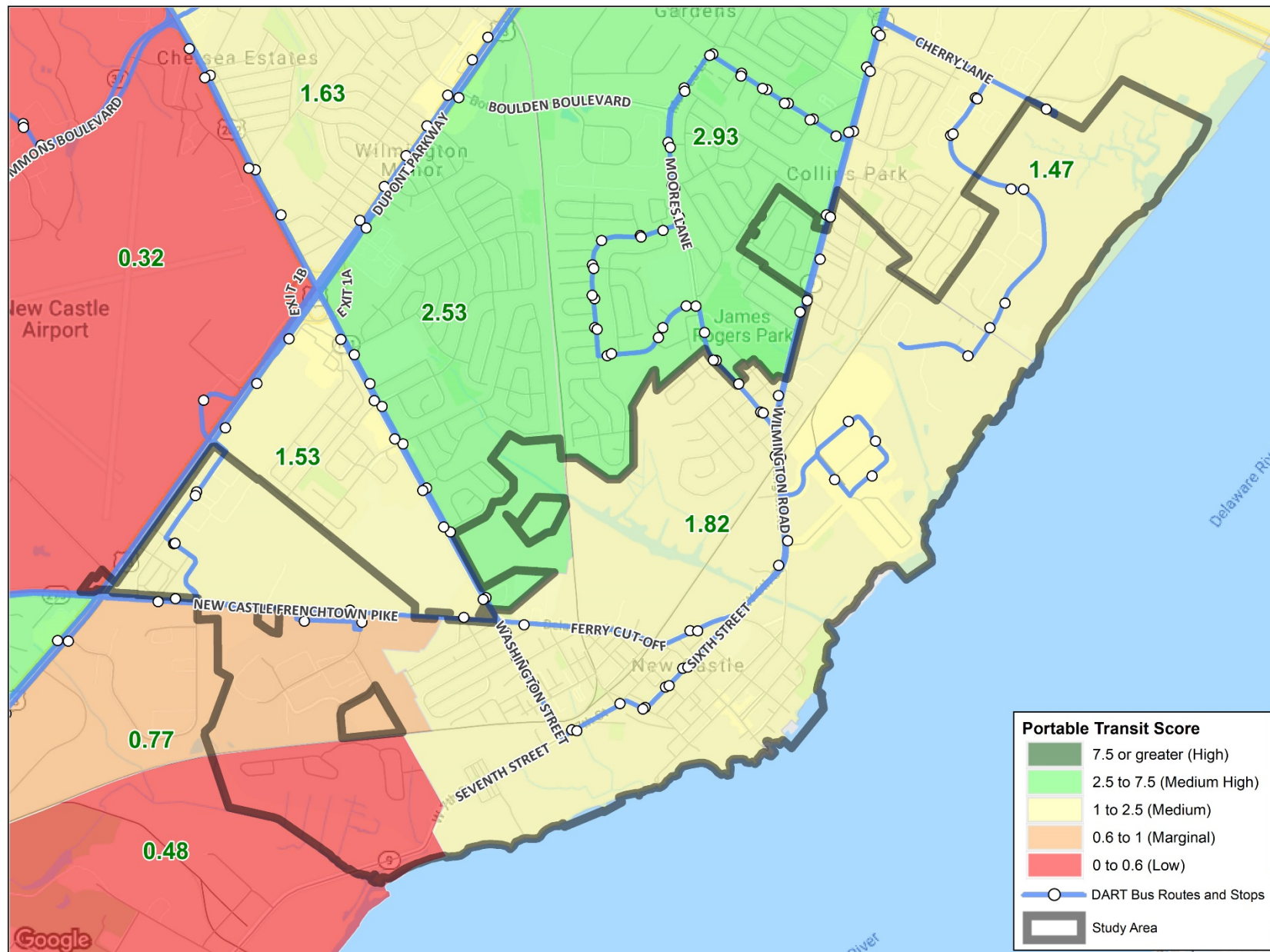
Transit

DART Route 15 and 51 travel through the City of New Castle--both connecting to the City of Wilmington and Christiana Mall. Route 14 connects areas in northern New Castle with Wilmington. Routes 13, 14, 25, and 47 travel along US 13. The City's busiest bus stop is at the Farmer's market. Other busy stops are along DE 273 in western New Castle, DE 9 in northern New Castle, and along US 13 outside of the City.

The Portable Transit Score assesses the current and future appropriateness of various intensities of transit service throughout the region based on population density, jobs, and zero-car households. Most of the City of New Castle is expected to support moderate levels of transit service. Areas immediately northwest of the City have higher scores in the medium-high range.

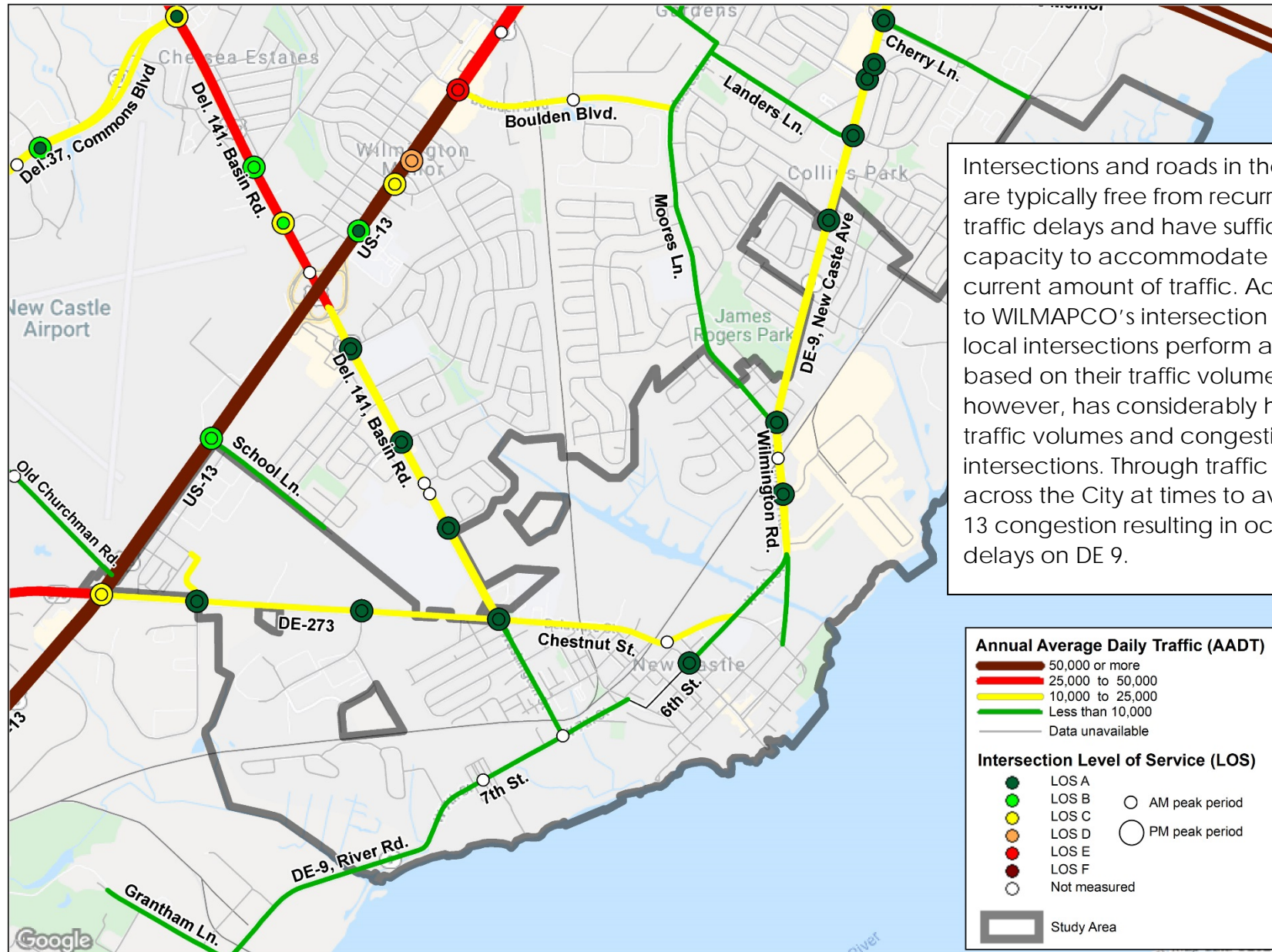
Short-term route changes have been proposed to help with transit operations during the upcoming I-95 construction project.





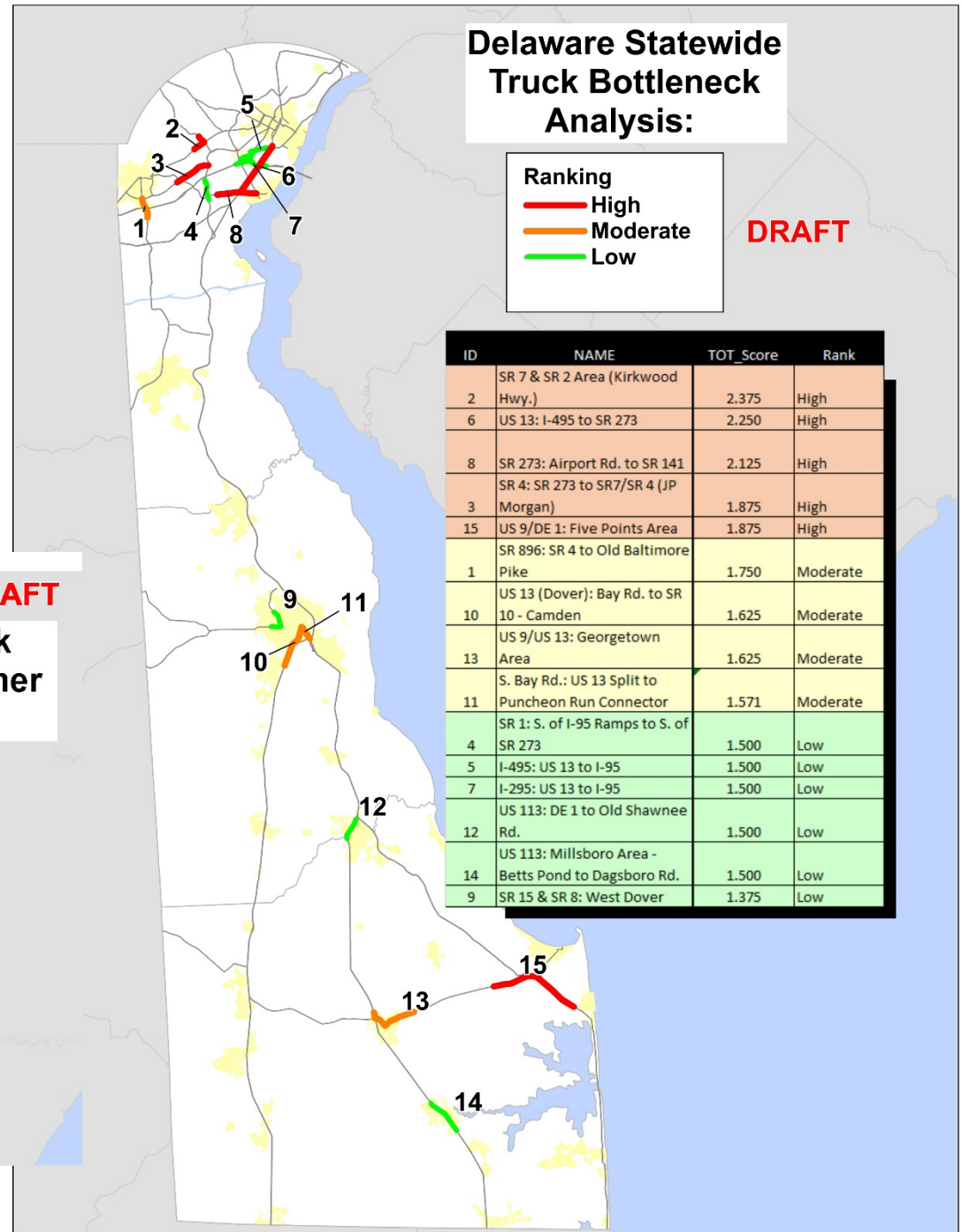
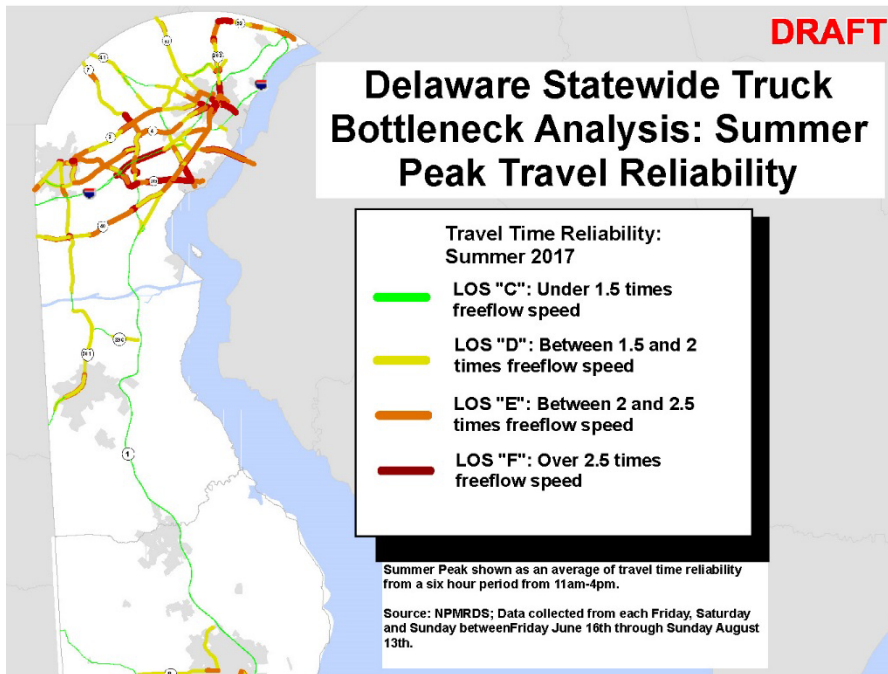
Roads

Roadway Volume and Intersection Level of Service.

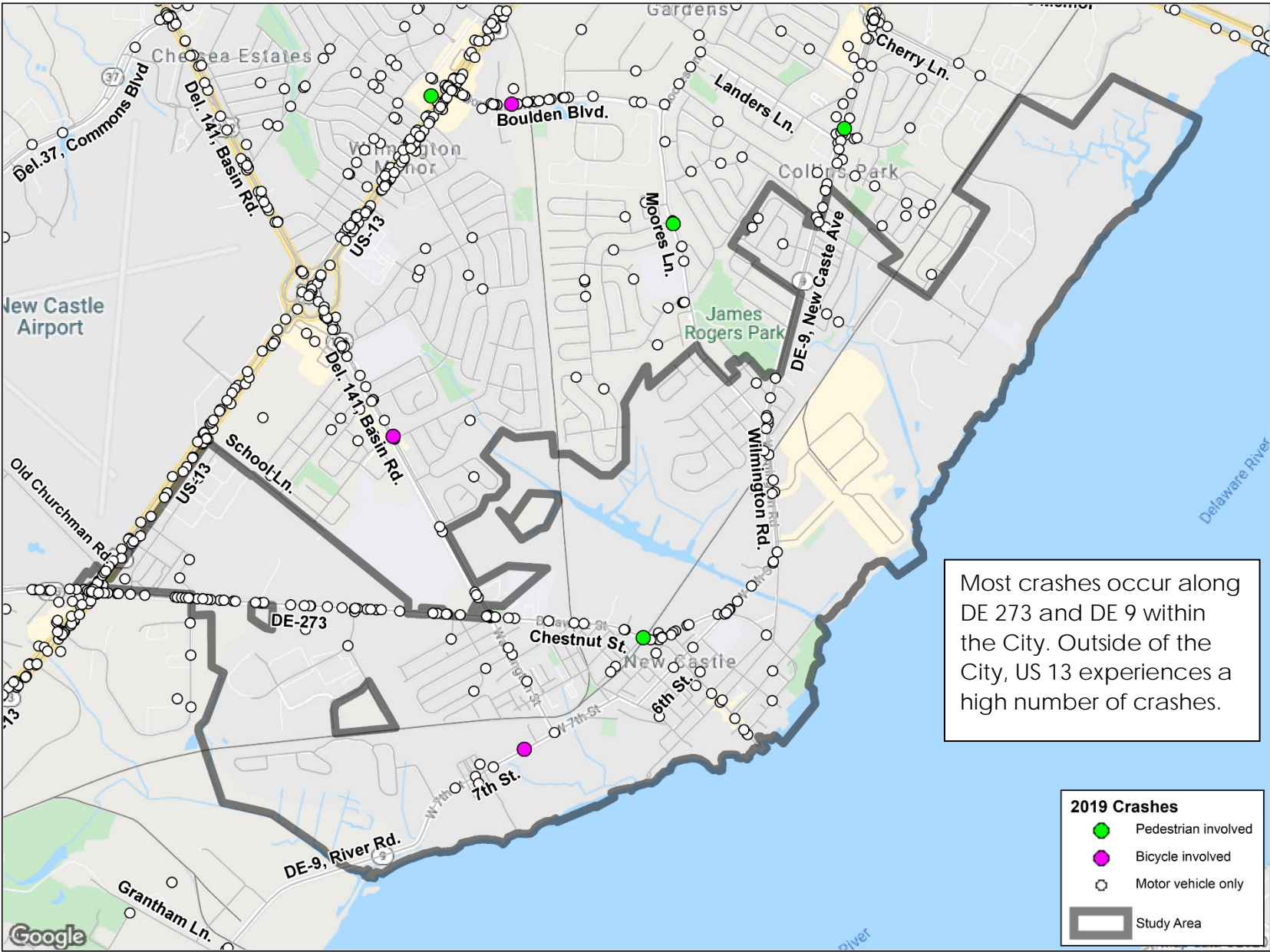


Freight

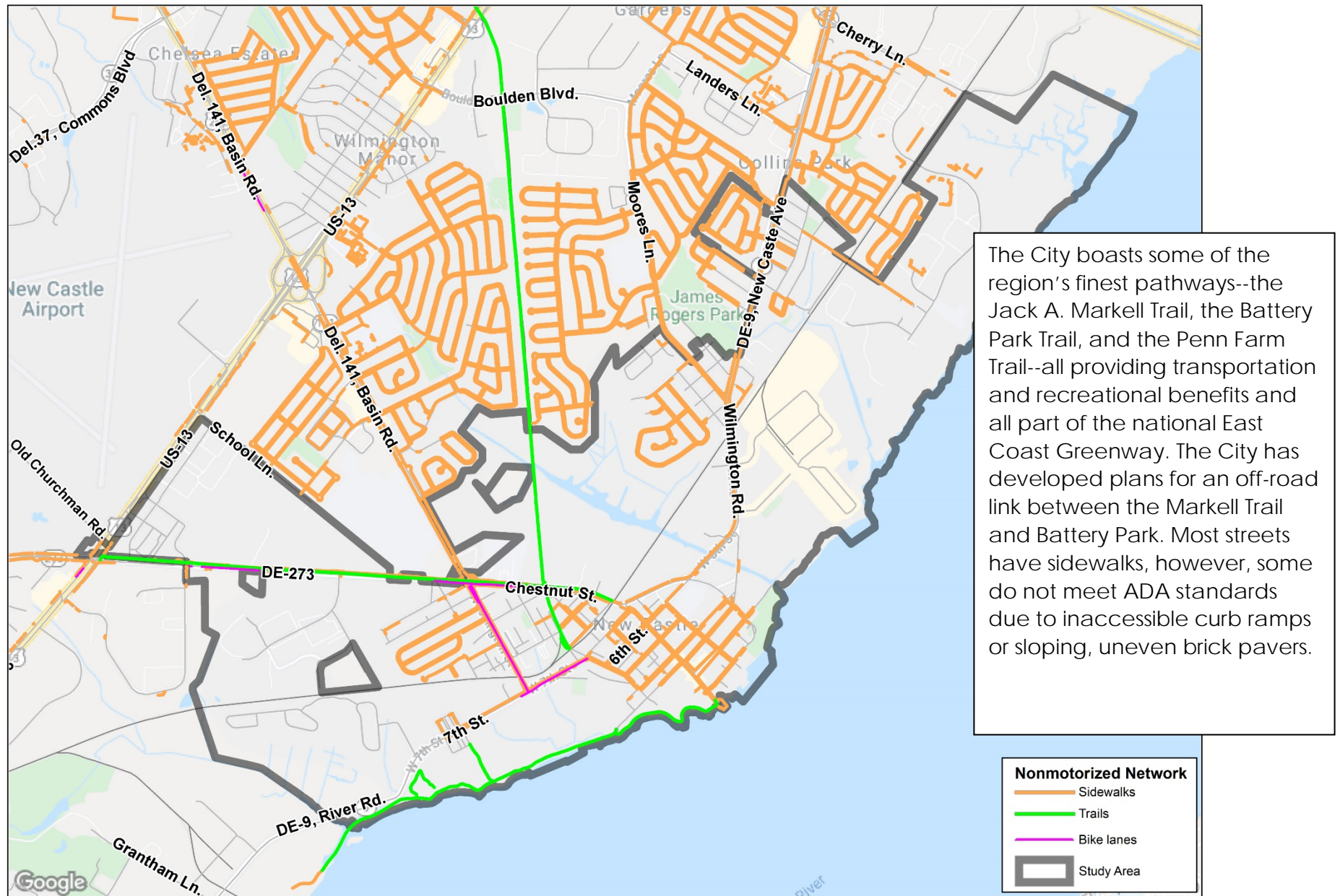
The City of New Castle area has several major freight routes, many of which experience reoccurring traffic congestion. US 13 from I-495 to DE 273 and DE 273 from Airport Road to DE 141 have been identified as high priority Truck Bottlenecks. Summer travel experiences additional delays as truck mix with beach traffic.



