Goal: People in Southern New Castle County can use a variety of transportation modes (car, public transportation, walking, and bicycling) to reach their destinations in a safe, comfortable, and convenient manner.

Where We Want To Be (Objectives)

Objective: Expanded public transportation
- Bus service on five routes is relatively infrequent and is focused toward Wilmington, Newark, and Dover
- DTC is currently planning for expanded service to Middletown and improved bus routes to better serve demand

Objective: Congestion management in Middletown
- SR 299, the primary east-west route through Middletown, is congested
- Road improvements to address existing problems and handle future traffic have been planned by WILMAPCO and DelDOT
- Developers in the Transportation Improvement Districts will contribute toward improvements in those areas

Objective: Better east-west connections (in Middletown and beyond)
- The road improvements mentioned above include specific east-west connections:
  - Widening of SR 299
  - Eastern extension of Lake Street
  - Eastern extension of Green Street
  - Western extension of Green Street

Objective: More/safer walking and biking paths/connections
- Pedestrian networks are disconnected and disjointed
- Limited trail segments and on-road bicycle facilities are disconnected
- A New Castle County bike plan is under development

Where We Are (Current Conditions)

Objective: Expanded public transportation
- Bus service on five routes is relatively infrequent and is focused toward Wilmington, Newark, and Dover
- DTC is currently planning for expanded service to Middletown and improved bus routes to better serve demand

Objective: Congestion management in Middletown
- SR 299, the primary east-west route through Middletown, is congested
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How To Get To Where We Want To Be (Preliminary Recommendations)

Objective: Expanded public transportation
- Support DART proposals to expand transit service, with continued focus on new and expanded service as more development occurs.
- To the extent the market allows, expand rideshare and alternative ridesharing network.
- Optimize traffic signal timing on a regular basis.
- Proceed with design and construction of road improvements identified in DelDOT’s Capital Transportation Program, WILMAPCO’s Regional Transportation Plan, and local Transportation Improvement Districts.
- Adopt New Castle County Bicycle Plan and implement proposed network.
- Increase number of miles of shared-use trails and pathways.
- Provide sidewalk connections to schools, libraries, retail establishments, and parks.
- Provide safe and comfortable bicycle routes within close proximity of those destinations.
Traffic Model Results

Daily Traffic Volume Changes

- Each of the three land use scenarios were analyzed through the DelDOT travel demand model. The maps below illustrate the average daily traffic produced in year 2050.
- Additional transportation modeling will be completed this winter to identify whether additional road improvements are needed to accommodate proposed development.
- Road improvements planned for 2050 were assumed to be built. See map of projects for details on assumptions.

Scenario 1: Business as Usual

Scenario 2: Village Centers & Hubs

Scenario 3: Town Infill

Legend 2050 AADT Scenario I
- > 80,000
- 40,000 - 80,000
- 20,000 - 40,000
- 10,000 - 20,000
- 4,000 - 10,000
- < 4,000

Source: DelDOT Peninsula Travel Demand Model

Legend 2050 AADT Scenario II
- > 80,000
- 40,000 - 80,000
- 20,000 - 40,000
- 10,000 - 20,000
- 4,000 - 10,000
- < 4,000

Source: DelDOT Peninsula Travel Demand Model

Legend 2050 AADT Scenario III
- > 80,000
- 40,000 - 80,000
- 20,000 - 40,000
- 10,000 - 20,000
- 4,000 - 10,000
- < 4,000

Source: DelDOT Peninsula Travel Demand Model

Current Conditions: 2015
Traffic Model Results

Link Level of Service Changes

- Each of the three land use scenarios were analyzed through the DelDOT travel demand model. The maps below illustrate the peak period (AM and PM) road segment level of service produced in year 2050.
- Each scenario model included the assumed number and location of future households and jobs for that scenario.
- Road improvements planned for 2050 were assumed to be built. See map of projects for details on assumptions.

**Level of Service Thresholds**

- LOS D: 81-90% Capacity
- LOS E: 90-99% Capacity
- LOS F: Over 100% Capacity

**Current Conditions: 2015**

**Scenario 1: Business as Usual**

**2050 Peak Period Level of Service**

**Scenario 2: Village Centers & Hubs**

**2050 Peak Period Level of Service**

**Scenario 3: Town Infill**

**2050 Peak Period Level of Service**
Using a methodology developed by the Delaware Valley Regional Planning Commission (DVRPC), we can assess the appropriateness of various modes and intensities of transit service on a regional scale. The analysis measures the combined impacts of population, employment and zero-car household densities by Traffic Analysis Zone (TAZ) to determine the type(s) of transit that could potentially be supported.

Each of the three land use scenarios were analyzed using the transit score methodology. The chart to the right breaks down the color designations.

### Portable Transit Score Calculation

\[
0.41 \times \text{Population per acre} + 0.09 \times \text{Jobs per acre} + 0.74 \times \text{Zero car households per acre}
\]

The DVRPC Transit Score Tool was then classified into five score category ranges:

- **High**: > 7.5
- **Medium-High**: 2.51 – 7.5
- **Medium**: 1.01 – 2.5
- **Marginal**: 0.6 – 1.0
- **Low**: < 0.6

### Appropriateness of Transit Service Intensity/Investment by Score Category

<table>
<thead>
<tr>
<th>Transit modal investment</th>
<th>High Suitability</th>
<th>Medium-High Suitability</th>
<th>Medium Suitability</th>
<th>Marginal Suitability</th>
<th>Low Suitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Urban Rail</td>
<td>A</td>
<td>N</td>
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<td>N</td>
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<tr>
<td>Light Rail Transit (LRT)</td>
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<td>A</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Commuter Rail</td>
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<td>A</td>
<td>C</td>
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<tr>
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<tr>
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<td>N</td>
<td>N</td>
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<tr>
<td>Bus Priority Treatment</td>
<td>A</td>
<td>A</td>
<td>C</td>
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<tr>
<td>Fixed Route/Line Haul Bus Service</td>
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<td>A</td>
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<tr>
<td>Express Bus</td>
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<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>Local Circulator Bus/ Shuttle/Paratransit</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

A = Appropriate
C = May be appropriate depending on conditions
N = Not Appropriate

### Scenario 1: Business as Usual

### Scenario 2: Village Centers & Hubs

### Scenario 3: Town Infill

Current Conditions: 2