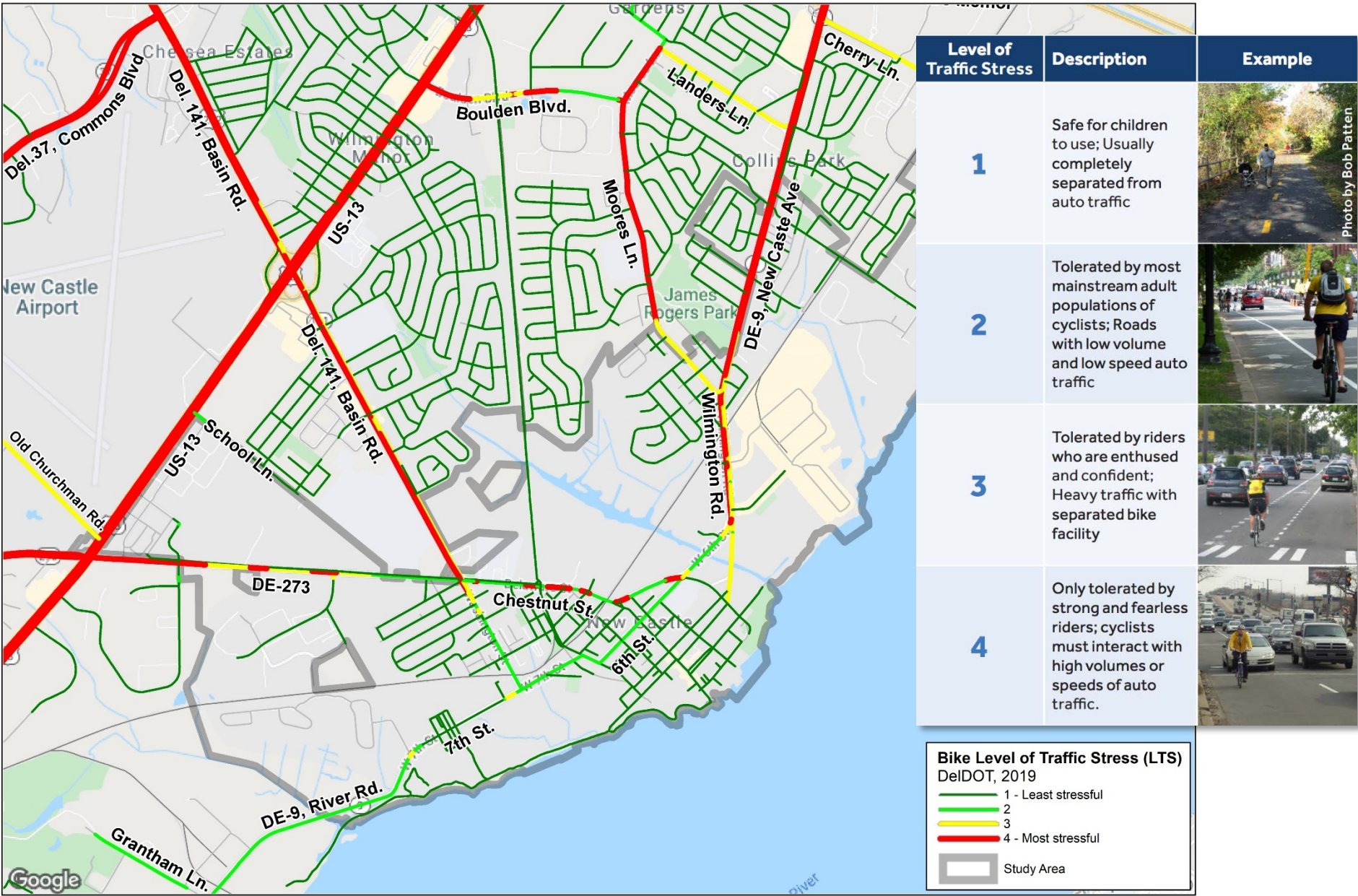
Crashes



Bicycle and Pedestrian



Local streets and pathways provide for comfortable bicycling for most people. Routes DE 273, DE 141, DE 9, and especially US 13 are more challenging for people walking and bicycling.



Greater New Castle Pedestrian & Bicycle Guide Map

Legend

- Shared use pathway
- Route with sidewalks
- Low-traffic road
- Moderately busy road, use extra caution
- Busy road, avoid when possible
- Bicycle lanes or shoulders present
- East Coast Greenway
- Parks, open space, and natural areas
- Historic New Castle
- Historic Attraction

Trail is complete to the south bank of the Christina River. Completion of the trail to the Wilmington Riverfront and ECG is undetermined at this time.

Route 9 / Interim ECG
Use extreme caution!
(No shoulders, unpredictable road conditions)

Underpass expected to open in 2016

Rt. 273/13 is a major intersection. It is advisable to walk bicycles through the intersection. Use extreme caution!

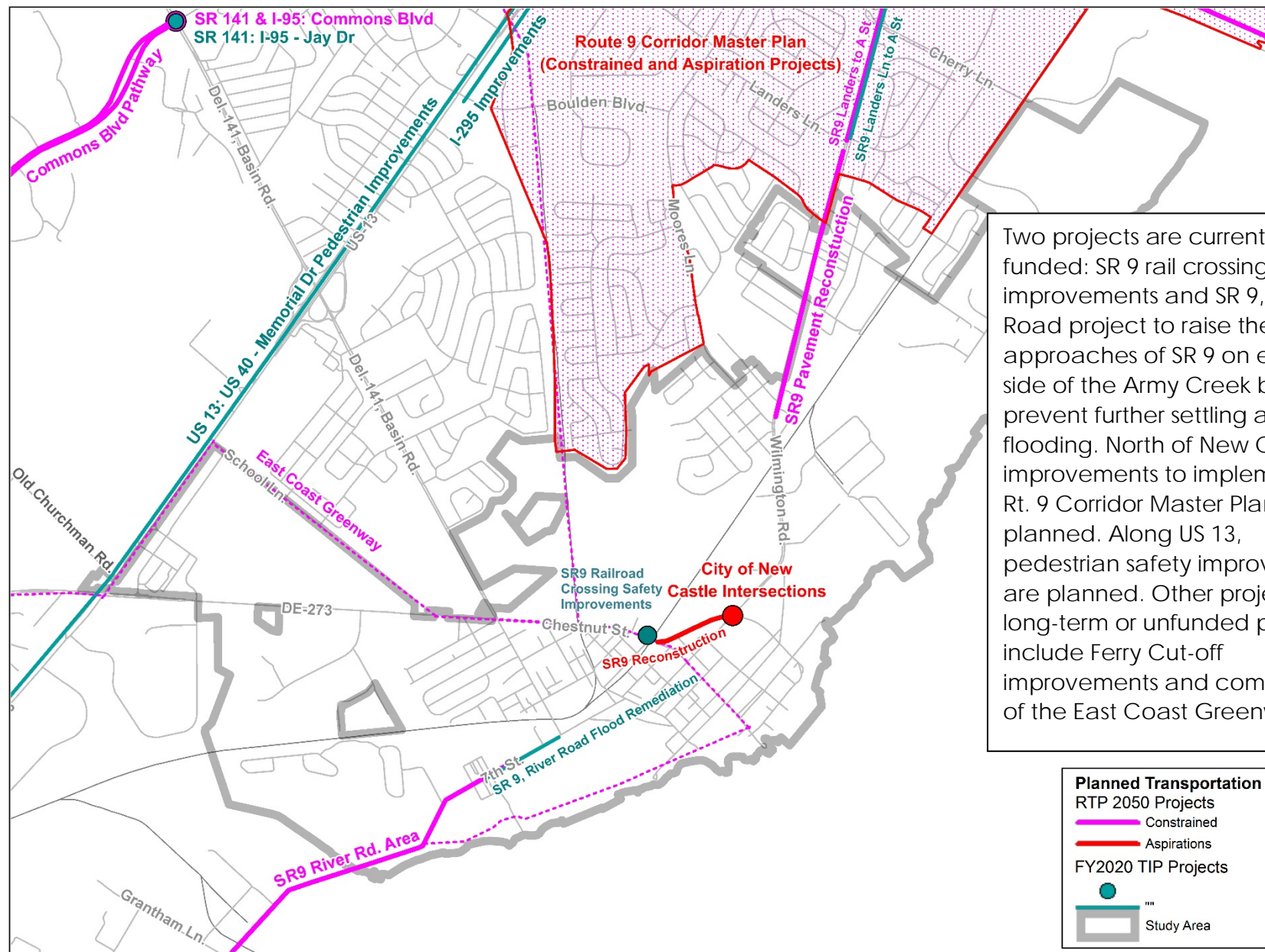
Must pass around gate

Route 273 Trail and at-grade crossing expected completion by 2014

Historic New Castle
See detail map inside

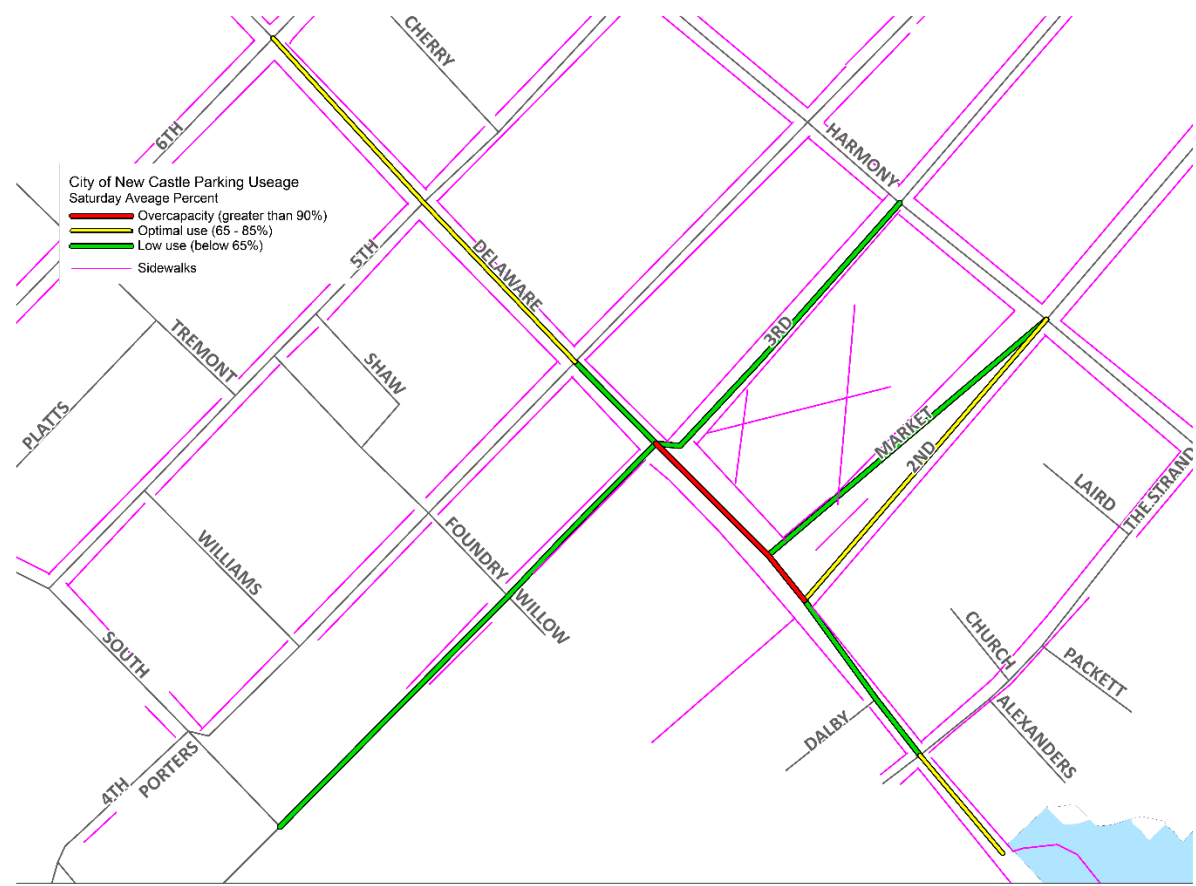


Planned Transportation



Two projects are currently funded: SR 9 rail crossing improvements and SR 9, River Road project to raise the approaches of SR 9 on either side of the Army Creek bridge to prevent further settling and flooding. North of New Castle, improvements to implement the Rt. 9 Corridor Master Plan are planned. Along US 13, pedestrian safety improvements are planned. Other projects long-term or unfunded projects include Ferry Cut-off improvements and completion of the East Coast Greenway.

Parking
2015 Usage



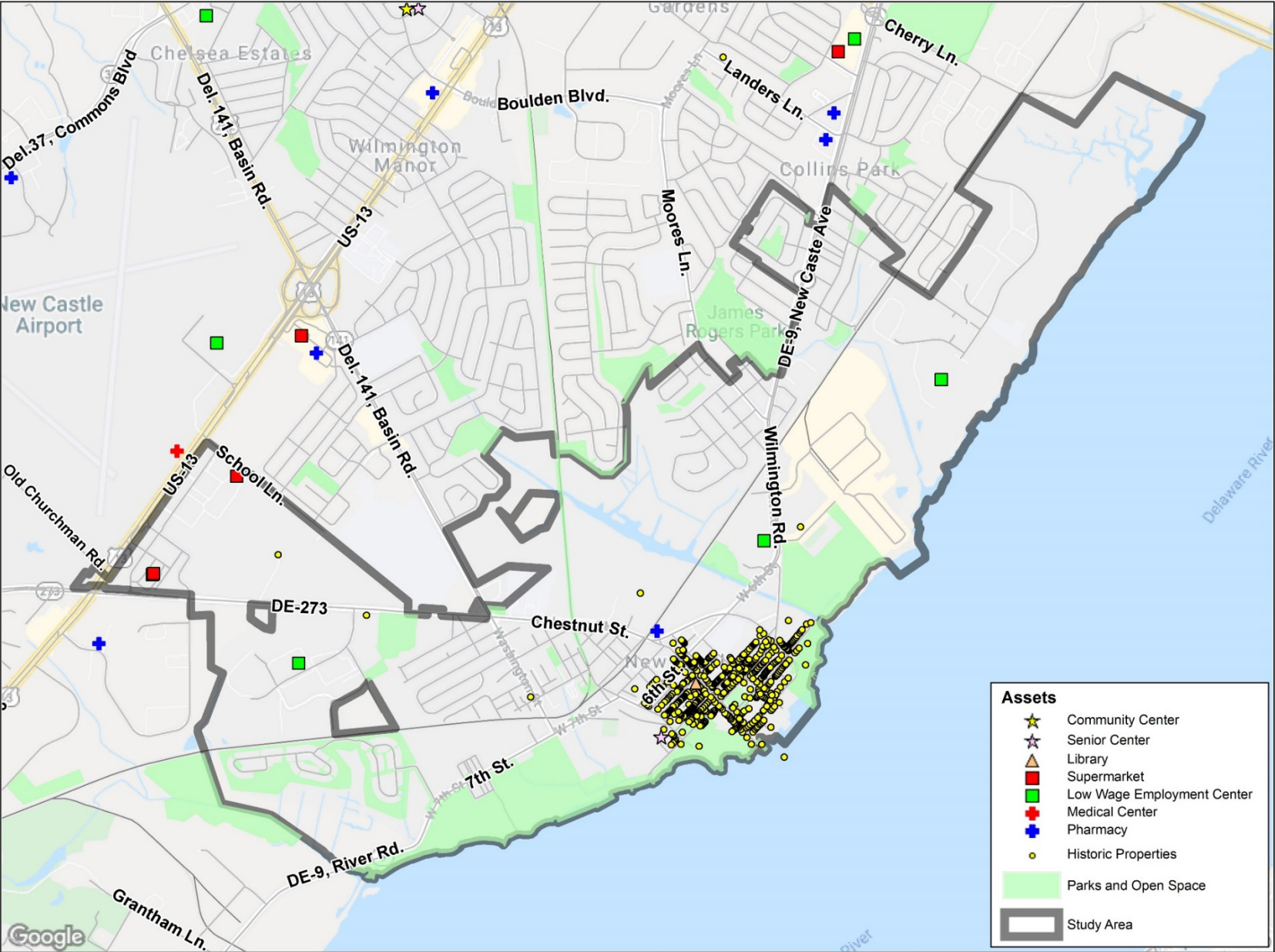
Environmental and Cultural Resources

Assets

The City is home to the First State National Historic Park and a national historic district, including numerous historic and natural sites of national and regional significance. The Park's headquarters is located at the New Castle Court House Museum. Two Delaware Byways, the Delaware Bayshore Byway and Harriet Tubman Underground Railroad Byway, pass through the City. Battery Park is enjoyed by local and regional visitors, one of the few recreational destinations along the Delaware River in New Castle County.

Community destinations in the heart of the City include a library, senior center, pharmacy, City Hall, post office, banks, places of worship, schools, and small shops and restaurants. The New Castle Farmers Market, a supermarket, Penn Farm and a variety of dining and larger shops are located on the western area of the City near DE 273/US 13. Just outside the City, the New Castle Airport is located in this area as well. Other commercial goods and services are located along DE 9 and DE 141, mostly outside City limits.

Community Destinations



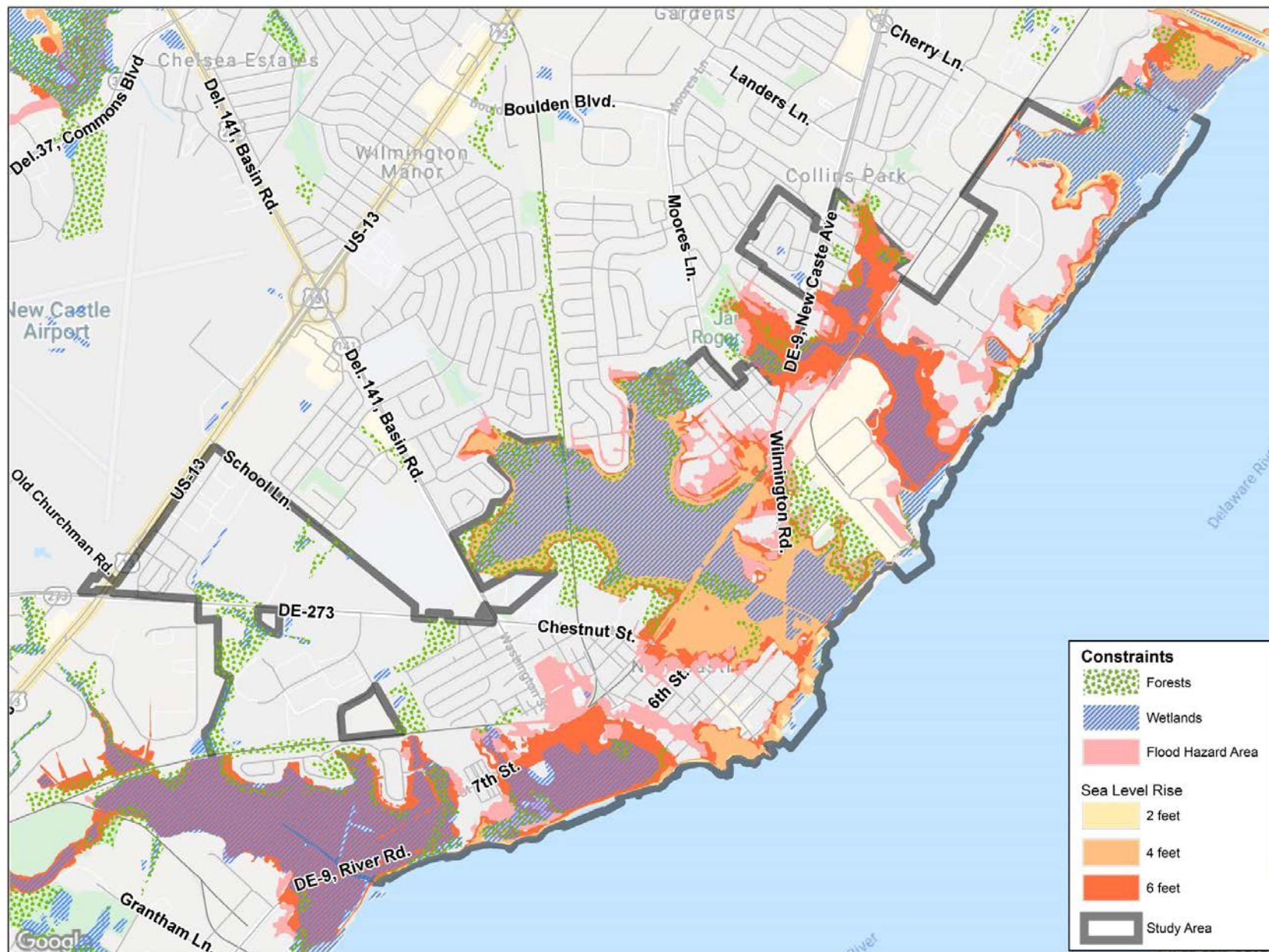
Points of Interest



Constraints

Environmental constraints are present throughout much of the study area. Wetlands comprise much of the City, including the 41-acre Gambacorta Marsh and 210-acre Broad Dyke Marsh, which form a natural barrier between the City's historic center and newer development. These have been improved through DNREC rehabilitation programs.

As a low lying, riverfront community, many roads and neighborhoods experience storm-related flooding and have projected Sea Level Rise impacts. The [2018 Vulnerability Assessment and Adaptation Plan](#) is a community-based plan to adapt the City to minimize the risks associated with flooding. Conservative projections suggest that an increase in sea level and flood elevations of 2 feet or more, with the neighborhoods of Buttonwood, Van Dyke Village, New Castle Manor, Bull Hill, the Strand, and the 7th and Washington The intersections of Delaware Street and Ferry Cut-Off, 6th Street (Route 9) and Ferry Cut-Off/Chestnut Street, and 7th Street (Route 9) and Washington Street are at risk of flooding and Sea Level Rise impacts, blocking access to emergency evacuation routes.



Next Steps

Future tasks include:

Task 2: Identify Transportation Issues and Opportunities

Work with stakeholders to identify issues and opportunities including traffic operations/system management, freight, transit, parking, and bicycle/pedestrian transportation.

- Kick-off Advisory Committee will present the Task 1 report and seek feedback regarding stakeholder outreach process.
- Committees will compile contacts for key community stakeholders and assist with outreach including civic associations and community Public Workshop.
- Work with Management Committee and Advisory Committee to prepare for and hold Public Workshop.
- Public Workshop will use an interactive approach to assess community preferences.

Task 3: Identify and Analyze Potential Multimodal Transportation Solutions

Identify and analyze potential strategies to address traffic operations/system management, freight, transit, parking, and bicycle/pedestrian transportation issues and opportunities.

- Potential strategies for analysis will be developed based on stakeholder and public outreach, identified economic, land use, transportation issues, environmental issues including flooding and sea-level rise, opportunities and constraints, and existing plans.
- Analysis should address roadway capacity needs, parking, pedestrian and bicycle infrastructure, freight, bus transit, green stormwater infrastructure, flooding and sea level rise, and interconnections with the surrounding transportation network.
- A Community meeting will be held to present and discuss potential strategies and the analysis, and get feedback on the preferred recommendations.

Task 4: Identify, Prioritize, and Document Preferred Recommendations

Work with stakeholders to reach an agreement on a transportation plan for the City of New Castle that includes the best set of multimodal solutions and a prioritized implementation plan.

- Based on stakeholder feedback, community outreach and technical analysis, preferred recommendations will be selected by the Management Committee.
- The preferred concept(s) will be compared to existing conditions, using measures of effectiveness such as level of service, bicycle level of stress, traffic diversion, and others as appropriate for the proposed design(s).
- Assessment will evaluate anticipated land use, demographic, environmental and transportation impacts of the proposed design(s).
- For high priority recommendations as appropriate, planning level cost estimates, potential funding sources, and next steps for implementation will be identified, especially regarding infrastructure needs, costs, and phasing that include compliance with National Environmental Policy Act (NEPA) standards to enable eligibility for future Federal funding, and will be documented in a final report.
- Draft report will be presented to the Management Committee, Advisory Committee and public.

Appendix B: PEL Checklist

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
1.	Background:		
a.	Who is the sponsor of the PEL study? (state DOT, Local Agency, Other)	Project Description and Purpose & Need	City of New Castle, WILMAPCO, and DeIDOT
b.	What is the name of the PEL study document and other identifying project information (e.g. sub-account or STIP numbers, long-range plan, or transportation improvement program years)?		City of New Castle Transportation Plan Update
c.	Who was included on the study team (Name and title of agency representatives, consultants, etc.)?	Project Description and Purpose & Need	City of New Castle, WILMAPCO, DeIDOT, Advisory Committee, and Steering Committee
d.	Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment (urban vs. rural, residential vs. commercial, etc.)	Project Description and Purpose & Need, and Existing Conditions	The study area includes the entire City of New Castle, but some of the transportation solutions address, and/or are affected by, traffic conditions beyond the corporate boundaries as improvements transition to adjacent areas within New Castle County. The City of New Castle is situated between I-295 to the north, SR 9 to the south, the Delaware River to the east, US 13 to the west.
e.	Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.	Project Description and Purpose & Need, Existing Conditions, Public Involvement, and Improvement Options – Evaluated, Recommended & Prioritized	A PEL Study was completed which included identifying the Project Needs and the goals of the City of New Castle to address those Needs. Existing conditions were identified, improvement alternatives were developed, and recommendations were provided. All alternatives and ultimately recommendations were developed in conjunction with the Advisory Committee, Steering Committee and with input from the community through several public workshops. The Study was completed between August 2020 and June 2022.
f.	Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?	Improvement Options –	The US 13/SR 273 intersection has been identified in DeIDOT's Safety Program prompting DeIDOT to conduct

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
		Evaluated, Recommended & Prioritized	<p>a feasibility study for a grade separated intersection at this location. Since traffic congestion at this intersection is the cause of much of the congestion along the SR 273 corridor it can be safely assumed that improving this intersection, particularly grade separating it, would reduce volumes and improve congestion along the SR 273, Frenchtown Road, Delaware Street and Ferry Cut Off Street Corridor.</p> <p>The Delaware Street/Ferry Cut Off Street Intersection, under a separate contract, DelDOT is working on the SR 9 Delaware Street (N-055) Railroad Crossing Safety Improvements Project (T201500506 SR9 DELAWARE STREET (N-055) RAILROAD CROSSING SAFETY IMPROVEMENTS). The project will replace, in-kind, the existing hot mix at-grade crossing surface on SR 9/Delaware Street, perform drainage improvements at the crossing, close W. 8th Street at Delaware Street and improve both the railroad and roadway signals to improve safety, visibility and meet current standards.</p> <p>The SR 9/River Road area, to the west/southwest of Dobbinsville is a highly prone to flooding. DelDOT has programmed the SR 9, River Road Area Improvements, Flood Remediation to address this issue.</p>
2.	Methodology used:		
a.	What was the scope of the PEL study and the reason for completing it?	Project Description and Purpose & Need	The purpose of this study is to update and develop the City of New Castle's Transportation Plan. The new Plan builds upon the 1999 <i>City of New Castle Transportation Plan</i> , provides additional analyses, and expands on

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
			<p>many of the issues identified in the 2009 <i>City of New Castle Comprehensive Development Plan</i>. Improvements will be evaluated to address:</p> <ul style="list-style-type: none"> • An improved multimodal transportation network which provides connectivity to communities and trails, enhances health and livability, reduces illegal truck traffic within the City, and improves overall safety for pedestrians, bicyclists and vehicles. • Understand and address the impacts flooding and sea-level rise have on land use and access to major transportation corridors. • Improve gateways, with specific attention to the historic elements of the City. • Develop a shared parking analysis. • Enhance bicycle and pedestrian connections and facilities. • Clarify regional and local traffic patterns. • Redesign streets and intersections to reduce speeding and cut-through traffic while improving pedestrian safety in all neighborhoods. • Formalize and optimize the existing parking supply
b.	Did you use NEPA-like language? Why or why not?	Existing Conditions	Yes, because there are state and federally regulated environmental and cultural resources present in the study area.
c.	What were the actual terms used and how did you define them? (Provide examples or list)	Existing Conditions	Purpose and Need, NEPA, FHWA, Section 4(f), Section 6(f), DNREC, USACE, Section 106, SHPO, wetlands, RTE Species, floodplains

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
d.	How do you see these terms being used in NEPA documents?	Existing Conditions	These analyses are described in the report for reference in a future NEPA study
e.	What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by state DOT and the local agency, with buy-in from FHWA, the USACE, and USFWS and other resource/regulatory agencies.	Public Involvement	Public involvement and community outreach were important components of the New Castle Transportation Plan Update Study. Residents, the business community, as well as state and local stakeholders were engaged throughout the Study. Community Workshops were held on: <ul style="list-style-type: none"> February 10, 2021 July 28, 2021 September 13, 2021 November 9, 2021 Advisory Committee meetings were held on: <ul style="list-style-type: none"> October 21, 2020 December 9, 2020 October 26, 2021 Meeting with Fire and Police Chiefs – November 18, 2021
f.	How should the PEL information be presented in NEPA?		The PEL Study may be attached
3.	Agency coordination:		
a.	Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.	Existing Conditions	Agency coordination was recommended based on study area resources.
b.	What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?	Project Need	WILMAPCO, DelDOT, DTC, and New Castle County
c.	What steps will need to be taken with each agency during NEPA scoping?	Improvement Options – Evaluated, Recommended & Prioritized	Each recommendation that moves forward for design will continue with the NEPA process where this report leaves off. Each agency will be prepared to have a scoping meeting for the recommendation and begin the in-depth investigation into the permitting and coordination necessary for design.

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
4.	Public coordination:		
1.	Provide a synopsis of your coordination efforts with the public and stakeholders.	Public Involvement	<p>Public involvement and community outreach were important components of the New Castle Transportation Plan Update Study. Residents, the business community, as well as state and local stakeholders were engaged throughout the Study. Community Workshops were held on:</p> <ul style="list-style-type: none"> • February 10, 2021 • July 28, 2021 • September 13, 2021 • November 9, 2021 <p>Advisory Committee meetings were held on:</p> <ul style="list-style-type: none"> • October 21, 2020 • December 9, 2020 • October 26, 2021 <p>Meeting with Fire and Police Chiefs – November 18, 2021</p>
5.	Range of alternatives:		
a.	What types of alternatives were looked at?	Improvement Options – Evaluated, Recommended & Prioritized	<p>The transportation and mobility goals of the City of New Castle are varied and multifaceted and, as such, require a variety of solutions to address those goals. As part of the development of improvements, a holistic approach was used to ensure all modes of transportation and all types of users of transportation were accounted for. Recommendations are categorized as low, moderate, and high cost.</p> <p>Low Cost/Short-Term Improvements are lower cost, (under \$250,000) easily implementable recommendations that can be performed within three years.</p>

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
			Moderate Cost/Mid-Term Improvements are between the lower cost and higher cost improvements (\$250,000 - \$1,000,000). These improvement projects usually occur three to eight years out from the planning study. High Cost/Long-Term projects generally occur beyond year eight from the completion of a planning study and require the high expenditures (over \$1,000,000).
b.	How did you select the screening criteria and screening process?	Project Description and Purpose & Need	The new Plan builds upon the 1999 <i>City of New Castle Transportation Plan</i> , provides additional analyses, and expands on many of the issues identified in the 2009 <i>City of New Castle Comprehensive Development Plan</i> . Improvements were developed mindful of the study's purpose and need, and the desired goals and objectives the City of New Castle strives to achieve.
c.	For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws.)	Improvement Options – Evaluated, Recommended & Prioritized	Alternatives that did not adequately meet project needs, had significant impacts, and/or were strongly opposed by the community were not recommended to move forward for further study.
d.	Which alternatives should be brought forward into NEPA and why?	Improvement Options – Evaluated, Recommended & Prioritized	Alternatives that sufficiently meet project need, so not have significant impacts , and are supported by the community were recommended to move forward for further study.
e.	Did the public, stakeholders, and agencies have an opportunity to comment during this process?	Public Involvement	Public involvement and community outreach were important components of the New Castle Transportation Plan Update Study. Residents, the business community, as well as state and local stakeholders were engaged throughout the Study.

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
			<p>Community Workshops were held on:</p> <ul style="list-style-type: none"> February 10, 2021 July 28, 2021 September 13, 2021 November 9, 2021 <p>Advisory Committee meetings were held on:</p> <ul style="list-style-type: none"> October 21, 2020 December 9, 2020 October 26, 2021 <p>Meeting with Fire and Police Chiefs – November 18, 2021</p>
f.	Were there unresolved issues with the public, stakeholders, and/or agencies?		No
7.	Planning assumptions and analytical methods:		
a.	What is the forecast year used in the PEL study?	N/A	N/A
b.	What method was used for forecasting traffic volumes?	N/A	N/A
c.	Are the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?	Project Description and Purpose & Need	The new Plan builds upon the 1999 <i>City of New Castle Transportation Plan</i> , provides additional analyses, and expands on many of the issues identified in the 2009 <i>City of New Castle Comprehensive Development Plan</i> . Improvements were developed mindful of the study's purpose and need, and the desired goals and objectives the City of New Castle strives to achieve.
d.	What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?	Appendix H Cost Estimates	Costs were estimated using 2022-unit prices.
8.	Environmental resources (wetlands, cultural, etc.) reviewed.		
a.	In the PEL study, at what level of detail was the resource reviewed and what was the method of review?	Existing Conditions	Desktop review and field verification
b.	Is this resource present in the area and what is the existing environmental condition for this resource?	Existing Conditions	It appears from our desktop review there are environmental, cultural and Section 4(f) resources present in the project study area.

City of New Castle Transportation Plan Update

Federal Highway Administration - Planning and Environmental Linkages Questionnaire https://www.environment.fhwa.dot.gov/env_initiatives/pel/pel_quest.aspx			
	Topic	Section Reference	Comments
c.	What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?	Existing Conditions	It appears there could be impacts to the resources with many of the recommendations presented in this report.
d.	How will the planning data provided need to be supplemented during NEPA?	Existing Conditions	Coordination with appropriate State and Federal resource agencies will be imperative at the start of the next phase of design for each individual project.
9.	List environmental resources you are aware of that were not reviewed in the PEL study and why. Indicate whether they will need to be reviewed in NEPA and explain why.		<ul style="list-style-type: none"> • 25 historic markers • 13 parks/public open spaces • NWI Wetlands • Waters of the US <p>These resources will need to be reviewed in NEPA and further coordination with the appropriate State and Federal resource agencies will be required.</p>
10.	Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.	N/A	N/A
11.	Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.	N/A	N/A
12.	What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?		The PEL Study will be available to agencies involved in the planning and design processes.
13.	Are there any other issues a future project team should be aware of?	N/A	N/A

Appendix C: Public Workshop 1 Summary Report

**City of New Castle
Transportation Plan Update
Public Workshop
February 10, 2021**

The first Public Workshop for the City of New Castle Transportation Plan Update was held on February 10, 2021 via Zoom. The Workshop was held in a meeting format which allowed for a presentation, as well as live public participation in three separate topic-specific, Breakout Sessions.

The following provides a summary of the Workshop and corresponding feedback.

The Workshop hosted 56 attendees. A presentation of the existing conditions and the data collected to date was provided to the public.

Two polling questions were used at the beginning of the presentation to gather information and to encourage participation from the attendees. The following information was gathered through the polls:

City of New Castle Transportation Plan Update Public Workshop 1 February 10, 2021 Poll Results			
Question 1: Do you live, work, or play in New Castle?			
	<u>Answer</u>	<u>Tally</u>	<u>%</u>
	Live, Work and Play	11	14
	Live and Work	11	14
	Work and Play	2	3
	Live	5	7
	Work	2	3
	Play	8	10
Question 2: How many people are attending this Workshop in your household?			
	One	34	44
	Two	4	5

Additionally, there were three topic-specific Breakout Sessions that allowed members of the public to discuss specific topics with project moderators. The topics of the Breakout Sessions were as follows:

- Breakout Session 1 – Bicycle/Pedestrian & Transit
- Breakout Session 2 – Traffic/Freight & Parking
- Breakout Session 3 – Environmental/Flooding/Streetscape & Electric Car Charging Stations

Participants of the Breakout Sessions were able to voice their thoughts, concerns, and potential improvements for each of the topics, as well as electronically “mark-up” an aerial base map of the study area with their thoughts. Moderators recorded the Sessions and took handwritten notes of the comments received. At the end of each Breakout Session, the groups came together as one large group and the moderators provided a summary of the information gathered during each group Session. All of the recordings, mark-ups and notes were posted on WILMAPCO’s website and are part of the official record of the study.

The following are the comments received during the Breakout Sessions:

Breakout Session 1 - Bicycle/Pedestrian & Transit
1. Preserve Old New Castle
2. Balance preserving residential character v. commercial development
3. Need Creative ideas to repair sidewalks, paths and other pedestrian facilities
4. The intersection of Ferry Cut Off St from the north of Delaware St is dangerous to drivers and would be expected to be dangerous to bicyclists
5. Need a pedestrian crossing from 7th St to Delaware St is difficult - Blind corner - Existing pedestrian crossing at 6th St - Possible future signal at 9th St
6. Biking from Jack Markell Trail to Battery Park trail is difficult is difficult to determine - possibly add way finding signs for pedestrians and bicyclists for safest route to use
7. The location of bike racks should attract bicyclists to the location they are placed - where are bicycle racks placed in the City now - identify locations for future bike racks - bike racks should be designed to be friendly and attractive
8. #15 Bus routing could be adjusted to service the airport from 141 to 13 to airport - Rt 13 Bus to Wilmington, route ends prior to train station - extend bus service to train station
9. Intersection of 273/9 where Pizza History is - larger signs to instruct of oncoming traffic - people will stop when they don't have to - very difficult for pedestrians to cross this intersection

10. Shopping Center Light (Ferry Cut Off St/Delaware St) - people not crossing at crosswalk along street - crossing at corner of shopping center - crossing along entire street
11. Intersection of 9/W 6th St - making a right off 6th St many bikers get off their bike to cross
12. Improved connection from end of JAM
Trail to Battery Park
13. Connection from end of Battery Park to Rt 9 - currently ends at a fence
14. Bike and ped parking between Carrie Downy School and New Castle Elementary School - Yellow flashing lights are not enough - When people are approaching on bike or foot, not certain traffic is getting a good enough notice that they need to slow down or stop at crosswalk - Lots of people run the light when you've pushed the crossing button - Someone was rear-ended when they stopped at that crossing for a pedestrian
15. Walking and biking at Ferry Cutoff with 6th St/rt 9 – intersection is a nightmare for anyone on foot or bike – not even automobile friendly
16. Took #15 bus when first moved to NC to commute to Wilmington but service was too unreliable and bought car – need more limited stop lines - Same for Newark – too long when you have to go to Wilmington first
17. Traveling southward on SR 9 from Wilmington area into Town of New Castle is very stressful and unsafe
18. The Markell Trail crossing of SR 273 to South St and jog from 7th to 6th Street crossing is difficult - Needs a safely signed direct connection to the riverfront - Consider direct bike/ped connection between South St and Battery Park Trail
19. Continue the Battery Park Trail farther north along the riverfront
20. Markell Trail to Battery Park Trail
21. Better connection to the high school

22. Consider extending Road Dieting along SR 9
23. There is good transit mobility within the Town CBD, but better accessibility and stops are needed between the Town and US 13
Breakout Group 2 - Traffic/Freight & Parking
1. Large trucks on 2nd St going south (trucks are possibly following GPS routing) should be on Route 9
2. Market St traffic could flow in either direction - A study should be conducted to determine the best direction of traffic flow on Market St to serve drivers looking for parking
3. Potential traffic calming location at Delaware St/Ferry Cut Off St intersection - Bend in roadway conflicts with parallel parking spaces - Recommends traffic calming on Delaware St near 7th St
4. Area trucks currently being routed around the city - What is the existing signing directing truck traffic - Is there enforcement - Is truck traffic in the City still a problem
5. Trucks coming from near Carroll Dr and Printpack Industrial area are using a short cut route through River Rd - Dobbinsville left on Washington St to 141 or 273 to 13
6. Dobbinsville residents have complained about truck traffic safety and speeding
7. Rt 9 to Washington St reroute truck traffic away from this route
8. Parking in New Castle still needs to be improved - Need more input from DelDOT and WILMAPCO - More parking planning and advice needed
9. Traffic jams, especially on the weekend in the summertime - Light at Hares Corner backs up to 295 - Light at Farmers Market entrance - Light at 273/141 - Possible issue with light timing
10. Tractor trailers have issues in the city, often can't get out - Especially at night - GPS problem (Google)

11. Route 9 through Dobbinsville - Lot of truck traffic - Usually turning left on Washington Street
12. Army Creek Bridge constantly flooded - Trucks go through and get stopped/stop traffic
13. New parking lot behind Delaware Street close to Battery Park - People struggling, circling around one-way streets looking for parking
14. Multiple places of interest that do not have parking, so people compete with residents for on street parking
15. Chestnut & 9 is also problem with traffic, especially rush hour -This intersection holds water, too, which impacts traffic - I-95 work will make this worse during that construction
16. Heavy truck traffic in Dobbinsville
17. Traffic filters through downtown area with people trying to bypass 6th St - High speed traffic 3rd St to South St to head to Rt 9 - Wilmington Rd into 3rd St - High speeds, especial during rush hour
18. Ferry Cut Off St near Walgreens has high speeds when it's not congested - intersection in front of courthouse, sometimes people make u-turns there -
19. Drivers disregarding one-way streets, Harmony 5th-3rd, Cherry St near 6th
20. Cherry St close to Ferry Cut Off St has no parking and people park on sidewalk
21. Speeding on residential streets especially smaller trucks
22. 3rd & Delaware with that little jog seems dangerous – cars miss that there's a ped crossing
23. Traffic is regularly problematic at - US 13 during PM peaks and summer traffic - Dangerous yield sign at SR 273 and Delaware St - SR 9 and Delaware St. congestion - SR 9 backs up to Moore's Ave. at peaks

24. trucks regularly cause traffic congestion and backups at - Amazon facility along SR 273 has mix of all types of trucks - Dobbinsville truck traffic along SR 9
25. Norfolk Southern Train at 4am causes vibrations and noise for residents
26. The new parking garage on 3rd street is ineffective, as 100 spaces were trimmed to only 32 spaces
27. Request – Please provide better crash statistics regarding number of fatal crashes and crash-type distribution
28. Don't just rehash old studies - Need new creative ideas to be implemented
29. Evaluate complete bypass around City for trucks and other through traffic (in area of Basin Rd)
30. 3rd St is major cut through corridor especially when US 13 & I 95 are backed up
31. Rt 9 south of town floods even when rain isn't heavy – causes backups and trucks to use other roads they're not supposed to use like 6th St
32. Development South of town generating more traffic particularly along Rt 9
33. Evaluate the income levels of developments along US 13 and what that means for New Castle
Breakout Group 3 - Environment, Flooding, Streetscape & Electric Vehicles
1. More trees is better - More tree lined streets
2. Ferry Cut Off St area needs more street scaping and landscaping improvements -This area is not very attractive
3. Flooding at 7th St. going south - Past state studies of the area have recommend discouraging development near wetland but the area is still developing near wetlands - Need more accountability from the state on following study recommendations

4. The historic layout and sense of space in the city should be preserved - Projects should preserve the built environment, (size of open area and street widths) open space and the character of the historic layout of the city - Stay true to the historic layout of the city
5. Flooding on Route 9 south of Dobbinsville - Potential that tide gate may be malfunctioning - Water coming in the tide gate to Army Creek could be contributing to the roadway flooding
6. Army Corps Bridge flooding
7. 273 meets 9 -South side floods out to the road - Left side floods business' parking lot - Minimal light at this intersection - illuminated/flashing high water sign to warn people about the flooding/frozen over water -Trucks get stuck
8. Route 9 - South of town, on the other side of Dobbinsville - Barriers put up, but people go around or move them out of the way then get stuck - Possible citation/fine for people ignore the signs/barriers
9. Better signage for historic district/local parking
10. Flooding on Rt 9 – getting worse over last several months
11. Need to look at flooding near Dobbinsville and southwest from there
12. Rt 9 floods near refinery, and then Dobbinsville is only exit
13. Electric Vehicle charging stations make a lot of sense - Maybe on South St where ASPCA is leaving - 3rd St parking lot
14. Gateway at Frenchtown Rd is really ugly – needs some love
15. Patch of grass near the pier where the house used to be – end of Delaware St
16. Gateway off 9 to Wilmington Rd not inviting either - Also intersection difficult for cyclists, especially trying to turn left into town
17. Entrance to Van Dyck Village – just hidden

18. Town Gateway opportunity and/or beautification needed at 6th St. and Ferry Cut Off St/Chestnut St - Need better Town 'gateway' entrance from points south of Town
19. Dobbinsville area and points south of Town prone to flooding
20. Focus improvements with electric vehicles in mind, including amenities -This is the future of transportation
21. Some consider paths nuisances
22. Designate areas to preserve
23. City already working on wayfinding and gateway study – need to identify funding sources
24. City tree program started along Delaware St – correct species and maintenance important factors

The following are the Post-Breakout Session Summaries:

Bicycles

Markell trail down to Battery Park area has connections missing

Need wayfinding signs between trails

Location of bike parks and where we need them

Pedestrians

Maintain brick sidewalks - When in poor repair, people walk in street

Good mobility in CBD

Transit

Need better accessibility to High School and west of Town

Route Changes for 15 to Airport and 13 to Train Station

Often slow and unreliable to Wilmington or Newark

Traffic

Bypass traffic from US 13 3rd to South to Rt 9

Congestion at Rt 9 & Delaware

Development south of town - how will that traffic affect the City

Speeding traffic

One-way streets - people going the wrong way & speeding

U-turns near courthouse
6th St backs up
Rt 9 south of town an issue for flooding, then traffic
Norfolk southern train at 4am - noise and vibrations
Large trucks on 2nd going south

Freight

Signing for routing trucks around City - enforcement
River Rd, 7th St - cut-throughs
Vibrations in Dobbinsville area
3rd St heavy cut-through

Parking

Issues with new parking on 3rd St
Need more planning for parking in general
Which way should Market St flow
People parking on sidewalks on one-way streets

Flooding

Flooding through Dobbinsville
9 corridor
Army Creek Bridge
Rts 273 & 9 - maybe flashing light earlier on Rt 9
Rt 9 south of town, people move the barriers and then get stuck in flooded areas

Streetscape

Frenchtown Rd & Ferry Cut Off St
Wilmington/3rd St
Van Dyke Village
EV on South & 3rd St
Careful that EV stations don't create problems
Wayfinding sign system and plan for gateway signs but need funding
City trees - maintenance
Support for tree-lined streets
Streetscaping in Ferry Cut Off St area
Ferry Cut Off, 6th St - needs enhancement
Better gateway entrance from south
Spatial layout and history of town important

Other Issues

Some rivalry between commercial and residential interests

Additional traffic from attractions like Kalmar Nickel?

Do not just re-hash studies from years ago

Intersections with issues

Rts 273 & 9

Needs better signage - some people stop when they don't have to
near shopping center light

Button for crosswalk not ADA accessible

Rt 9 north of town very difficult

Ferry Cut Off St and turn to Delaware St Intersection

7th St over to Delaware St

Rt 273 & 7th St

Hares Corner

Rts 273-141

Q&A

Increased flooding on Rt 9 south of NC - now floods even with light rain or low wind –
improvements scheduled for 2030-35 but needs action sooner

Bypass road for the City of New Castle - is considering this part of the study

There were environmental challenges with route identified but will look at it

Very large pothole on ferry cut off near Walgreens that has been there for 5 years

Answer from City Councilperson: not supposed to block public streets unless you get permission for
specific purpose

City should consider policy re: placement of cones in front of house to hold a parking space

Sign for Van Dyke Village

#1 problem is EVs for areas with townhouses and others that don't have assigned parking spaces

There are some DNREC grants available for EV charging stations in shared parking areas

Streetscape improvements for both gateways needed

Increased downed trees in Van Dyke Village at end of 14th St - in wetlands section, not on private property

Crossing Rt 13 is not safe for bikes

Stop train horns going off - designated quiet zone

Long trains + Rt 9 flooding sometimes strands parts of the City

Dark section on Rt 9 between Cherry St and Landsford - are you looking at lighting

Pedestrian improvements at entrance to River plaza

Hares Corner bad intersection for cycling

Sign at South St headed into town reminding cyclists about laws and who has right of way

Places for kiosks for maps and explanations for bikes/peds



Bike Delaware had conceptual designs for several intersections
Yes! bringing those outside consultants to team
More maps for visitors and stalls for bike parking
Speed limit on Rt 9 south of Dobbinsville could be raised to 35
Intersection of South & 7th - people are not stopping at stop sign

Post Workshop Comments:

See Attached

Appendix D: Pop Up Workshop Comments

City of New Castle Transportation Plan Update

The City of New Castle and the Wilmington Area Planning Council are working together to update the 1999 *City of New Castle Transportation Plan* and analyze issues raised in the 2009 *City of New Castle Comprehensive Development Plan*.

The study area for the plan includes the entire City of New Castle and will also consider transportation transitions to surrounding areas.

City of New Castle Transportation Plan Goals and Objectives

- ✓ Improve the multimodal transportation network
 - Provide connectivity to communities and trails
 - Enhance health and livability
 - Reduce illegal truck traffic
 - Improve safety
- ✓ Address flooding and sea-level rise impacts on land use and access to major transportation corridors
- ✓ Improve gateways to the historic city
- ✓ Analyze shared parking options



Next Public Workshop

September 13

Details TBA

Find out more here:

<http://www.wilmapco.org/cityofnewcastle/>



Public Comments

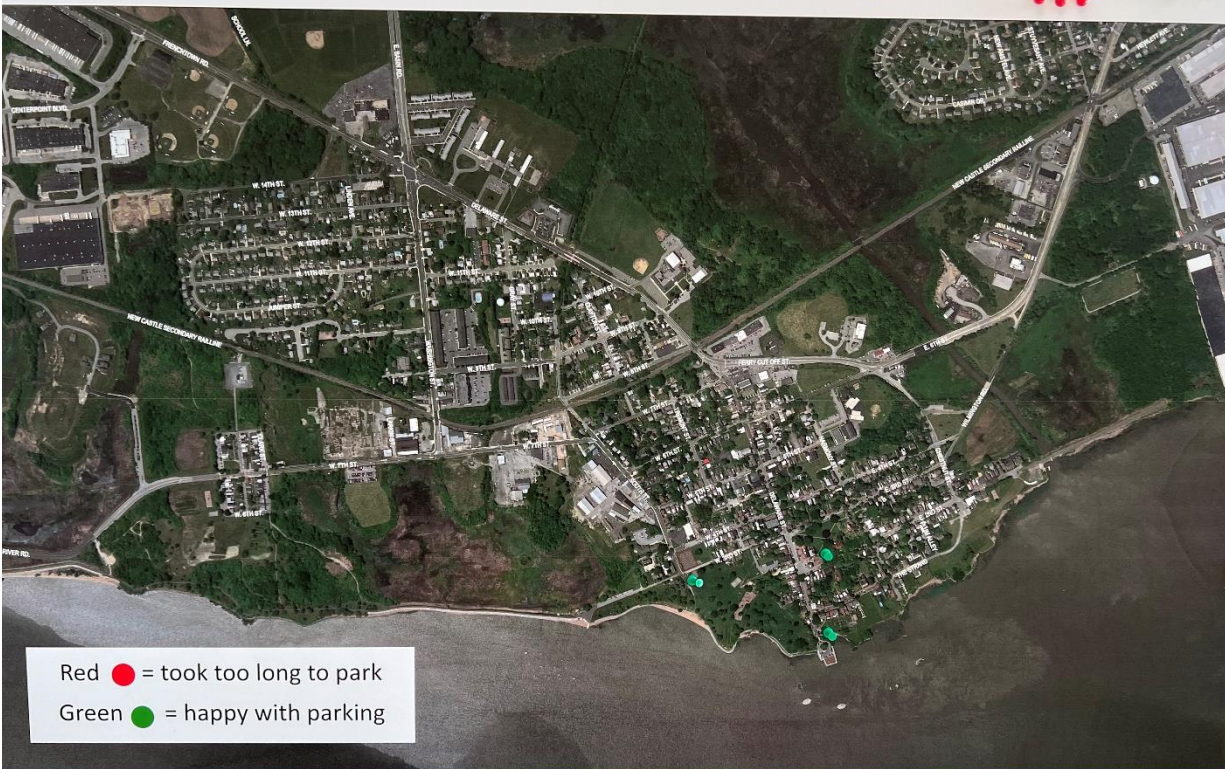
- Too Much Traffic / Truck Traffic on 6th Street – GPS Directs You This Way
- Trucks Should Use Washington Street
- Beach Traffic on 6th Street - Fridays SB, Sundays NB
- No One Stops at 6th & Harmony Streets
- Do Not Do RR Crossing Work Until I 95 Work is Finished
- SR 273 should be Four Lanes Whole Way
- In Front of Farmer's Market at SR 273 Light Make Turn Lane Longer – There is Room
- Speeding on 6th Street
- Uneven Sidewalks
- Battery Park Trail Just Ends
- JAM Trail Ends at Road
- More Parking by Delaware Street Section of SW Crossing at 3rd & Harmony Streets
- Add Street Lighting
- Truck Speeding on Washington Street
- Not Enough Signage
- Cars & Truck Speeding
- Rental Bikes & Bike Racks
- Need Parking on 4th Street

Priorities for Improvements

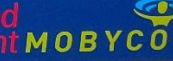
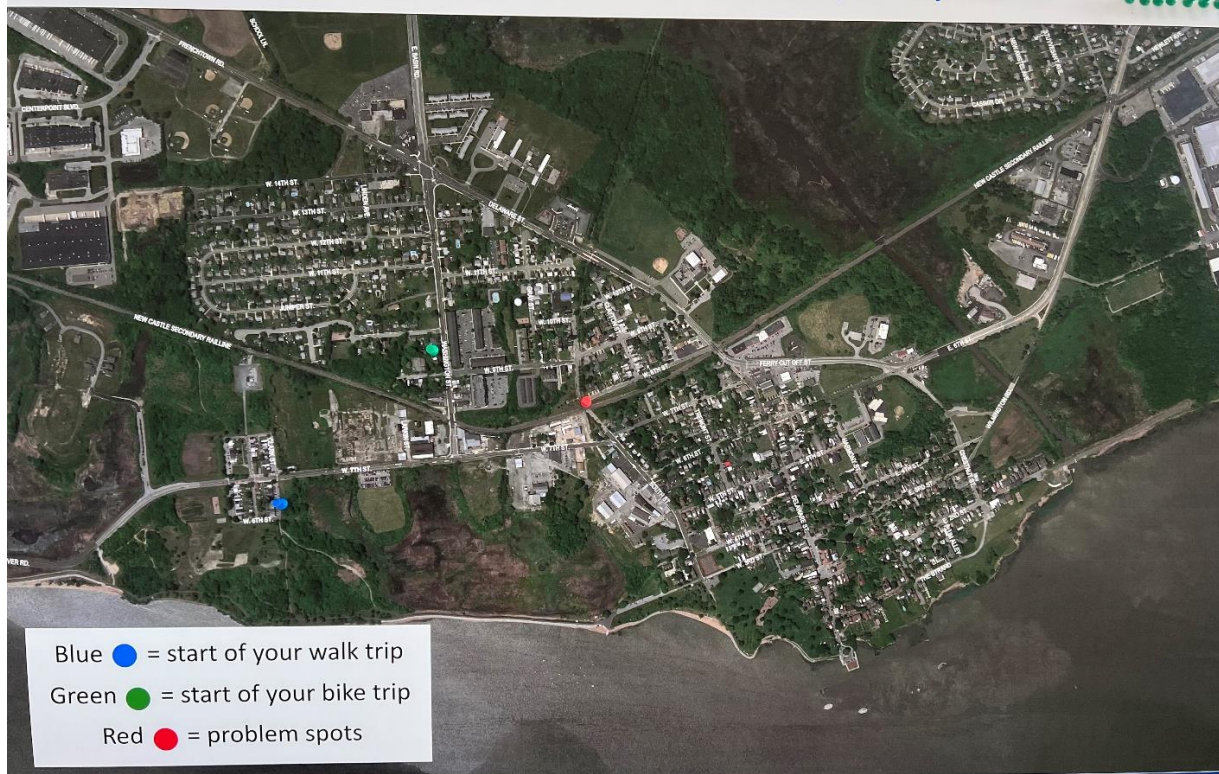
Tell us your 3 top priorities for transportation improvements in New Castle – put a ✓ by each

<p>Improve on-road bike facilities</p>	<p>Improve off-road bike/pedestrian paths & trails</p> <p>✓✓</p>	<p>Reduce traffic congestion</p> <p>✓ ✓ ✓</p>	<p>Reduce cut-through traffic</p> <p>✓ 6th / 3rd ✓ ✓ ✓ ✓ - 25 mph on Ferry Cut-off ✓</p>
<p>Add parking</p> <p>✓✓</p>	<p>Improve sidewalks and crosswalks</p> <p>Fix sidewalks ✓✓</p>	<p>Slow traffic speeds</p> <p>✓ 3rd St ✓ Running stop signs</p>	<p>Add street trees or lighting</p> <p>✓ ✓ ADD STREET LIGHTS TO E. 4TH ST</p>
<p>Improve signs and gateway elements</p> <p>Improve Ferry Cut-off ✓✓ ✓</p>	<p>Improve bus service</p> <p>✓ ✓ ✓</p>	<p>Add electric vehicle charging stations</p> <p>✓</p>	<p>Other? You tell us!</p> <p>Flooding ✓✓✓✓ Improve Ferry Cut-off</p>

Parking Issues – Where did you park today? How was your experience?



Walking & Biking – Did you walk or bike today? How was your experience?



Appendix E: Public Workshop 2 Summary Report

City of New Castle Transportation Plan Update Study
Community Workshop #2
September 13, 2021
Workshop Summary Report

The second Public Workshop for the City of New Castle Transportation Plan Update Study was held on September 13, 2021, via Zoom. The Workshop included a live presentation and was followed by a Question-and-Answer period.

The following provides a summary of the Workshop and corresponding feedback.

The Workshop hosted 37 attendees. The Workshop presentation included a review of the Study Area, Goals and Objectives, Public Comments, Study Approach, Improvement Options Developed, and Next Steps of the study.

Specific topics covered during the Workshop encompassed Speed Limit Reductions, Strategic Projects, Improvements to Make Intuitive Travel Decisions (Cut-Through Traffic, Trucks, Bicycle Boulevards/Focus on Bicycle Movements, and Gateways), Bicycle/Pedestrian Improvements (Focused/Improved Bicycle Network and Primary & Recreational Bicycle Routes), and Parking/Roadway Modifications for Greater Circulation.

Sixteen polling questions were asked throughout the presentation to gather information and to encourage participation from the attendees. The following information was gathered through the polls:

City of New Castle Transportation Plan Update Study			
Community Workshop #2			
13-Sep-21			
Poll Results			
Workshop Summary Report			
	Answer	Tally	Percentage
Did You Attend the First Public Workshop on February 10, 2021?			
	Yes	14	56%
	No	11	44%
	Total:	25	100%
Did You Attend the Pop-Up Workshop on July 28, 2021?			
	Yes	7	28%
	No	18	72%
	Total:	25	100%
Do You Support Speed Reductions Throughout the City?			
	Yes	18	67%
	No	7	26%
	Unsure	2	7%
	Total:	27	100%
Which Concept at the SR 273 / SR 141 Intersection Do You Support?			
	Concept 1: Free Right Turn	9	33%
	Concept 2: Signal Controlled Right Turn	9	33%
	Both	2	7%
	Neither	6	22%
	Unsure	1	4%
	Total:	27	100%

	Answer	Tally	Percentage
Which Concept at the Delaware Street / Ferry Cut Off Street Intersection Do You Support?			
	Concept 1: Existing Condition with Multi Use Path	3	10%
	Concept 2: Gateway Addition	16	55%
	Both	7	24%
	Neither	3	10%
	Unsure	0	0%
	Total:	29	100%
Which Concept at the Ferry Cut Off Street / E. 6th Street / Chestnut Street Intersection Do You Support?			
	Concept 1: Separated Roads	7	25%
	Concept 2: Dutch Left	15	54%
	Both	4	14%
	Neither	1	4%
	Unsure	1	4%
	Total:	28	100%
Which Concept at the W. 7th Street / Washington Street Intersection Do You Support?			
	Concept 1: Signing	4	14%
	Concept 2: Washington Street Sweep	13	46%
	Both	8	29%
	Neither	1	4%
	Unsure	2	7%
	Total:	28	100%
Do You Support a Revised Bicycle Network Which Identifies On-Road and Off-Road Paths?			
	Yes	28	93%
	No	1	3%
	Unsure	1	3%
	Total:	30	100%

	Answer	Tally	Percentage
Do You Support a Continuous Multi Use Path from the SR 273 / SR 141 Intersection to Landers Lane and Along Basin Road?			
	Yes	24	89%
	No	2	7%
	Unsure	1	4%
	Total:	27	100%
Do You Support a Separated Bicycle Path Along Washington Street?			
	Yes	25	86%
	No	4	14%
	Unsure	0	0%
	Total:	29	100%
Do You Support the Dobbinsville Multi Use Path Connector?			
	Yes	17	94%
	No	1	6%
	Unsure	0	0%
	Total:	18	100%
Do You Support the Proposed Improvements Along South Street?			
	Yes	18	72%
	No	3	12%
	Unsure	4	16%
	Total:	25	100%
Do You Support the Proposed Improvements Along Cherry Street?			
	Yes	11	61%
	No	3	17%
	Unsure	4	22%
	Total:	18	100%
Do You Support the Proposed Expansion of the Chestnut Street Parking Lot?			
	Yes	7	39%
	No	7	39%
	Unsure	4	22%
	Total:	18	100%

	Answer	Tally	Percentage
Do You Support the Proposed Locations for Gateway and Other Aesthetic Enhancements?			
	Yes	19	90%
	No	1	5%
	Unsure	1	5%
	Total:	21	100%
Do You Support the Proposed Flood Improvements?			
	Yes	14	82%
	No	0	0%
	Unsure	3	18%
	Total:	17	100%

Following the presentation, which included the sixteen poll questions summarized above, a Question-and-Answer session was held. The following questions were asked:

1. Will the slides be able to be emailed out after the presentation?

Yes, the PowerPoint presentation is posted at <http://www.wilmapco.org/cityofnewcastle/>. We'll have the recording available there later this week.

2. What is a "bicycle boulevard" and how does it differ from a bike path?

Bicycle boulevards are shared streets with low traffic volumes and slow speeds to give bicycle travel priority. They use signs, pavement markings, and speed and volume management measures to discourage through trips by motor vehicles and create safe, convenient bicycle crossings of busy arterial streets.

3. I would suggest in the next poll when it comes to limiting the speed that it read: "Yes, No, Unsure, or Some Streets."

Thanks, great point. We'd love to hear where/where not speed reductions are supported.

4. Speed limits must consider that residents need to come and go, too. 15 MPH is "Sunday driver" speed, not useful getting around speed.
5. I own and have just revamped the property at the corner of Frenchtown Road (604 Frenchtown Road). A business cannot survive there if there is no access due to a cul-de-sac. Please do not do this!!
6. Free turns should all be allowed at SR 141 and SR 273. It will back up!

7. Crossing SR 141 is the worst part of the Penn Farm Trail. A design solution is needed for that.
8. This would be a big, missed opportunity to improve the Penn Family Trail crossing of SR 141, which is the worst part of the trail.
9. Why was a roundabout not looked at for the SR 273 / SR 141 intersection?
10. I would love to get the slides so that I could mark up the where and where not speeds should be changed.
11. Do they plan on putting flashing lights at the intersection in front of the shopping center (Ferry Cut Off Street / Delaware Street intersection)? People fly through there when the light is green and there's no traffic.
12. With Concept 2 at the Ferry Cut Off Street / Delaware Street intersection, is there a proposed sidewalk behind the grassy area where an existing sidewalk is currently?
13. The area at the Ferry Cut Off Street / Delaware Street intersection just before the curve to SR 273 floods. This will cause major issues if the road is flooded.
14. Will there be stop signs or lights for those accessing the turn into the city (Ferry Cut Off Street / E. 6th Street / Chestnut Street Intersection)?
15. Has adding a light been considered at the existing Ferry Cut Off Street / E. 6th Street / Chestnut St. location?
16. Will the Dutch Left circle be small enough to reduce 18 wheelers? Hopefully so.
17. FYI - Once people figure it out, they will most likely make a left off of SR 9 onto Wilmington Rd. to Chestnut and then go through the city.
18. As Ted stated, I wanted to make sure that any changes made to roads would include improved drainage for that area. Is this correct?
19. Speed should be reduced on W. 7th Street. This is a residential street now, and there is potential for additional residential use in the future. Large trucks should be routed on to US 13 and SR 273. With growth at the Port, not reducing truck traffic now would be a great mistake.
20. So, drivers won't be able to make a left onto W. 7th Street from Washington Street anymore?
21. I support low stress routes for people using bicycles (whether "on" or "off" road).
22. The proposed improvements along Wilmington Road probably aren't needed.
23. No one calls the "Markell Trail" the "New Castle Industrial Track Trail."
24. FYI - DelDOT has plans to install a traffic light at the W. 9th Street and Delaware Street intersection.

25. It would be good to show proposed pathways extending across driveways.
26. The side paths seem to end abruptly. How do you propose to transition bicycle traffic into mixed traffic when these paths end?
27. Would the city or the state foot the bill for each of these improvements?
28. For a separated bike path on Washington Street, would it connect down to SR 9?
29. Was making South Street a one-way between 6th Street and 7th Street evaluated? (This was funded by the Delaware Bicycle Council and requested by the city).
30. There is almost no use of the parking lane on South Street between 4th Street and 5th Street.
31. I strongly support the pathway extension of the Markell Trail, but there are some design details that should be looked at more carefully.
32. The side paths on Washington Street and South Street seem to have many street crossings and some driveway crossings. How will you mitigate these conflicts?
33. Is this parcel on Chestnut Street buildable (for housing)?
34. The residents by the proposed Chestnut Street parking lot will not agree to this.
35. It is not obvious how to get to the main part of town. Some design is needed for pedestrians/bicycles to get to Delaware St, Battery Park.
36. Yes, I support proposed flooding repair work. A few areas that are now flooding where I never noticed a year ago are by the train tracks, Municipal Drive by the police station, and the industrial park. This is important to take notice of.
37. Maybe turn the area where the old city garage used to be into a parking lot, instead of the area near the river. Chestnut and 4th (across the road).
38. You already have a sign by W. 7th Street and Wilmington Road.
39. We already have plans in hand for the Gateway Locations.
40. In terms of aesthetic enhancements, I support better signage with lighting.
41. There are big plans for a dense apartment unit on the triangle at Ferry Cut Off Street and E. 6th Street. Please factor in this project with your road improvement plans/projects in that area.
42. Does DART bus service have any role in these improvements?

43. Are there any plans at the intersection of Wilmington Road and Moore as far as bicycle/pedestrian improvements?
44. We've recently seen more stop signs pop up in an attempt to slow and control traffic flow through town. Wouldn't speed bumps/humps accomplish this without all the signs, starts, stops, revving, etc.?
45. Will this study interface with the SR 9 Corridor Master Plan, which ended at Buttonwood Avenue? Will the recommendations and priorities (road diet, streetscape, etc.) be extended into the City of New Castle portion of SR 9?
46. I don't like the idea of the tobacco shop being at the dead end. It would bring more traffic through Washington Park and promote on-street parking in that area. (SR 141, SR 273, and 14th Street).
47. The Dutch left can't work with the triangle apartment project at E. 6th Street and Ferry Cut Off Street.
48. Anything that reduces through traffic in this entire area is ideal. Traffic has been horrible lately, more so than previous years.
49. The Washington Street Sweep is a very clever design.
50. Pathways should be continuous across driveways.
51. FYI – For the South Street improvements, cyclists will most like stay on the road and not use the sidewalks.
52. Does your plan include the land, installing streets and vacant building lots off Buttonwood Avenue and New Castle Avenue?

The Q&A Session, as well as the entire presentation, was recorded and the responses to the questions above can be found on that recording which is posted on the Dover/Kent County MPO Website at doverkentmpo.delaware.gov.

At the completion of the Workshop and Q&A Session, attendees were asked to complete a Post Workshop Survey. The results of that survey are as follows:

1. **Do you support the proposed vision for transportation improvements developed as part of this study?**

Scale: 1 Strongly Disagree – 10 Strongly Agree

Reply: 10 (3)

Reply: 9 (2)

Reply: 8 (3)

Reply: 7

Reply: 5

2. **How well do you feel that tonight's Workshop provided you the opportunity to share your ideas, thoughts, and concerns related to transportation and traffic circulation in the study area?**

Scale: 1 Strongly Disagree – 10 Strongly Agree

Reply: 10 (3)

Reply: 9

Reply: 8 (3)

Reply: 7

Reply: 5

Reply: 2

3. **Are there other improvements you would like evaluated as part of this study?**

Reply: More consideration for the residents, please! Many of us don't want prominent "gateways" and endless signs. Managing traffic around the perimeter of town is necessary but remember that people live here and don't necessarily want to move around in our own city in order to accommodate visiting cyclists and tourists. It's nice being a little hidden gem. Please remember that this is, for many of us, our home first, not a destination.

Reply: The crossing of SR 141 is by far the worst part of the Penn Farm Trail. Failing to improve this crossing would be a big, missed opportunity.

Reply: No, I believe all the traffic congestion was touched. Specifically, traffic through the city (north on 7th Street), down Washington Street and Delaware Street. As a resident of W. 12th Street, it lately has been hard getting on/off my street onto Washington Street specifically around rush hour and weekends. Also closing off 14th Street at Washington Street may bring more through traffic into Washington Park, especially since the incoming tobacco shop (which many of us residents are not happy about) only has 3 parking spaces and opens onto 14th Street.

Reply: The study must interrelate to intended access into the Port of Wilmington--SR 9 to continue as a relief for coastal traffic; there is a need of a major loop at Chestnut Street and a Gateway entrance to Old New Castle and overpass at US 13. Deny any intrusion upon private properties at the waterfront --- New Castle Commons does have prerogative over the East side of US 13 (and a major (overpass) will be required over US 13 to SR 273 to alternate tie-in to I-95). Optimum use for bike and pedestrian traffic is being denied at the New Castle Industrial Track Trail. Do not permit bikes along major routing such as US 9. The Waterfront Path system exists adjacent sailboat landings - maximize such. Elevating roads creates major flooding elsewhere.

Reply: Quality of existing sidewalks. Bike parking locations.

Reply: Increased DART bus service.

4. **Are there any other thoughts, or topics regarding the content or format of tonight's Workshop you would like addressed?**

Reply: Great job. A little more upfront explanation of exactly what your assignment is and from whom would help. Not everyone has been with you all along the way, so it'd help to contextualize the project.

Reply: I would like to understand the evaluation of making South Street between 6th Street and 7th Street a one-way in order to make room for the extension of the Markell Trail. I am also confused by the retention of parking lanes in the rest of the corridor.

Reply: Not sure at this time.

Reply: The side paths had few design details when compared to the other proposed improvements. The street and driveway crossings where there are the most conflicts are left blank. The Washington Street and Ferry Cut Off Street paths need to be flushed out better to address this. If the speed limit on South Street is reduced to 15 MPH, it should function as a shared street.

Reply: No.

5. **How was the video quality of the workshop?**

Scale: *1 Strongly Disagree – 10 Strongly Agree*

Reply: 10 (4)

Reply: 8 (5)

Reply: 3

6. **How was the audio quality of the workshop?**

Scale: *1 Strongly Disagree – 10 Strongly Agree*

Reply: 10 (5)

Reply: 9

Reply: 8 (3)

Reply: 2

Following the Workshop, attendees were provided with contact information where they could reach out to the presenters, should they have any further comments or questions at a later date. The following messages were received by attendees:

1. First off, many thanks again for tracing down, as best you were able, my continued engagements with WILMAPCO, the County, etc., particularly with regard to Land Use — extending over forty years.

Several evenings back, attending the Zoom meeting with subject New Castle regard (and unable to click properly the Chat button), I wish to reinforce earlier comment and that, subsequently, herein, added:

As earlier stated, Old New Castle is a National Icon and any even attempt at further commercialization should find rebuke. (Yes, "Jessups", etc. must be preserved—The Tea House & Arsenal, sadly, long gone. The Kalmar-Nyckel cruise landing at the Army Pier is lovely in concept.) Of a minority of such small jurisdictions within Delaware able to be self-supporting (separate but contributing New Castle Commons being income generating) --- the Commons, apparently, in recent make up is now prejudiced toward commercial growth and such endeavor should draw strong criticism. New Castle's jurisdiction included what became the Army Air Corps airfield, the farmlands bordering Rt. 273/Rt. 13 de facto commercialized by Bellanca, thence a generation later, Amazon, etc., etc. --- continues handsome incomes to the Town. Maximizing trans-shipment between rail, air, the I-95, Rt.141/273 and the expanded Port of Wilmington and required inter connections, must bear upon the State/WILMAPCO with a priority to be so set. Further, Residential accommodation for expanded demographics—" connectivity to communities", opportunities for varied mobility, availability of the Town as a tourist attraction should be left vacant. Such interests have earlier been addressed and excessively. The experience of Collins Park is but one example of "accommodation." Old New Castle MUST remain as is. Not to leave out needed discussion with regard to Bike ways. Preserving individual mobility, mini cars might become an option.

For the above trans-shipment priorities, WILMAPCO/Century Engineering should be commended for the current effort-Rt. 9 recommended improvements for such Town bi pass. Herein, is recommended a full round-about/prime announced "gateway" at Rt. 9/ Delaware Street and, yet denial of separate "Dutch Loop" --- this latter plainly dangerous. That intersection of Rt. 273/Rt.13, the earlier notorious Bear Intersection, may, alas, require a fly- over if the widened 273 becomes a prime access to I-95 at Churchman's. Rt. 273 tie backed into Rt. 9 South is not evident. Think the big picture.

Back to the old Town: Kalmar-Nyckel's permanent dockage, probably, should stay in Wilmington but New Castle would be ideal during the cruising season-- moored along the Army dock/ice break. And the crew/guests coming aboard require minimal parking. But the parking today is a mess. Should a new locale be at the former location of the Wilson Ferry landing? ---- separate access from the present Rt. 9 access? Such entities, inevitably, bring the cry for commercial hucksters ---- a plea constantly heard at most Parks.

Back to the Pedestrians/Bikes: Stay clear of even mention of running a pedestrian way in back of the Strand private properties----such would be an insurmountable attractive nuisance (green vaguely indicated on Century/WILMAPCO map --- albeit at the Zoom not mentioned.) Historic pavements should remain as is. Continuous "French well"-typar wrapped stone ballast set under the same material/re configuration could give some relief. And with regard to flooding (thank the Dutch for the Dyke), retain/even expand all marsh areas and proper enlarged "weeps" under elevated streets (Rt. 9). Indicated pedestrian walks are excessive in scope/number. Is there an

insider on concrete sidewalk paving? Those newly placed apartments should have each required open green space. Further, bulk heading simply diverts flooding onto adjacent properties. (There is more than a little head scratching occurring at the Army Corps of Engineers.)

Bike ways: Such bicyclists are currently on their way ELSEWHERE and don't need the enticement of a flattened pavement to get there. Sounding out, but again, the dysfunction of Land Use and Transportation, little in the presentation dealt with the criticality in separating the bike from high speed thru vehicular traffic (The Netherlands employs smaller cars/viable bike commerce) nor the required safe interconnection of the multiple bike paths at the continuum of the Markel bikeway. Let the biker simply bike off the round a bout to visit our heritage.

Noting the encouragement of residential Growth to be around existent residential cores, such as New Castle, the probable derailment of County Government Land Use with the County's intended 2050 Comprehensive menage ----- the latter being absent any indicated infrastructure, particularly with regard to future road alignment, begs such as WILMAPCO, if accorded a Governor, to overview and coordinate. New Castle, financially independent, should retain its own mandate ----- particularly, of Honoring its Past.

Many thanks for Reading this --- Charlie Weymouth, AIA

2. My name is George Velitskakis, and I am on the Transportation Advisory Board for the city of New Castle. I have been a business and property owner, investor, and resident of the city of New Castle for over 37 years. I wanted to reach out to you to voice my concern about a proposal that was made at the transportation meeting on Monday Sept. 13th, 2021. A property that I own at 604 Frenchtown Road would be directly impacted in a negative manner. Over the past two years, I have spent a great amount of time, energy, and resources on turning around what was once the worst looking property in New Castle, to one of the best. A new business has recently signed a lease there and has spent a lot of money to get it off the ground. A proposal was made to close off access to the property from that intersection by closing off 14th street with cul-de-sac. This would be severely detrimental to the survival of ANY business there. I understand that they are looking for ways to help traffic flow better at that intersection, but there isn't an issue with the way that corner is setup right now. Some years ago, they had installed a "NO TURN ON RED" sign at the light and it has been working as intended. Closing 14th street is absolutely unnecessary. If this were to happen, there would be no visible access in plain sight for the passersby and many would continue driving on and not patronize the business. There needs to be easy, visible, access to all commercial buildings in town to help their tenants survive because the community depends on them. Please reconsider this proposal. Thank you for your time and consideration and I look forward to working with you.

Best Regards,
George Velitskakis

3. Randi,

Thanks to the project team for coming up with some very creative ideas to address transportation problems in New Castle.

I think the combination of the Dutch left at Ferry Cut-Off/6th Street/ Chestnut and the Washington Street Sweep combined with enhanced gateways/better pedestrian and bicycle multimodal amenities/streetscaping—at all locations--plus lowered speed limits can greatly improve traffic calming and reduce cut-through and errant truck traffic throughout the city. I think most residents would get behind these concepts. Reduced traffic also provides an opportunity to make the South Street area more amenable to pedestrians and bicyclers by preventing the problem instead of trying to fix it. Start with these intersection changes and any related small changes and then decide what else needs to be done—if anything—before redesigning South Street.

We have been studying these issues for years. Your designs are real game changers to enhance quality of life. Right now, travel through the center of New Castle is an appealing traffic shortcut—make it less obvious and more inconvenient for the “Waz” crowd and more appealing for the residents and visitors.

Street level views would be helpful for all the gateways. Delaware Street/Ferry Cut-off area has a lot of foot traffic and better views of 2 options would facilitate making choices between two similar options.

The Fort Casimir area is Trustee property and already has some preliminary outdoor space/historic recreation designs. I don’t think we need a parking lot there.

Regards,
Linda Ratchford

4. Ms. Heather Dunigan, I agree with you as far as public involvement is essential for change. I direct Green Drinks Delaware, which is a group to bring together people that have strong commonality to recycling, repurposing, pushing for legislation on environmental issues and helped with the banning of plastic bags. I have a commitment to community and realize the need for a more responsible transportation plan especially for the City of New Castle area as we have LONG past the ability to handle the traffic load that we're experiencing.

I am asking you if you would bring me on board the community work group that has been established. I think that I would bring a unique and fresh perspective to this group. I would welcome hearing from you and discussing this matter further. I can be reached any time that's convenient for you at, 302-562-7636.

Thank you for your consideration and have a great weekend,
Phil Gross

5. Thanks for letting me share my suggestions! The top priority should be to address the road flooding issues on Route 9 south of Dobbinsville between Aster Boulevard and Carroll Drive. Additionally, the flooding issue in front of 202 East 6th Street continues to get worse and should be corrected. This is just north of the intersection of 6th and Chestnut and effects the southbound lane and shoulder.

Sidewalks should be added on Wilmington Road from Chestnut Street to Glebe Lane and continue down Glebe Lane. The old city garage area on Chestnut Street should have minor enhancements like striping/curbing and have vehicle charging stations installed. Install streetscaping and traffic calming measure on Ferry Cutoff. Connect Penn Acres/Stockton/Wilmington Manor Gardens to the JAM trail. Sidewalks should be installed on East 6th Street and a cross walk should be provided at 6th and Chestnut, so it is safe to walk/bike out to Three Country's restaurant.

Provide a sidewalk on Chestnut Street between Fourth and Sixth Streets. Install electric vehicle charging stations at the new 3rd Street parking lot and at the 5th Street parking lot behind the Post Office. Improve Penn Street. Install sidewalks on the northbound side of 7th Street from Dobbinsville to Washington Street. Install a walking/bike path from Washington Park to the New Castle Little League fields. Provide traffic calming features on Washington Street. Install bike racks in the area of 3rd And South Streets. Provide a safe bike path that connects New Castle to Delaware City.

6. Rt. 273 from Basin Rd to Rt 13 needs more lanes. Traffic backs up constantly. The flooding on Rt. 9 south of Dobbinsville needs to be addressed. Bicycle safety needs to be a priority will the increased bicycle traffic into New Castle. Increased bicycle activity needs to be encouraged. Traffic needs to be diverted from going through town on 6th St. It can't handle the volume and is dangerous.
7. Heavy truck traffic has increased noticeably and dramatically on Route 9 since the opening of Twin Spans Industrial Park. As I have suggested previously, why not build a bridge and road connecting Lukens and Twin Span industrial parks, and require truck traffic to enter both industrial parks using Cherry Lane into Lukens? This would remove most of the large truck traffic from Route 9 (Wilmington Road). These trucks literally vibrate my house on Wilmington Road.
8. All of the new bicycle trails are wonderful, however, it would be nice to see a bicycle rental shop somewhere along the trail.
9. Generally, pedestrian and bicycle traffic should be privileged over cars. There are increasing numbers of innovative ways to accomplish this, and I hope the City of New Castle will seek them out. There are also well-established ways (e.g., metered parking, residential parking permits or seasonal residential parking permits, and tickets for parking and traffic infractions) which the City has not yet utilized and should.
10. Status on building streets/roads for vacant lots off Buttonwood Avenue and New Castle Avenue.
11. I am adamantly opposed to a 68-car parking lot at the end of Chestnut Street/The Strand. The destruction and paving of this green space are a detriment to wildlife, residents, and visitors alike who seek peace and quiet in the greenspace this area provides. Not to mention the paving of an historic area, negating the preservation, celebration, and studying of this town's history!
12. Paul Moser suggested reaching out to Mike DuRoss to ask if he would be willing to do a quick (travel demand) analysis of the impact of the proposed Washington Street Sweep and Dutch Left intersection redesigns in New Castle. Do you have any thoughts, pro or con, on that?

I cc'd Scott Hoffman above because of the Delaware Bicycle Council's grant for South Street (Markell Trail extension). We are wondering whether the two 'gateway' intersection redesigns - if they actually happen - might suggest different approaches to South Street than we have all been talking about for the last 8 years.

We are wondering whether the Washington Street Sweep and the Dutch Left, together, might actually mean that vehicle traffic volumes on South Street become low enough that there is no longer a need to tie ourselves into knots trying to squeeze in separate infrastructure in the right-of-way? And perhaps we could pursue a "bicycle boulevard" strategy instead?

The most extensive system of bicycle boulevards in the U.S. is in Portland. The city's website:

<https://www.portlandoregon.gov/transportation/article/554110>

identifies 1,000 cars per day as the upper limit for a bicycle boulevard. (Although the program manager has told me personally that < 500 cars a day is a better number.)

13. During the presentations, Southbridge Neighborhood plan included charging stations but City of New Castle didn't. Since New Castle is a tourist destination and a recreation area for walking and different activities, is there any plan to include charging stations around the City of New Castle?

Thank you.

14. I'm not even sure what this is all about, but I have some thoughts on the congestion in Historic New Castle. Forgive me if this is complete already and I am late to the party. However, I noticed and have been stuck in the back up of traffic going through Historic New Castle and around the Ferry Cut Off where both areas turn into one lane. I believe the only solution is an overpass to hook up from the Twin Spans Business Park area of Route 9. This overpass should include an exit to Route 9 after Dobbinsville and at least an exit to hook up to Route 13 above and after the Quigley Boulevard complexes. It should pass over the Historical New Castle area and avoid destroying any wetlands and migration areas as we already have enough destruction of these areas.
Any Route 9 exit via this overpass should exit onto a two-lane highway up to at least Hamburg Road and have a light at that intersection for those vehicles that want to get to Route 13 via that way. Hamburg Road needs to expand and have two turning lanes also at the end to enter onto Route 13. These are my thoughts of the congestion that has struck the Historical New Castle district.

Thank you for allowing input. Have a great day.

15. I thought there were some exciting ideas in the workshop.

Heather, do you know if a traffic analysis of making South Street one way for vehicle traffic between 6th and 7th Streets is on Century's radar? (That work is being funded separately by the Delaware Bicycle Council.) I had been hoping that might have gotten a mention (if not a poll question) in Monday's presentation.

16. The bone-headed idea of putting a 68-space parking lot on the last along the river is the most egregious example of their failures. If they had done any research at all, they would have found that City doesn't own the land. If they had talked to us, we could have told them that residents would be up in arms if they thought City Council supported such a proposal. This has caused us problems already.

Who told them we were desperate for a parking lot? We have repeatedly told them that we recently went through a very painful process getting that 40-car lot that the Trustees built for us, and that parking is a very sensitive issue.

17. After some discussion w/ Councilman Smith and the President of Council Michael Platt, who viewed the presentation you sent, we wanted to pass on some observations we have concerning the project.

In general, it was surprising that there was not more awareness of the issue concerning overall traffic volume and congestion. As I mentioned at the meeting, we had asked DelDOT years ago about widening Route 273 to help with traffic, we received a new sidewalk and were told not to expect the road to be widened, and since then the issue has only gotten worse.

As I also pointed out, I was surprised that they suggested a new configuration at Washington St. and 273, considering that what is there is a relatively new configuration. Not saying what they are suggesting may not result in a positive change, but you would think they would look at why the change was made to begin with and if that change has been a positive one.

In general, we're not sure that narrowing anything with a bike path is going to reduce traffic congestion, and on Delaware St. we are concerned that the recommendation they made could create a safety problem.

We think the reduction in speed limits is a good idea, but defer back to the congestion issues.

This is not meant to be critical of the efforts and ideas presented, but to voice the concerns we have that at the end of the day, we will have the same issues we have now regarding truck traffic and overall congestion; we are just moving the proverbial chairs on the deck of the Titanic, if you will.

It would be great if we could actually consider road widening as part of this project, a true solution at 273 and 13 – I know DelDOT has said that "something" is in the works, but what and when? A way to re-direct truck traffic to 13 and around the City, and a way to do all of this in the time frame DelDOT has indicated they are considering for addressing the Dobbinsville issues.

Thanks for your time and hard work, we truly appreciate it, and thanks for listening.

Appendix F: Public Workshop 3 Summary Report

**City of New Castle Transportation Plan Update Study
Community Workshop #3
And
New Castle County Council Presentation
November 9, 2021
Workshop Summary Report**

The third Public Workshop for the City of New Castle Transportation Plan Update Study was held on November 9, 2021, prior to the City of New Castle Council Meeting. The Workshop included a live presentation and was followed by a Question-and-Answer period.

The following provides a summary of the Workshop and corresponding feedback.

The Workshop hosted over 70 attendees (43 attendees sign-in). The Workshop presentation included a review of the status of the study to date including public involvement opinion on Improvement Options Developed, as well as new surveys and poll questions regarding improvements and the study in general.

Specific topics covered during the Workshop encompassed Speed Limit Reductions, Strategic Projects, Improvements to Make Intuitive Travel Decisions (Cut-Through Traffic, Trucks, Bicycle Boulevards/Focus on Bicycle Movements, and Gateways), Bicycle/Pedestrian Improvements (Focused/Improved Bicycle Network and Primary & Recreational Bicycle Routes), and Parking/Roadway Modifications for Greater Circulation.

Sixteen polling questions were asked throughout the presentation to gather information and to encourage participation from the attendees. The following information was gathered through the polls:

City of New Castle Transportation Plan Update Study			
Community Workshop #3			
9-Nov-21			
Poll Results			
Workshop Summary Report			
On a scale from 1 to 5, how would you rate the draft concepts with 1 being most disliked and 5 being most favored?			
	Answer	Tally	Percentage
A. Reduce Speed Limits			
	1 (Strongly Oppose)	2	6%
	2	0	0%
	3	0	0%
	4	8	24%
	5 (Strongly Support)	23	70%
	Total:	33	100%
B. US 13 / SR 273 DelDOT Feasibility Study			
	1 (Strongly Oppose)	2	7%
	2	0	0%
	3	4	15%
	4	6	22%
	5 (Strongly Support)	15	56%
	Total:	27	100%
C. SR 141 / SR 273 - Concept 1 - Free Right Turn			
	1 (Strongly Oppose)	2	10%
	2	2	10%
	3	8	38%
	4	6	29%
	5 (Strongly Support)	3	14%
	Total:	21	100%
D. SR 141 / SR 273 - Concept 2 - Signal Controlled Right Turns			
	1 (Strongly Oppose)	4	17%
	2	4	17%
	3	7	30%
	4	6	26%
	5 (Strongly Support)	2	9%
	Total:	23	100%

	Answer	Tally	Percentage
E. SR 141 / SR 273 - Concept 3 - Protected Intersection			
	1 (Strongly Oppose)	3	14%
	2	0	0%
	3	10	48%
	4	2	10%
	5 (Strongly Support)	6	29%
	Total:	21	100%
F. Ferry Cutoff / Delaware - Concept 1 - Existing Condition w/ Path			
	1 (Strongly Oppose)	0	0%
	2	7	37%
	3	6	32%
	4	4	21%
	5 (Strongly Support)	2	11%
	Total:	19	100%
G. Ferry Cutoff / Delaware - Concept 2 - Gateway			
	1 (Strongly Oppose)	0	0%
	2	0	0%
	3	6	26%
	4	7	30%
	5 (Strongly Support)	10	43%
	Total:	23	100%
H. Ferry Cutoff / E. 6th - Concept 1 - Separated Roads			
	1 (Strongly Oppose)	7	28%
	2	2	8%
	3	4	16%
	4	4	16%
	5 (Strongly Support)	8	32%
	Total:	25	100%
I. Ferry Cutoff / E. 6th - Concept 2 - Dutch Left			
	1 (Strongly Oppose)	2	7%
	2	2	7%
	3	10	33%
	4	2	7%
	5 (Strongly Support)	14	47%
	Total:	30	100%

	Answer	Tally	Percentage
J. W. 7th / Washington - Concept 1 - Signing			
	1 (Strongly Oppose)	3	12%
	2	10	40%
	3	6	24%
	4	4	16%
	5 (Strongly Support)	2	8%
	Total:	25	100%
K. W. 7th / Washington - Concept 2 - Sweep			
	1 (Strongly Oppose)	0	0%
	2	3	12%
	3	2	8%
	4	8	31%
	5 (Strongly Support)	13	50%
	Total:	26	100%
L. Expand Nonmotorized Network			
	1 (Strongly Oppose)	0	0%
	2	2	7%
	3	6	21%
	4	8	29%
	5 (Strongly Support)	12	43%
	Total:	28	100%
M. Parking Expansion near 2nd and Chestnut			
	1 (Strongly Oppose)	14	45%
	2	4	13%
	3	4	13%
	4	4	13%
	5 (Strongly Support)	5	16%
	Total:	31	100%
N. Parking Expansion near 3rd and Chestnut			
	1 (Strongly Oppose)	6	19%
	2	4	13%
	3	4	13%
	4	6	19%
	5 (Strongly Support)	12	38%
	Total:	32	100%

	Answer	Tally	Percentage
O. Flood Mitigation			
	1 (Strongly Oppose)	0	0%
	2	0	0%
	3	4	12%
	4	4	12%
	5 (Strongly Support)	25	76%
	Total:	33	100%
P. Gateway Improvements			
	1 (Strongly Oppose)	0	0%
	2	2	6%
	3	0	0%
	4	10	32%
	5 (Strongly Support)	19	61%
	Total:	31	100%

Following the sixteen poll questions summarized above, attendees were asked to answer the following questions:

1. Which of the draft concepts do you like the best and why?

Number of times each option was selected:

- A. Reduce speed limits: 1
- B. US 13 / SR 273 DelDOT Feasibility Study: 1
- E. SR 141 / SR 273 - Concept 3 - Protected Intersection: 1
- F. Ferry Cutoff / Delaware - Concept 1 - Existing Condition w/ Path: 2
- G. Ferry Cutoff / Delaware - Concept 2 – Gateway: 3
- H. Ferry Cutoff / E. 6th - Concept 1 - Separated Roads: 2
- I. Ferry Cutoff / E. 6th - Concept 2 - Dutch Left: 4
- K. W. 7th / Washington - Concept 2 – Sweep: 3
- L. Expand Nonmotorized Network: 1
- N. Parking Expansion near 3rd and Chestnut: 1
- O. Flood Mitigation: 1
- P. Gateway Improvements: 1

Comments:

- Dutch left – can still access other sides of roads
- K. Sweep – help with flow of traffic
- Ferry Cutoff: on the fence about concepts presented. Most likely cheaper project will get done faster, can't be soon enough.
- Ferry Cutoff Gateway = beautiful.
- Ferry Cutoff and E. 6th Dutch Left – Changing the bus route would be a great help as several cars have suffered damage from the bus dodging trucks, parked and moving.
- I and K are the most important ideas in this draft plan.

- Ferry Cutoff / E. 6th Street (Both concepts). One note – either of these concepts can't be done unless the triangle area just north of this intersection is incorporated into it.
- Gateway – more welcoming
- A – reduce speed limits
- N – the ideal place for parking and for an attractive entrance to New Castle.
- O – Vital for the town. It has been woefully ignored for the past decades.
- Anything that stops traffic from coming through town unless they are trying to get into town.
- H. Separated Roads
- Nonmotorized network concept – this concept combined with Battery Park concepts will make New Castle an ideal biking and walking community.
- E, I, and K are all Dutch designs, and their cities are the best designed in the world (in my opinion). Also E. Especially when I bike to the farmers market, that intersection is scary to get across with all the tuning lanes.
- B. needs to be completed during peak beach and Christmas.
- Ferry Cutoff concept 2: Gateway addition. I feel this will help with traffic and give people better direction of where they want to go.

2. Which of the draft concepts do you like the least and why?

Number of times each option was selected:

- B. US 13 / SR 273 DelDOT Feasibility Study: 2
- H. Ferry Cutoff / E. 6th - Concept 1 - Separated Roads: 1
- I. Ferry Cutoff / E. 6th - Concept 2 - Dutch Left: 2
- M. Parking Expansion near 2nd and Chestnut: 4
- N. Parking Expansion near 3rd and Chestnut: 2

Comments:

- H. Separated Road – Don't like cutting areas off and forcing traffic further down
- B. DelDOT needs to do a count of cars going west on 273 when Route 9 marsh is flooded. The flooding isn't to be fixed until 2028.
- Parking at 2nd and Chestnut – over historical site.
- US/13 Study is questionable – a lot of traffic! And if this is corrected it will solve many of the issues
- The huge, proposed lot at 3rd and Chestnut – too big, out of place – just maximize existing lot.
- I haven't commented on a number because unfortunately I was unable to attend the earlier meetings and so am not sufficiently knowledgeable about them.
- I am opposed to M – parking at 2nd and Chestnut.
- There is nothing to stop people from coming in from Wilmington Road
- All good ideas so don't have any least favorite.
- M, N might mean more people coming in and parking. What will this do?
- Dutch left at Ferry Cutoff/E. 6th – does not address the traffic coming from opposite direction. Crossing over Ferry Cutoff is difficult due to oncoming traffic.

- I do not like the Dutch left. My concern is the heavy traffic going away from the city and people not able to turn. I also believe people will utilize the Chestnut St. and 3rd option.

3. What is the City of New Castle's single greatest transportation need?

- Traffic flow through 273
- Traffic congestion.
- Less traffic on the narrow one-way streets and better speed enforcement.
- The cut-through traffic is really destructive to the city's quality of life.
- Cut through traffic. Truck traffic.
- No one thing. Most proposed ideas are good.
- A bypass road around New Castle. Some years ago, I served on the Planning Commission. At that time the city was told that because Council gave up a possible bypass road when River Bend was first proposed that we had lost any chance of a bypass road for the town. I hope that is not true.
- Cut through for mc on E. 3rd Street
- Reduce speeding.
- Stop cut-through traffic in New Castle.
- Traffic monitoring – speed, etc.
- Keeping cars and people separate.
- Removing cut through traffic and large truck traffic. This is exacerbated by beach traffic and Amazon vehicles – seasonally. Amazon gets worse during holidays, December-time.
- 273 needs to be fixed.

4. Please provide us with any comments that will assist us in developing the City of New Castle Transportation Plan.

- Consider realignment of Rt 9 from the intersection of Rt 9 and Heron Cir. North-North West over the railroad to connect with 273 near the little league fields. This would help divert traffic/trucks around as opposed to through town.
- Consider extending the green light timing on 273 at Centerpoint Blvd.
- Can't please everyone.
- For the most part, the plans look good – especially the 6th/Ferry Cutoff and the Del St. entrance.
- You address reducing speed limit, how are you going to enforce it?
- Look at changing direction of E. 3rd, once we do this it would stop people from coming in Wilmington Rd to cut through.
- E. 6th St. is too narrow for tractor trailers. They drive in the middle of the road. 2 tractor trailers cannot pass going opposite directions with one coming to a complete stop. This is not efficient.
- I think any residential roads that are 2-way should be converted into one-way streets with car-protected bike paths.

- Speed limit reductions are not effective without enforcement. Adding a parking lot near 3rd and Chestnut will increase traffic on 3rd Street.
- 273 is a nightmare between school traffic, beach traffic, holiday traffic and Amazon.
- I also think DelDOT's feasibility studies are not an accurate representation of traffic or city needs during peak seasons.

5. Which of the following best describes you? (Check all that apply):

Number of times each option was selected:

- I LIVE in the City of New Castle: 17
- I WORK in the City of New Castle: 4
- I SHOP in the City of New Castle: 12
- I SPEND LEISURE TIME in the City of New Castle (visit parks, events, places of worship, etc.): 14

The presentation was recorded and the responses to the questions above can be found on that recording which is posted on the Dover/Kent County MPO Website at doverkentmpo.delaware.gov.

Following the Workshop, attendees were provided with contact information where they could reach out to the presenters, should they have any further comments or questions at a later date. The following messages were received:

1. My name is David Majewski, Jr. and I am the Fire Chief of Good Will Fire Company in the City of New Castle. I was in attendance yesterday evening for your presentation of WILMAPCO's Transportation Plan for New Castle. Overall, I think that the plan has a lot of merit. Parking, multiuse trails, and overall traffic flows are all topics that will help define the lifestyle of the residents in New Castle as well as what will make it a desirable destination for tourism and outdoor life. In full transparency, I have CC'ed Council President Michael Platt and Good Will Fire Company Captain Tim Moore, who was in attendance at last night's meeting as well, so that everyone is on the same page.

As I reviewed some of the proposed changes, I do have a few clarification questions as well as one major concern. The question I have is in reference to the "Washington Street Sweep: Concept 2." In this design, would traffic be able to turn left from Washington Street onto West Seventh Street and head towards South Street? If not, that is an area of concern to me. Reason being is that we have several members of our department whom live in the Washington Park Community, including myself. When those members are trying to get to the fire station, they will now be forced to travel down 9th Street and through Shawtown, an area that is much more residentially populated than West 7th Street. During this trip, they would encounter an additional stop sign as well as a narrow roadway on 9th Street between Gray Street and Young Street. Finally, they would be put on the wrong side of the intersection at 7th and South Streets where their passage onto South Street is not favored strictly due to the traffic flow. As a disclaimer, we are not a huge

“respond from home” department anymore. We rely heavily on in station staffing. However, we still do rely on “home response” for additional emergencies and additional apparatus responses.

My major concern, however, lies with the 6th Street and Ferry Cut Off intersection. I am happy to see that “Concept 1: Separated Roads” was not well received. In “Concept 2: Dutch Left”, I foresee multiple issues with this. While I understand that the intention is to reduce the amount of “cut through” traffic, this design cripples both traffic flow of residents and emergency vehicles into and out of the City on this essentially arterial road. Additionally, this design, coupled with the 7th and Washington Street designs, significantly constrict any ability to allow vehicles to exit the City with any ease. Add on any of the numerous major events (Separation Day, Day in Old New Castle, Art on the Green, Christmas in New Castle, etc.) and getting traffic to exit the City, or “flush” from the event will take a long time. For the Fire Company, 6th Street is our primary and truly only means of egress from Downtown New Castle to the rest of our service area to the North. In 2020 alone, 34% of our fire call volume and almost all of our in district working fires occurred in the communities North of the City. Medical incidents in the service area North of the City accounted for 47%, or over 800 responses. Additionally, 6th Street through Ferry Cut Off is the route needed to respond to, at minimum, approximately 25% of our mutual aid incidents. In summary, the Fire Company uses this route to respond to over 1,000 incidents annually.

While I heard and understood your comment last night that the roadway would be built to accommodate large vehicles, does this include emergency vehicles acting in an emergency fashion? Would the turn and merge areas truly be designed to allow our engine that is 30’ in length or our new tower ladder which is 42’ in length to navigate through this traffic pattern? The hard left off of East 6th Street and immediate hard right hand turn around stopped or yielding traffic will be difficult for apparatus and cause increased wear and tear on the suspensions of the vehicles. I know a huge goal of this project is to make it difficult for truck traffic to enter into the city itself. With this idea in mind, it will also hamper the emergency vehicle access and egress, ultimately causing a delayed response to emergencies.

Moving forward, a recommendation I would like to see explored is recreating “Concept 2: Dutch Left” with a merge from Northbound East 6th Street onto Northbound Ferry Cut Off. This would still allow for egress to the North while still calming traffic and diverting around the City. I would like to continue this conversation as needed and would be available to talk on the phone, Zoom, or meet in person to further discuss and work together towards a plan in which everyone wins.

2. Thanks for leading a well-paced presentation last night at the Senior Center. Rather than fill out the survey at the meeting, I opted for this route. I figured that would be ok since everything folks wrote down last night has to be digitized, anyway. I went over all the material with my wife afterward. 5 = Strongly Agree, as noted.

A. Reduce speed limits: 5

Note: Speeders like to speed no matter how little room they have to do so. My wife and I live at 416 Delaware Street. Although there are stop signs at the intersections of 5th and 4th, many folks step on it when traversing this one-block stretch that runs past our home. A lot of people live here, including many renters, and more than a few little kids. I fear a future tragedy. It's an issue in many parts of the city, most notably on E. 6th Street. I'd be more than happy to drive 10 mph here and on other city streets where a slower speed might be posted in the future. We do strongly support the use of moveable traffic cameras to catch speeders - and not just on Delaware Street and E. 6th Street. The City of New Castle Police Department could probably fund another officer or two with the proceeds. There is no excuse for any non-emergency vehicle to drive fast in this town.

B. US 13/SR 273 Feasibility: 5

C. 5. With a caveat: This would work better with a widened 273.

D. 3. Would support keeping the No Turn on Red sign at eastbound 173 at the turn for Washington Street rather than turning the end of 14th St. into a cul-de-sac. The new business there would be negatively affected. Don't see where No Turn on Red is a necessity at the other points.

E. 1.

Note: We're lived here about 10 years and have not had issues with the SR 141/SR273 intersection. Doubling the number of lanes from Ferry Cut-Off to near US 13 as well as, of course, this intersection, would certainly ease the backup issue and make for smoother traffic flow. We think this intersection is the least of our Areas of Concern/traffic problems.

F. 2 The path would be nice but pedestrian crossing remains an issue. Since there's no crossing on the west side of the RR tracks, that's a long way around for folks who live on 8th and 9th Streets, etc., to safely get to the single crossing leading from Delaware Street to the shopping center. The current crossing light buttons aren't very user-friendly. They'd be quite difficult for someone in a wheelchair to access.

G. 4 This would somewhat alleviate the issue for the folks mentioned in F. The Wilmington Road Multi- Modal Concept: 5.

H. 1

I. 5

Note: This intersection is a fatal head-on or "T-bone" collision waiting to happen. We like the Dutch Left. I do agree with the lady's concern expressed last night regarding emergency vehicle access. That is critical. Semi-tractor trailers should not be allowed to even attempt this turn - there should be signs that tell truckers that vehicles over a certain number of axles are prohibited (and would get stuck, if that's the plan). The through lanes are also prime locations for speed cameras, because folks will learn to fly through there even faster once the turns for E.

6th and Chestnut are regulated. We are also STRONGLY in favor of blocking left-hand turns southbound on Rt. 9 onto Wilmington Road. It would be much less convenient for 3rd Street residents, but I think the trade-off for blocking most through traffic would be worth having to come into town from the north via the Dutch Left. They do not deserve this sort of through-traffic abuse. Less drastically, signage saying TRUCKS PROHIBITED - although this would probably be abused once a Dutch Left was built. If the turn was eliminated, the current Wilmington Road access to Rt. 9 northbound should be maintained.

J. 1 Signing is pretty much useless in the face of human nature.

K. 2 How are NC residents supposed to keep going south on Rt. 9? It doesn't look as though we'd be able to do so. If that's the case, it just increases congestion on 273.

L. 5

M. 5

N. 5

O. 5 The flooding problem south of Dobbinsville will obviously continue to worsen.

P. 5

New Castle's greatest transportation need? The need to widen 273/Frenchtown Road from Delaware Street to just west of Traders Lane. Traffic counts don't take surges from I-95 backups into account. Whether due to volume, weather or traffic mishaps, they are a GIVEN - a way of life. Yes, all secondary roads become clogged when drivers try to find shortcuts. New Castle, however, is uniquely situated to suffer the consequences more than most, sitting between the Wilmington Road access to the Delaware Memorial Bridge and the 273 access to 95. I agree with the gentleman who spoke on this last night. Put aside the lockstep adherence to numbers and requirements, as well as the expectation that some sort of improvements to the US 13/273 intersection will alleviate these backups. Hope is not a strategy. Common sense says that you can't squeeze traffic on four lanes (on 273 coming east from 13, and Wilmington Road coming south into New Castle) into two without expecting backups. It's ridiculous, really. This is an obvious and urgent need.

You didn't ask, but the No. 2 issue is fixing the Ferry Cut-Off/6th intersection and ending semi-trailer truck through town.

Appendix G: Fire and Police Chiefs Meeting Report

**New Castle Transportation Study
Fire and Police Chiefs Meeting
November 18, 2021**

Attendees

David Majewski	City of New Castle Fire Chief
Rick McCabe	City of New Castle Police Chief
Bill Barthel	City of New Castle City Administrator
Michael Platt	City of New Castle City Councilperson
Cooper Bowers	DelDOT Planning
Tigist Zegeye	WILMAPCO Director
Heather Dunigan	WILMAPCO Senior Planner
Ted Foglietta	Century Engineering Project Manager

Items of Discussion

1. The primary topic of discussion focused on the Dutch Left concept at the Ferry Cut Off Street/E. 6th Street/Chestnut Street intersection.
2. Fire Chief Majewski had the following concerns at this intersection:
 - Turning radii on the internal “roundabout” of the Dutch Left looks tight. Concerned it will be difficult for fire trucks and other large emergency vehicles.
 - Will all accesses be operational under normal circumstances?
 - Fear having to wait in traffic at internal “roundabout.”
 - Concerned about wear and tear of fire vehicles, access at intersection, and time delays.
 - Over 50% of EMS calls are north of that intersection – about 3 -5 times per day (1,000 times per year).
 - Northbound egress is their primary issue – Into town is a secondary issue.
 - Would like to see a simulation with fire trucks using Dutch left.
 - Would like adjustment with signal timing – longer cycle and coordinated with Quigley Road signal.
3. Police Chief Rick McCabe had the following thoughts about the overall transportation plan:
 - Likes the Dutch Left concept.
 - Signal timing along entire corridor (SR 273, Delaware Street, Ferry Cut Off Street) needs to be adjusted.
 - Wants to ensure to keep southbound traffic moving (a no-stop condition) at the W. 7th Street/Washington Street intersection.
 - Volume is more of an issue on 3rd Street than speeding.
4. It was noted that these issues and concerns will be identified, and to the extent possible, addressed in the Final Recommendations Report.

5. One potential solution at the Dutch Left intersection that was brought forth by the study team was to provide service roads for emergency access through the infield of the intersection. however, the feasibility of this solution would need to be further evaluated as part of the design phase at this location.

Reported by:

Ted Foglietta, AICP
Century Engineering

Appendix H: Cost Estimates

Cost Estimate Summary

Contract No.

TBD

SR 273/SR 141 Concept 3 - Protected Intersection

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$858,240.00	
Right-of-Way		\$125,000.00	
Total Construction		\$2,998,585.53	

Contractor Items*	\$1,827,933.80		* From TrnsPort
Const. Contingency	\$182,793.38	@	10.00%
CE**	\$546,483.45	@	29.90%
Traffic	\$300,000.00		
Utilities	\$50,000.00		
Planting	\$15,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$3,286.50		
Asphalt Cost Adj	\$73,088.40		

Total Need: \$2,998,585.53

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$274,190.07
Construction engineering services	\$182,793.38
E&S Inspection services	\$73,500.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$15,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$858,240.00
Right-of-Way	\$125,000.00
Construction	\$1,842,933.80
Contingency	\$259,168.28
CE	\$546,483.45
Traffic	\$300,000.00
Utilities	\$50,000.00

SR 273/SR 141 Concept 3 - Protected Intersection

TBD

Conceptual Cost Estimate 4/13/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	310.00	\$10,850.00
209006	BORROW, TYPE F	CY	\$20.00	4.00	\$80.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	475.00	\$18,050.00
301001	GABC	CY	\$50.00	329.00	\$16,450.00
301002	GABC, PATCHING	CY	\$75.00	14.00	\$1,050.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	9354.00	\$1,403,100.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	7.00	\$1,225.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	11.00	\$1,155.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	18.00	\$1,800.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	272.00	\$9,792.00
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	SYIN	\$1.25	17837.00	\$22,296.25
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	884.00	\$2,210.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	168.00	\$840.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	2771.00	\$41,565.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	1064.00	\$1,170.40
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	10.00	\$4,750.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	6.00	\$900.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	1430.00	\$12,155.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	1430.00	\$1,430.00
	Subtotal				\$1,560,868.65
763000	Initial Expense (5%)	L.S.	\$78,043.43	1	\$78,043.43
763501	Construction Engineering (2.5%)	L.S.	\$39,021.72	1	\$39,021.72
	MOT	L.S.	\$150,000.00	1	\$150,000.00
	TOTAL BASE FOR PROJECT				\$1,827,933.80
	CONSTRUCTION CONTINGENCY	10%	\$182,793.38	1	\$182,793.38
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$300,000.00	1	\$300,000.00
	UTILITY	L.S.	\$50,000.00	1	\$50,000.00
	PLANTING	L.S.	\$15,000.00	1	\$15,000.00
	QA/QC for HMA	L.S.	\$3,286.50	1	\$3,286.50
	Asphalt Cost Adj	L.S.	\$73,088.40	1	\$73,088.40
	TOTAL CONSTRUCTION COST				\$2,452,102.08
	PROJECT DEVELOPMENT	L.S.	\$367,820.00	1	\$367,820.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$490,420.00	1	\$490,420.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$546,483.45	1	\$546,483.45
	ROW COSTS	L.S.	\$125,000.00	1	\$125,000.00
	TOTAL BASE CONSTRUCTION COST				\$3,981,825.53

Cost Estimate Summary

Contract No.

TBD

SR 9 (Delaware Street/Ferry Cut Off Street) Intersection Concept 2 - Gateway Addition

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$312,040.00	
Right-of-Way		\$30,000.00	
Total Construction		\$1,068,462.76	

Contractor Items*	\$475,624.19		* From TrnsPort
Const. Contingency	\$47,562.42	@	10.00%
CE**	\$176,906.05	@	37.19%
Traffic	\$300,000.00		
Utilities	\$50,000.00		
Planting	\$15,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$242.90		
Asphalt Cost Adj	\$3,127.20		

Total Need: \$1,068,462.76

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$71,343.63
Construction engineering services	\$47,562.42
E&S Inspection services	\$42,000.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$15,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$312,040.00
Right-of-Way	\$30,000.00
Construction	\$490,624.19
Contingency	\$50,932.52
CE	\$176,906.05
Traffic	\$300,000.00
Utilities	\$50,000.00

SR 9 (Delaware Street/Ferry Cut Off Street) Intersection Concept 2 - Gateway Addition

TBD

Conceptual Cost Estimate 4/13/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	916.00	\$32,060.00
209006	BORROW, TYPE F	CY	\$20.00	130.00	\$2,600.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	420.00	\$15,960.00
301001	GABC	CY	\$50.00	223.00	\$11,150.00
301002	GABC, PATCHING	CY	\$75.00	278.00	\$20,850.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	103.00	\$15,450.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	160.00	\$28,000.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	163.00	\$17,115.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	268.00	\$26,800.00
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	\$85.00	32.00	\$2,720.00
602003	DRAINAGE INLET, 34" X 24"	EACH	\$4,000.00	2.00	\$8,000.00
602010	DRAINAGE INLET, 72" X 48"	EACH	\$7,000.00	1.00	\$7,000.00
602060	JUNCTION BOX, 48" X 30"	EACH	\$4,000.00	2.00	\$8,000.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1191.00	\$42,876.00
705001	PCC SIDEWALK, 4"	SF	\$12.00	336.00	\$4,032.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	2006.00	\$24,072.00
705010	PEDESTRIAN CONNECTION, TYPE 5	SF	\$30.00	445.00	\$13,350.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	2460.00	\$6,150.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	193.00	\$965.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	1315.00	\$19,725.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	2702.00	\$2,972.20
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	9.00	\$4,275.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	8.00	\$1,200.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	578.00	\$4,913.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	578.00	\$578.00
N/A	SHARED-USE PATH AT RAILROAD CROSSING	LS		1.00	\$0.00
N/A					\$0.00
	Subtotal				\$330,813.20
763000	Initial Expense (5%)	L.S.	\$16,540.66	1	\$16,540.66
763501	Construction Engineering (2.5%)	L.S.	\$8,270.33	1	\$8,270.33
	MOT	L.S.	\$120,000.00	1	\$120,000.00
	TOTAL BASE FOR PROJECT				\$475,624.19
	CONSTRUCTION CONTINGENCY	10%	\$47,562.42	1	\$47,562.42
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$300,000.00	1	\$300,000.00
	UTILITY	L.S.	\$50,000.00	1	\$50,000.00
	PLANTING	L.S.	\$15,000.00	1	\$15,000.00
	QA/QC for HMA	L.S.	\$242.90	1	\$242.90
	Asphalt Cost Adj	L.S.	\$3,127.20	1	\$3,127.20
	TOTAL CONSTRUCTION COST				\$891,556.71
	PROJECT DEVELOPMENT	L.S.	\$133,730.00	1	\$133,730.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$178,310.00	1	\$178,310.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$176,906.05	1	\$176,906.05
	ROW COSTS	L.S.	\$30,000.00	1	\$30,000.00
	TOTAL BASE CONSTRUCTION COST				\$1,410,502.76

Cost Estimate Summary

Contract No.

TBD

SR 9 (Ferry Cut Off Street/6th Street)/Chestnut Street Intersection Concept 2 - Dutch Left

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$645,490.00	
Right-of-Way		\$250,000.00	
Total Construction		\$2,310,250.53	

Contractor Items*	\$1,568,045.72		* From TrnsPort
Const. Contingency	\$156,804.57	@	10.00%
CE**	\$466,011.43	@	29.72%
Traffic	\$30,000.00		
Utilities	\$60,000.00		
Planting	\$20,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$403.20		
Asphalt Cost Adj	\$8,985.60		

Total Need: \$2,310,250.53

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$235,206.86
Construction engineering services	\$156,804.57
E&S Inspection services	\$63,000.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$10,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$645,490.00
Right-of-Way	\$250,000.00
Construction	\$1,588,045.72
Contingency	\$166,193.37
CE	\$466,011.43
Traffic	\$30,000.00
Utilities	\$60,000.00

SR 9 (Ferry Cut Off Street/6th Street)/Chestnut Street Intersection Concept 2 - Dutch Left

TBD

Conceptual Cost Estimate 4/18/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	6495.00	\$227,325.00
202003	UNDERCUT EXCAVATION	CY	\$30.00	1309.00	\$39,270.00
209001	BORROW, TYPE A	CY	\$25.00	1309.00	\$32,725.00
209002	BORROW, TYPE B	CY	\$35.00	241.00	\$8,435.00
209006	BORROW, TYPE F	CY	\$20.00	723.00	\$14,460.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	427.00	\$16,226.00
301001	GABC	CY	\$50.00	2401.00	\$120,050.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	1152.00	\$172,800.00
401014	SUPERPAVE TYPE B, PG 64-22	TON	\$95.00	1567.00	\$148,865.00
401021	SUPERPAVE TYPE BCBC, PG 64-22	TON	\$90.00	2577.00	\$231,930.00
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	\$85.00	32.00	\$2,720.00
602003	DRAINAGE INLET, 34" X 24"	EACH	\$4,000.00	2.00	\$8,000.00
602060	JUNCTION BOX, 48" X 30"	EACH	\$4,000.00	2.00	\$8,000.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	5623.00	\$202,428.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	1815.00	\$4,537.50
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	25.00	\$125.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	1091.00	\$16,365.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	7823.00	\$8,605.30
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	9.00	\$4,275.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	5.00	\$750.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	4339.00	\$36,881.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	4339.00	\$4,339.00
N/A	STORMWATER PONDS	LS		2.00	\$0.00
	Subtotal				\$1,319,112.30
763000	Initial Expense (5%)	L.S.	\$65,955.62	1	\$65,955.62
763501	Construction Engineering (2.5%)	L.S.	\$32,977.81	1	\$32,977.81
	MOT	L.S.	\$150,000.00	1	\$150,000.00
	TOTAL BASE FOR PROJECT				\$1,568,045.72
	CONSTRUCTION CONTINGENCY	10%	\$156,804.57	1	\$156,804.57
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$30,000.00	1	\$30,000.00
	UTILITY	L.S.	\$60,000.00	1	\$60,000.00
	PLANTING	L.S.	\$20,000.00	1	\$20,000.00
	QA/QC for HMA	L.S.	\$403.20	1	\$403.20
	Asphalt Cost Adj	L.S.	\$8,985.60	1	\$8,985.60
	TOTAL CONSTRUCTION COST				\$1,844,239.09
	PROJECT DEVELOPMENT	L.S.	\$276,640.00	1	\$276,640.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$368,850.00	1	\$368,850.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$466,011.43	1	\$466,011.43
	ROW COSTS	L.S.	\$250,000.00	1	\$250,000.00
	TOTAL BASE CONSTRUCTION COST				\$3,205,740.53

Cost Estimate Summary

Contract No.

TBD

7th Street and Washington Street Concept 1 - Signing

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$564.60	
Right-of-Way		\$0.00	
Total Construction		\$5,516.80	

Contractor Items*	\$3,764.00		* From TrnsPort
Const. Contingency	\$376.40	@	10.00%
CE**	\$1,376.40	@	36.57%
Traffic	\$0.00		
Utilities	\$0.00		
Planting	\$0.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$0.00		
Asphalt Cost Adj	\$0.00		

Total Need: \$5,516.80

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$376.40
Construction engineering services	\$0.00
E&S Inspection services	\$0.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$0.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$564.60
Right-of-Way	\$0.00
Construction	\$5,516.80
Contingency	\$376.40
CE	\$1,376.40
Traffic	\$0.00
Utilities	\$0.00

7th Street and Washington Street Concept 1 - Signing					
TBD					
Conceptual Cost Estimate 4/28/2022					
ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
818001	SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE IV, RETROREFLECTIVE SHEETING	SF	\$20.00	18.00	\$360.00
819011	GALVANIZED TELESCOPING STEEL SIGN POSTS, 12' X 2", COMPLETE W/ BASEPOSTS AND HARDWARE	EACH	\$200.00	3.00	\$600.00
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	EACH	\$85.00	6.00	\$510.00
	Subtotal				\$1,470.00
763000	Initial Expense (5%)	L.S.	\$147.00	1	\$147.00
763501	Construction Engineering (2.5%)	L.S.	\$147.00	1	\$147.00
	MOT	L.S.	\$2,000.00	1	\$2,000.00
	TOTAL BASE FOR PROJECT				\$3,764.00
	CONSTRUCTION CONTINGENCY	10%	\$376.40	1	\$376.40
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$0.00	1	\$0.00
	UTILITY	L.S.	\$0.00	1	\$0.00
	PLANTING	L.S.	\$0.00	1	\$0.00
	QA/QC for HMA	L.S.	\$0.00	1	\$0.00
	Asphalt Cost Adj	L.S.	\$0.00	1	\$0.00
	TOTAL CONSTRUCTION COST				\$4,140.40
	PROJECT DEVELOPMENT	L.S.	\$0.00	1	\$0.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$1,240.00	1	\$1,240.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$1,376.40	1	\$1,376.40
	ROW COSTS	L.S.	\$0.00	1	\$0.00
	TOTAL BASE CONSTRUCTION COST				\$6,756.80

Cost Estimate Summary

Contract No.

TBD

7th Street & Washington Street Concept 2 - Street Sweep

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$204,410.00	
Right-of-Way		\$10,000.00	
Total Construction		\$599,437.81	

Contractor Items*	\$411,101.21		* From TrnsPort
Const. Contingency	\$41,110.12	@	10.00%
CE**	\$88,415.18	@	21.51%
Traffic	\$20,000.00		
Utilities	\$30,000.00		
Planting	\$5,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$307.30		
Asphalt Cost Adj	\$3,504.00		

Total Need: \$599,437.81

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$41,110.12
Construction engineering services	\$20,555.06
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$10,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$204,410.00
Right-of-Way	\$10,000.00
Construction	\$599,437.81
Contingency	\$44,921.42
CE	\$88,415.18
Traffic	\$20,000.00
Utilities	\$30,000.00

7th Street & Washington Street Concept 2 - Street Sweep

TBD

Conceptual Cost Estimate 5/10/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	1318.00	\$46,130.00
209006	BORROW, TYPE F	CY	\$20.00	279.00	\$5,580.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	121.00	\$4,598.00
301001	GABC	CY	\$50.00	228.00	\$11,400.00
301002	GABC, PATCHING	CY	\$75.00	307.00	\$23,025.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	90.00	\$13,500.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	157.00	\$27,475.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	239.00	\$25,095.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	392.00	\$39,200.00
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	\$85.00	32.00	\$2,720.00
602003	DRAINAGE INLET, 34" X 24"	EACH	\$4,000.00	2.00	\$8,000.00
602060	JUNCTION BOX, 48" X 30"	EACH	\$4,000.00	2.00	\$8,000.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	2329.00	\$83,844.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	964.00	\$11,568.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	153.00	\$382.50
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	10.00	\$50.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	271.00	\$4,065.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	1786.00	\$1,964.60
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	8.00	\$3,800.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	9.00	\$1,350.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	438.00	\$3,723.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	438.00	\$438.00
Subtotal					\$335,908.10
763000	Initial Expense (5%)	L.S.	\$16,795.41	1	\$16,795.41
763501	Construction Engineering (2.5%)	L.S.	\$8,397.70	1	\$8,397.70
	MOT	L.S.	\$50,000.00	1	\$50,000.00
TOTAL BASE FOR PROJECT					\$411,101.21
	CONSTRUCTION CONTINGENCY	10%	\$41,110.12	1	\$41,110.12
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$20,000.00	1	\$20,000.00
	UTILITY	L.S.	\$30,000.00	1	\$30,000.00
	PLANTING	L.S.	\$5,000.00	1	\$5,000.00
	QA/QC for HMA	L.S.	\$307.30	1	\$307.30
	Asphalt Cost Adj	L.S.	\$3,504.00	1	\$3,504.00
TOTAL CONSTRUCTION COST					\$511,022.63
	PROJECT DEVELOPMENT	L.S.	\$76,650.00	1	\$76,650.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$127,760.00	1	\$127,760.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$88,415.18	1	\$88,415.18
	ROW COSTS	L.S.	\$10,000.00	1	\$10,000.00
TOTAL BASE CONSTRUCTION COST					\$813,847.81

Cost Estimate Summary

Contract No.

TBD

East Basin Road Multimodal Concept

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$191,730.00	
Right-of-Way		\$40,000.00	
Total Construction		\$648,933.43	

Contractor Items*	\$317,610.50		* From TrnsPort
Const. Contingency	\$31,761.05	@	10.00%
CE**	\$101,152.63	@	31.85%
Traffic	\$10,000.00		
Utilities	\$180,000.00		9 Poles @ \$20,000
Planting	\$5,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$183.05		
Asphalt Cost Adj	\$3,226.20		

Total Need: \$648,933.43

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$47,641.58
Construction engineering services	\$31,761.05
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$5,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$191,730.00
Right-of-Way	\$40,000.00
Construction	\$322,610.50
Contingency	\$35,170.30
CE	\$101,152.63
Traffic	\$10,000.00
Utilities	\$180,000.00

East Basin Road Multimodal Concept

TBD

Conceptual Cost Estimate 4/13/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	452.00	\$15,820.00
209006	BORROW, TYPE F	CY	\$20.00	2.00	\$40.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	1047.00	\$39,786.00
301001	GABC	CY	\$50.00	449.00	\$22,450.00
301002	GABC, PATCHING	CY	\$75.00	113.00	\$8,475.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	296.00	\$44,400.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	66.00	\$11,550.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	61.00	\$6,405.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	100.00	\$10,000.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1578.00	\$56,808.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	3592.00	\$8,980.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	66.00	\$330.00
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	10.00	\$4,750.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	6.00	\$900.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	868.00	\$7,378.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	868.00	\$868.00
	Subtotal				\$248,940.00
763000	Initial Expense (5%)	L.S.	\$12,447.00	1	\$12,447.00
763501	Construction Engineering (2.5%)	L.S.	\$6,223.50	1	\$6,223.50
	MOT	L.S.	\$50,000.00	1	\$50,000.00
	TOTAL BASE FOR PROJECT				\$317,610.50
	CONSTRUCTION CONTINGENCY	10%	\$31,761.05	1	\$31,761.05
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$10,000.00	1	\$10,000.00
	UTILITY	L.S.	\$180,000.00	1	\$180,000.00
	PLANTING	L.S.	\$5,000.00	1	\$5,000.00
	QA/QC for HMA	L.S.	\$183.05	1	\$183.05
	Asphalt Cost Adj	L.S.	\$3,226.20	1	\$3,226.20
	TOTAL CONSTRUCTION COST				\$547,780.80
	PROJECT DEVELOPMENT	L.S.	\$82,170.00	1	\$82,170.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$109,560.00	1	\$109,560.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$101,152.63	1	\$101,152.63
	ROW COSTS	L.S.	\$40,000.00	1	\$40,000.00
	TOTAL BASE CONSTRUCTION COST				\$880,663.43

Cost Estimate Summary

Contract No.

TBD

SR 9 (Delaware Street/Ferry Cut Off Street) Multimodal Concept - Segment 1

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$161,870.00	
Right-of-Way		\$15,000.00	
Total Construction		\$583,697.57	

Contractor Items*	\$397,846.35		* From TrnsPort
Const. Contingency	\$39,784.64	@	10.00%
CE**	\$121,211.59	@	30.47%
Traffic	\$15,000.00		
Utilities	\$0.00		
Planting	\$5,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$242.20		
Asphalt Cost Adj	\$4,612.80		

Total Need: \$583,697.57

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$59,676.95
Construction engineering services	\$39,784.64
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$5,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$161,870.00
Right-of-Way	\$15,000.00
Construction	\$402,846.35
Contingency	\$44,639.64
CE	\$121,211.59
Traffic	\$15,000.00
Utilities	\$0.00

SR 9 (Delaware Street/Ferry Cut Off Street) Multimodal Concept - Segment 1

TBD

Conceptual Cost Estimate 4/13/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	878.00	\$30,730.00
209006	BORROW, TYPE F	CY	\$20.00	5.00	\$100.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	771.00	\$29,298.00
301001	GABC	CY	\$50.00	585.00	\$29,250.00
301002	GABC, PATCHING	CY	\$75.00	214.00	\$16,050.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	398.00	\$59,700.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	146.00	\$25,550.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	56.00	\$5,880.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	92.00	\$9,200.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1440.00	\$51,840.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	382.00	\$4,584.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	3926.00	\$9,815.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	108.00	\$540.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	1140.00	\$17,100.00
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	14.00	\$6,650.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	9.00	\$1,350.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	1678.00	\$14,263.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	1678.00	\$1,678.00
	Subtotal				\$323,578.00
763000	Initial Expense (5%)	L.S.	\$16,178.90	1	\$16,178.90
763501	Construction Engineering (2.5%)	L.S.	\$8,089.45	1	\$8,089.45
	MOT	L.S.	\$50,000.00	1	\$50,000.00
	TOTAL BASE FOR PROJECT				\$397,846.35
	CONSTRUCTION CONTINGENCY	10%	\$39,784.64	1	\$39,784.64
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$15,000.00	1	\$15,000.00
	UTILITY	L.S.	\$0.00	1	\$0.00
	PLANTING	L.S.	\$5,000.00	1	\$5,000.00
	QA/QC for HMA	L.S.	\$242.20	1	\$242.20
	Asphalt Cost Adj	L.S.	\$4,612.80	1	\$4,612.80
	TOTAL CONSTRUCTION COST				\$462,485.99
	PROJECT DEVELOPMENT	L.S.	\$69,370.00	1	\$69,370.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$92,500.00	1	\$92,500.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$121,211.59	1	\$121,211.59
	ROW COSTS	L.S.	\$15,000.00	1	\$15,000.00
	TOTAL BASE CONSTRUCTION COST				\$760,567.57

Cost Estimate Summary

Contract No.

TBD

SR 9 (Delaware Street/Ferry Cut Off Street) Multimodal Concept - Segments 2 & 3

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$119,050.00	
Right-of-Way		\$150,000.00	
Total Construction		\$426,078.09	

Contractor Items*	\$256,692.51		* From TrnsPort
Const. Contingency	\$25,669.25	@	10.00%
CE**	\$85,923.13	@	33.47%
Traffic	\$15,000.00		
Utilities	\$30,000.00		
Planting	\$10,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$169.40		
Asphalt Cost Adj	\$2,623.80		

Total Need: \$426,078.09

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$38,503.88
Construction engineering services	\$25,669.25
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$5,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$119,050.00
Right-of-Way	\$150,000.00
Construction	\$426,078.09
Contingency	\$28,462.45
CE	\$85,923.13
Traffic	\$15,000.00
Utilities	\$30,000.00

SR 9 (Delaware Street/Ferry Cut Off Street) Multimodal Concept - Segments 2 & 3

TBD

Conceptual Cost Estimate 4/13/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	610.00	\$21,350.00
301001	GABC	CY	\$50.00	274.00	\$13,700.00
301002	GABC, PATCHING	CY	\$75.00	150.00	\$11,250.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	179.00	\$26,850.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	88.00	\$15,400.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	82.00	\$8,610.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	135.00	\$13,500.00
602004	DRAINAGE INLET, 48" X 30"	EACH	\$4,500.00	1.00	\$4,500.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1007.00	\$36,252.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	2397.00	\$5,992.50
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	537.00	\$8,055.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	1321.00	\$1,453.10
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	11.00	\$5,225.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	1.00	\$150.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	1051.00	\$8,933.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	1051.00	\$1,051.00
	Subtotal				\$192,272.10
763000	Initial Expense (5%)	L.S.	\$9,613.61	1	\$9,613.61
763501	Construction Engineering (2.5%)	L.S.	\$4,806.80	1	\$4,806.80
	MOT	L.S.	\$50,000.00	1	\$50,000.00
	TOTAL BASE FOR PROJECT				\$256,692.51
	CONSTRUCTION CONTINGENCY	10%	\$25,669.25	1	\$25,669.25
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$15,000.00	1	\$15,000.00
	UTILITY	L.S.	\$30,000.00	1	\$30,000.00
	PLANTING	L.S.	\$10,000.00	1	\$10,000.00
	QA/QC for HMA	L.S.	\$169.40	1	\$169.40
	Asphalt Cost Adj	L.S.	\$2,623.80	1	\$2,623.80
	TOTAL CONSTRUCTION COST				\$340,154.96
	PROJECT DEVELOPMENT	L.S.	\$51,020.00	1	\$51,020.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$68,030.00	1	\$68,030.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$85,923.13	1	\$85,923.13
	ROW COSTS	L.S.	\$150,000.00	1	\$150,000.00
	TOTAL BASE CONSTRUCTION COST				\$695,128.09

Cost Estimate Summary

Contract No.

TBD

SR 9 (Delaware Street/Ferry Cut Off Street) Multimodal Concept - Segment 4

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$129,750.00	
Right-of-Way		\$90,000.00	
Total Construction		\$469,206.66	

Contractor Items*	\$307,000.90		* From TrnsPort
Const. Contingency	\$30,700.09	@	10.00%
CE**	\$98,500.22	@	32.08%
Traffic	\$15,000.00		
Utilities	\$10,000.00		
Planting	\$5,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$162.05		
Asphalt Cost Adj	\$2,843.40		

Total Need: \$469,206.66

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$46,050.13
Construction engineering services	\$30,700.09
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$5,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$129,750.00
Right-of-Way	\$90,000.00
Construction	\$312,000.90
Contingency	\$33,705.54
CE	\$98,500.22
Traffic	\$15,000.00
Utilities	\$10,000.00

SR 9 (Delaware Street/Ferry Cut Off Street) Multimodal Concept - Segment 4

TBD

Conceptual Cost Estimate 4/20/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	374.00	\$13,090.00
209006	BORROW, TYPE F	CY	\$20.00	2.00	\$40.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	918.00	\$34,884.00
301001	GABC	CY	\$50.00	401.00	\$20,050.00
301002	GABC, PATCHING	CY	\$75.00	102.00	\$7,650.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	258.00	\$38,700.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	60.00	\$10,500.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	55.00	\$5,775.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	90.00	\$9,000.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1431.00	\$51,516.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	377.00	\$4,524.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	1786.00	\$4,465.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	1477.00	\$7,385.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	607.00	\$9,105.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	1601.00	\$1,761.10
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	8.00	\$3,800.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	12.00	\$1,800.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	529.00	\$4,496.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	529.00	\$529.00
	Subtotal				\$239,070.60
763000	Initial Expense (5%)	L.S.	\$11,953.53	1	\$11,953.53
763501	Construction Engineering (2.5%)	L.S.	\$5,976.77	1	\$5,976.77
	MOT	L.S.	\$50,000.00	1	\$50,000.00
	TOTAL BASE FOR PROJECT				\$307,000.90
	CONSTRUCTION CONTINGENCY	10%	\$30,700.09	1	\$30,700.09
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$15,000.00	1	\$15,000.00
	UTILITY	L.S.	\$10,000.00	1	\$10,000.00
	PLANTING	L.S.	\$5,000.00	1	\$5,000.00
	QA/QC for HMA	L.S.	\$162.05	1	\$162.05
	Asphalt Cost Adj	L.S.	\$2,843.40	1	\$2,843.40
	TOTAL CONSTRUCTION COST				\$370,706.43
	PROJECT DEVELOPMENT	L.S.	\$55,610.00	1	\$55,610.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$74,140.00	1	\$74,140.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$98,500.22	1	\$98,500.22
	ROW COSTS	L.S.	\$90,000.00	1	\$90,000.00
	TOTAL BASE CONSTRUCTION COST				\$688,956.66

Cost Estimate Summary

Contract No.

TBD

Wilmington Road Multimodal Concept - Segment 1

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$172,170.00	
Right-of-Way		\$40,000.00	
Total Construction		\$632,992.12	

Contractor Items*	\$414,327.98		* From TrnsPort
Const. Contingency	\$41,432.80	@	10.00%
CE**	\$141,082.00	@	34.05%
Traffic	\$15,000.00		
Utilities	\$10,000.00		
Planting	\$5,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$283.15		
Asphalt Cost Adj	\$5,866.20		

Total Need: \$632,992.12

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$62,149.20
Construction engineering services	\$41,432.80
E&S Inspection services	\$31,500.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$5,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$172,170.00
Right-of-Way	\$40,000.00
Construction	\$419,327.98
Contingency	\$47,582.15
CE	\$141,082.00
Traffic	\$15,000.00
Utilities	\$10,000.00

Wilmington Road Multimodal Concept - Segment 1

TBD

Conceptual Cost Estimate 4/21/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	830.00	\$29,050.00
202003	UNDERCUT EXCAVATION	CY	\$30.00	543.00	\$16,290.00
209002	BORROW, TYPE B	CY	\$35.00	543.00	\$19,005.00
209006	BORROW, TYPE F	CY	\$20.00	50.00	\$1,000.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	178.00	\$6,764.00
301001	GABC	CY	\$50.00	536.00	\$26,800.00
301002	GABC, PATCHING	CY	\$75.00	66.00	\$4,950.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	684.00	\$102,600.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	41.00	\$7,175.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	32.00	\$3,360.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	52.00	\$5,200.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1877.00	\$67,572.00
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	SYIN	\$1.25	5835.00	\$7,293.75
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	1944.00	\$4,860.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	2.00	\$10.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	343.00	\$5,145.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	6020.00	\$6,622.00
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	12.00	\$5,700.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	3.00	\$450.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	954.00	\$8,109.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	954.00	\$954.00
	Subtotal				\$338,909.75
763000	Initial Expense (5%)	L.S.	\$16,945.49	1	\$16,945.49
763501	Construction Engineering (2.5%)	L.S.	\$8,472.74	1	\$8,472.74
	MOT	L.S.	\$50,000.00	1	\$50,000.00
	TOTAL BASE FOR PROJECT				\$414,327.98
	CONSTRUCTION CONTINGENCY	10%	\$41,432.80	1	\$41,432.80
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$15,000.00	1	\$15,000.00
	UTILITY	L.S.	\$10,000.00	1	\$10,000.00
	PLANTING	L.S.	\$5,000.00	1	\$5,000.00
	QA/QC for HMA	L.S.	\$283.15	1	\$283.15
	Asphalt Cost Adj	L.S.	\$5,866.20	1	\$5,866.20
	TOTAL CONSTRUCTION COST				\$491,910.13
	PROJECT DEVELOPMENT	L.S.	\$73,790.00	1	\$73,790.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$98,380.00	1	\$98,380.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$141,082.00	1	\$141,082.00
	ROW COSTS	L.S.	\$40,000.00	1	\$40,000.00
	TOTAL BASE CONSTRUCTION COST				\$845,162.12

Cost Estimate Summary

Contract No.

TBD

Wilmington Road Multimodal Concept - Segment 2

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$295,050.00	
Right-of-Way		\$100,000.00	
Total Construction		\$1,010,037.71	

Contractor Items*	\$521,101.67		* From TrnsPort
Const. Contingency	\$52,110.17	@	10.00%
CE**	\$167,025.42	@	32.05%
Traffic	\$250,000.00		
Utilities	\$120.00		
Planting	\$15,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$253.05		
Asphalt Cost Adj	\$4,427.40		

Total Need: \$1,010,037.71

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$78,165.25
Construction engineering services	\$52,110.17
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$20,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$295,050.00
Right-of-Way	\$100,000.00
Construction	\$536,101.67
Contingency	\$56,790.62
CE	\$167,025.42
Traffic	\$250,000.00
Utilities	\$120.00

Wilmington Road Multimodal Concept - Segment 2

TBD

Conceptual Cost Estimate 4/25/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	845.00	\$29,575.00
209006	BORROW, TYPE F	CY	\$20.00	37.00	\$740.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	1232.00	\$46,816.00
301001	GABC	CY	\$50.00	681.00	\$34,050.00
301002	GABC, PATCHING	CY	\$75.00	135.00	\$10,125.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	419.00	\$62,850.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	75.00	\$13,125.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	87.00	\$9,135.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	142.00	\$14,200.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	2434.00	\$87,624.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	2015.00	\$24,180.00
705010	PEDESTRIAN CONNECTION, TYPE 5	SF	\$30.00	291.00	\$8,730.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	3655.00	\$9,137.50
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	1807.00	\$9,035.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	1532.00	\$22,980.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	698.00	\$767.80
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	16.00	\$7,600.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	9.00	\$1,350.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	1364.00	\$11,594.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	1364.00	\$1,364.00
N/A	SHARED-USE PATH AT RAILROAD CROSSING	LS		1.00	\$0.00
	Subtotal				\$414,978.30
763000	Initial Expense (5%)	L.S.	\$20,748.92	1	\$20,748.92
763501	Construction Engineering (2.5%)	L.S.	\$10,374.46	1	\$10,374.46
	MOT	L.S.	\$75,000.00	1	\$75,000.00
	TOTAL BASE FOR PROJECT				\$521,101.67
	CONSTRUCTION CONTINGENCY	10%	\$52,110.17	1	\$52,110.17
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$250,000.00	1	\$250,000.00
	UTILITY	L.S.	\$120.00	1	\$120.00
	PLANTING	L.S.	\$15,000.00	1	\$15,000.00
	QA/QC for HMA	L.S.	\$253.05	1	\$253.05
	Asphalt Cost Adj	L.S.	\$4,427.40	1	\$4,427.40
	TOTAL CONSTRUCTION COST				\$843,012.29
	PROJECT DEVELOPMENT	L.S.	\$126,450.00	1	\$126,450.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$168,600.00	1	\$168,600.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$167,025.42	1	\$167,025.42
	ROW COSTS	L.S.	\$100,000.00	1	\$100,000.00
	TOTAL BASE CONSTRUCTION COST				\$1,405,087.71

Cost Estimate Summary

Contract No.

TBD

Wilmington Road Multimodal Concept - Segments 3, 4, & 5

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$467,670.00	
Right-of-Way		\$180,000.00	
Total Construction		\$1,681,532.09	

Contractor Items*	\$1,085,251.48		* From TrnsPort
Const. Contingency	\$108,525.15	@	10.00%
CE**	\$345,312.87	@	31.82%
Traffic	\$50,000.00		
Utilities	\$50,000.00		
Planting	\$30,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$670.60		
Asphalt Cost Adj	\$11,772.00		

Total Need: \$1,681,532.09

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$162,787.72
Construction engineering services	\$108,525.15
E&S Inspection services	\$63,000.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$10,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$467,670.00
Right-of-Way	\$180,000.00
Construction	\$1,115,251.48
Contingency	\$120,967.75
CE	\$345,312.87
Traffic	\$50,000.00
Utilities	\$50,000.00

Wilmington Road Multimodal Concept - Segments 3, 4, & 5

TBD

Conceptual Cost Estimate 4/27/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	2463.00	\$86,205.00
209006	BORROW, TYPE F	CY	\$20.00	11.00	\$220.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	1651.00	\$62,738.00
301001	GABC	CY	\$50.00	1566.00	\$78,300.00
301002	GABC, PATCHING	CY	\$75.00	503.00	\$37,725.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	1007.00	\$151,050.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	311.00	\$54,425.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	226.00	\$23,730.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	372.00	\$37,200.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	6019.00	\$216,684.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	493.00	\$5,916.00
705010	PEDESTRIAN CONNECTION, TYPE 5	SF	\$30.00	488.00	\$14,640.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	14407.00	\$36,017.50
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	311.00	\$1,555.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	3615.00	\$54,225.00
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	36.00	\$17,100.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	25.00	\$3,750.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	2635.00	\$22,397.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	2635.00	\$2,635.00
	Subtotal				\$916,513.00
763000	Initial Expense (5%)	L.S.	\$45,825.65	1	\$45,825.65
763501	Construction Engineering (2.5%)	L.S.	\$22,912.83	1	\$22,912.83
	MOT	L.S.	\$100,000.00	1	\$100,000.00
	TOTAL BASE FOR PROJECT				\$1,085,251.48
	CONSTRUCTION CONTINGENCY	10%	\$108,525.15	1	\$108,525.15
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$50,000.00	1	\$50,000.00
	UTILITY	L.S.	\$50,000.00	1	\$50,000.00
	PLANTING	L.S.	\$30,000.00	1	\$30,000.00
	QA/QC for HMA	L.S.	\$670.60	1	\$670.60
	Asphalt Cost Adj	L.S.	\$11,772.00	1	\$11,772.00
	TOTAL CONSTRUCTION COST				\$1,336,219.22
	PROJECT DEVELOPMENT	L.S.	\$200,430.00	1	\$200,430.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$267,240.00	1	\$267,240.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$345,312.87	1	\$345,312.87
	ROW COSTS	L.S.	\$180,000.00	1	\$180,000.00
	TOTAL BASE CONSTRUCTION COST				\$2,329,202.09

Cost Estimate Summary

Contract No.

TBD

Washington Street Multi-Use Path Concept

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$258,160.00	
Right-of-Way		\$20,000.00	
Total Construction		\$941,374.73	

Contractor Items*	\$583,188.84		* From TrnsPort
Const. Contingency	\$58,318.88	@	10.00%
CE**	\$203,797.21	@	34.95%
Traffic	\$15,000.00		
Utilities	\$60,000.00		
Planting	\$15,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$450.80		
Asphalt Cost Adj	\$5,619.00		

Total Need: \$941,374.73

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$87,478.33
Construction engineering services	\$58,318.88
E&S Inspection services	\$42,000.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$15,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$258,160.00
Right-of-Way	\$20,000.00
Construction	\$598,188.84
Contingency	\$64,388.68
CE	\$203,797.21
Traffic	\$15,000.00
Utilities	\$60,000.00

Washington Street Multi-Use Path Concept

TBD

Conceptual Cost Estimate 4/29/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	1570.00	\$54,950.00
209006	BORROW, TYPE F	CY	\$20.00	186.00	\$3,720.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	878.00	\$33,364.00
301001	GABC	CY	\$50.00	373.00	\$18,650.00
301002	GABC, PATCHING	CY	\$75.00	406.00	\$30,450.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	245.00	\$36,750.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	208.00	\$36,400.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	316.00	\$33,180.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	519.00	\$51,900.00
601033	REINFORCED CONCRETE PIPE, 18", CLASS IV	LF	\$85.00	128.00	\$10,880.00
602003	DRAINAGE INLET, 34" X 24"	EACH	\$4,000.00	8.00	\$32,000.00
602060	JUNCTION BOX, 48" X 30"	EACH	\$4,000.00	8.00	\$32,000.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1329.00	\$47,844.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	4406.00	\$11,015.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	204.00	\$1,020.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	568.00	\$8,520.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	1093.00	\$1,202.30
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	10.00	\$4,750.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	13.00	\$1,950.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	1283.00	\$10,905.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	1283.00	\$1,283.00
	Subtotal				\$472,733.80
763000	Initial Expense (5%)	L.S.	\$23,636.69	1	\$23,636.69
763501	Construction Engineering (2.5%)	L.S.	\$11,818.35	1	\$11,818.35
	MOT	L.S.	\$75,000.00	1	\$75,000.00
	TOTAL BASE FOR PROJECT				\$583,188.84
	CONSTRUCTION CONTINGENCY	10%	\$58,318.88	1	\$58,318.88
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$15,000.00	1	\$15,000.00
	UTILITY	L.S.	\$60,000.00	1	\$60,000.00
	PLANTING	L.S.	\$15,000.00	1	\$15,000.00
	QA/QC for HMA	L.S.	\$450.80	1	\$450.80
	Asphalt Cost Adj	L.S.	\$5,619.00	1	\$5,619.00
	TOTAL CONSTRUCTION COST				\$737,577.52
	PROJECT DEVELOPMENT	L.S.	\$110,640.00	1	\$110,640.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$147,520.00	1	\$147,520.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$203,797.21	1	\$203,797.21
	ROW COSTS	L.S.	\$20,000.00	1	\$20,000.00
	TOTAL BASE CONSTRUCTION COST				\$1,219,534.73

Cost Estimate Summary

Contract No.

TBD

Dobbinsville Multi-Use Path Concept

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$130,110.00	
Right-of-Way		\$135,000.00	
Total Construction		\$463,641.92	

Contractor Items*	\$280,561.16		* From TrnsPort
Const. Contingency	\$28,056.12	@	10.00%
CE**	\$91,890.29	@	32.75%
Traffic	\$10,000.00		
Utilities	\$30,000.00		
Planting	\$20,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$169.75		
Asphalt Cost Adj	\$2,964.60		

Total Need: \$463,641.92

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$42,084.17
Construction engineering services	\$28,056.12
E&S Inspection services	\$15,750.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$5,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$130,110.00
Right-of-Way	\$135,000.00
Construction	\$300,561.16
Contingency	\$31,190.47
CE	\$91,890.29
Traffic	\$10,000.00
Utilities	\$30,000.00

Dobbinsville Multi-Use Path Concept

TBD

Conceptual Cost Estimate 5/2/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	719.00	\$25,165.00
209006	BORROW, TYPE F	CY	\$20.00	8.00	\$160.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	126.00	\$4,788.00
301001	GABC	CY	\$50.00	432.00	\$21,600.00
301002	GABC, PATCHING	CY	\$75.00	84.00	\$6,300.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	285.00	\$42,750.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	46.00	\$8,050.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	58.00	\$6,090.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	96.00	\$9,600.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1509.00	\$54,324.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	3498.00	\$8,745.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	13.00	\$65.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	221.00	\$3,315.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	290.00	\$319.00
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	12.00	\$5,700.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	5.00	\$750.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	711.00	\$6,043.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	711.00	\$711.00
	Subtotal				\$214,475.50
763000	Initial Expense (5%)	L.S.	\$10,723.78	1	\$10,723.78
763501	Construction Engineering (2.5%)	L.S.	\$5,361.89	1	\$5,361.89
	MOT	L.S.	\$50,000.00	1	\$50,000.00
	TOTAL BASE FOR PROJECT				\$280,561.16
	CONSTRUCTION CONTINGENCY	10%	\$28,056.12	1	\$28,056.12
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$10,000.00	1	\$10,000.00
	UTILITY	L.S.	\$30,000.00	1	\$30,000.00
	PLANTING	L.S.	\$20,000.00	1	\$20,000.00
	QA/QC for HMA	L.S.	\$169.75	1	\$169.75
	Asphalt Cost Adj	L.S.	\$2,964.60	1	\$2,964.60
	TOTAL CONSTRUCTION COST				\$371,751.63
	PROJECT DEVELOPMENT	L.S.	\$55,760.00	1	\$55,760.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$74,350.00	1	\$74,350.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$91,890.29	1	\$91,890.29
	ROW COSTS	L.S.	\$135,000.00	1	\$135,000.00
	TOTAL BASE CONSTRUCTION COST				\$728,751.92

Cost Estimate Summary

Contract No.

TBD

South Street Multi-Use Path Concept

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$556,980.00	
Right-of-Way		\$30,000.00	
Total Construction		\$1,980,929.72	

Contractor Items*	\$1,346,219.54		* From TrnsPort
Const. Contingency	\$134,621.95	@	10.00%
CE**	\$389,554.88	@	28.94%
Traffic	\$20,000.00		
Utilities	\$60,000.00		
Planting	\$10,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$1,578.15		
Asphalt Cost Adj	\$18,955.20		

Total Need: \$1,980,929.72

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$201,932.93
Construction engineering services	\$134,621.95
E&S Inspection services	\$42,000.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$10,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$556,980.00
Right-of-Way	\$30,000.00
Construction	\$1,356,219.54
Contingency	\$155,155.30
CE	\$389,554.88
Traffic	\$20,000.00
Utilities	\$60,000.00

South Street Multi-Use Path Concept

TBD

Conceptual Cost Estimate 5/6/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	4548.00	\$159,180.00
209006	BORROW, TYPE F	CY	\$20.00	218.00	\$4,360.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	1560.00	\$59,280.00
301001	GABC	CY	\$50.00	1031.00	\$51,550.00
301002	GABC, PATCHING	CY	\$75.00	1487.00	\$111,525.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	692.00	\$103,800.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	760.00	\$133,000.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	1156.00	\$121,380.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	1901.00	\$190,100.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	3294.00	\$118,584.00
705001	PCC SIDEWALK, 4"	SF	\$12.00	2149.00	\$25,788.00
705002	PCC SIDEWALK, 6"	SF	\$12.00	95.00	\$1,140.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	8080.00	\$20,200.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	220.00	\$1,100.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	1963.00	\$29,445.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	5858.00	\$6,443.80
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	\$475.00	20.00	\$9,500.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	14.00	\$2,100.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	2532.00	\$21,522.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	2532.00	\$2,532.00
N/A	SHARED-USE PATH AT RAILROAD CROSSING	LS		1.00	\$0.00
	Subtotal				\$1,182,529.80
763000	Initial Expense (5%)	L.S.	\$59,126.49	1	\$59,126.49
763501	Construction Engineering (2.5%)	L.S.	\$29,563.25	1	\$29,563.25
	MOT	L.S.	\$75,000.00	1	\$75,000.00
	TOTAL BASE FOR PROJECT				\$1,346,219.54
	CONSTRUCTION CONTINGENCY	10%	\$134,621.95	1	\$134,621.95
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$20,000.00	1	\$20,000.00
	UTILITY	L.S.	\$60,000.00	1	\$60,000.00
	PLANTING	L.S.	\$10,000.00	1	\$10,000.00
	QA/QC for HMA	L.S.	\$1,578.15	1	\$1,578.15
	Asphalt Cost Adj	L.S.	\$18,955.20	1	\$18,955.20
	TOTAL CONSTRUCTION COST				\$1,591,374.84
	PROJECT DEVELOPMENT	L.S.	\$238,710.00	1	\$238,710.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$318,270.00	1	\$318,270.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$389,554.88	1	\$389,554.88
	ROW COSTS	L.S.	\$30,000.00	1	\$30,000.00
	TOTAL BASE CONSTRUCTION COST				\$2,567,909.72

Cost Estimate Summary

Contract No.

TBD

Cherry Street Sidewalk

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$26,210.00	
Right-of-Way		\$0.00	
Total Construction		\$90,334.92	

Contractor Items*	\$49,808.65		* From TrnsPort
Const. Contingency	\$4,980.86	@	10.00%
CE**	\$15,452.16	@	31.02%
Traffic	\$5,000.00		
Utilities	\$15,000.00		
Planting	\$0.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$8.05		
Asphalt Cost Adj	\$85.20		

Total Need: \$90,334.92

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$7,471.30
Construction engineering services	\$4,980.86
E&S Inspection services	\$0.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$2,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$26,210.00
Right-of-Way	\$0.00
Construction	\$90,334.92
Contingency	\$5,074.11
CE	\$15,452.16
Traffic	\$5,000.00
Utilities	\$15,000.00

Cherry Street Sidewalk					
TBD					
Conceptual Cost Estimate 5/3/2022					
ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	75.00	\$2,625.00
209006	BORROW, TYPE F	CY	\$20.00	28.00	\$560.00
301001	GABC	CY	\$50.00	18.00	\$900.00
301002	GABC, PATCHING	CY	\$75.00	9.00	\$675.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	5.00	\$875.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	7.00	\$735.00
401031	SUPERPAVE TYPE BCBC, PG 64-22, PATCHING	TON	\$100.00	11.00	\$1,100.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	173.00	\$6,228.00
705001	PCC SIDEWALK, 4"	SF	\$12.00	902.00	\$10,824.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	372.00	\$930.00
762001	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$5.00	7.00	\$35.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	50.00	\$750.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	313.00	\$344.30
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	3.00	\$450.00
N/A					\$0.00
	Subtotal				\$37,031.30
763000	Initial Expense (5%)	L.S.	\$1,851.57	1	\$1,851.57
763501	Construction Engineering (2.5%)	L.S.	\$925.78	1	\$925.78
	MOT	L.S.	\$10,000.00	1	\$10,000.00
	TOTAL BASE FOR PROJECT				\$49,808.65
	CONSTRUCTION CONTINGENCY	10%	\$4,980.86	1	\$4,980.86
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$5,000.00	1	\$5,000.00
	UTILITY	L.S.	\$15,000.00	1	\$15,000.00
	PLANTING	L.S.	\$0.00	1	\$0.00
	QA/QC for HMA	L.S.	\$8.05	1	\$8.05
	Asphalt Cost Adj	L.S.	\$85.20	1	\$85.20
	TOTAL CONSTRUCTION COST				\$74,882.76
	PROJECT DEVELOPMENT	L.S.	\$11,230.00	1	\$11,230.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$14,980.00	1	\$14,980.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$15,452.16	1	\$15,452.16
	ROW COSTS	L.S.	\$0.00	1	\$0.00
	TOTAL BASE CONSTRUCTION COST				\$116,544.92

Cost Estimate Summary

Contract No.

TBD

Wilmington Road Parking Lot

	Funded Amount (CTP):	Current Estimate	% Difference
Preliminary Engineering		\$163,800.00	
Right-of-Way		\$0.00	
Total Construction		\$620,923.35	

Contractor Items*	\$401,700.26		* From TrnsPort
Const. Contingency	\$40,170.03	@	10.00%
CE**	\$152,925.07	@	38.07%
Traffic	\$0.00		
Utilities	\$0.00		
Planting	\$20,000.00		
Env. Performance	\$0.00		
QA/QC for HMA	\$287.00		
Asphalt Cost Adj	\$5,841.00		

Total Need: \$620,923.35

** CE costs consist of the following:

Advertisement	\$1,000.00
Construction inspection services	\$60,255.04
Construction engineering services	\$40,170.03
E&S Inspection services	\$31,500.00
Pipe Video Inspection Services	\$0.00
Materials and Research Insp. Services	\$20,000.00
Misc. Construction Items	\$0.00

Primavera Estimate Data

Preliminary Engineering	\$163,800.00
Right-of-Way	\$0.00
Construction	\$421,700.26
Contingency	\$46,298.03
CE	\$152,925.07
Traffic	\$0.00
Utilities	\$0.00

Wilmington Road Parking Lot

TBD

Conceptual Cost Estimate 5/4/2022

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1.00	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$35.00	1802.00	\$63,070.00
211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	SY	\$38.00	16.00	\$608.00
301001	GABC	CY	\$50.00	1016.00	\$50,800.00
301002	GABC, PATCHING	CY	\$75.00	51.00	\$3,825.00
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	TON	\$150.00	689.00	\$103,350.00
401029	SUPERPAVE TYPE C, PG 64-22, PATCHING	TON	\$175.00	26.00	\$4,550.00
401030	SUPERPAVE TYPE B, PG 64-22, PATCHING	TON	\$105.00	40.00	\$4,200.00
401031	SUPERPAVE TYPE BCB, PG 64-22, PATCHING	TON	\$100.00	65.00	\$6,500.00
701021	I.PCC CURB AND GUTTER, TYPE 3-4	LF	\$30.00	1893.00	\$56,790.00
701022	I.PCC CURB AND GUTTER, TYPE 3-6	LF	\$36.00	1014.00	\$36,504.00
762000	SAW CUTTING, BITUMINOUS CONCRETE	LF	\$2.50	2138.00	\$5,345.00
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	\$15.00	125.00	\$1,875.00
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$1.10	2000.00	\$2,200.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	1.00	\$150.00
908004	TOPSOIL, 6" DEPTH	SY	\$8.50	2027.00	\$17,229.50
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	2027.00	\$2,027.00
	Subtotal				\$369,023.50
763000	Initial Expense (5%)	L.S.	\$18,451.18	1	\$18,451.18
763501	Construction Engineering (2.5%)	L.S.	\$9,225.59	1	\$9,225.59
	MOT	L.S.	\$5,000.00	1	\$5,000.00
	TOTAL BASE FOR PROJECT				\$401,700.26
	CONSTRUCTION CONTINGENCY	10%	\$40,170.03	1	\$40,170.03
	TRAFFIC (FROM TRAFFIC STATEMENT)	L.S.	\$0.00	1	\$0.00
	UTILITY	L.S.	\$0.00	1	\$0.00
	PLANTING	L.S.	\$20,000.00	1	\$20,000.00
	QA/QC for HMA	L.S.	\$287.00	1	\$287.00
	Asphalt Cost Adj	L.S.	\$5,841.00	1	\$5,841.00
	TOTAL CONSTRUCTION COST				\$467,998.29
	PROJECT DEVELOPMENT	L.S.	\$70,200.00	1	\$70,200.00
	PRELIMINARY ENGINEERING (DESIGN)	L.S.	\$93,600.00	1	\$93,600.00
	CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC)	L.S.	\$152,925.07	1	\$152,925.07
	ROW COSTS	L.S.	\$0.00	1	\$0.00
	TOTAL BASE CONSTRUCTION COST				\$784,723.35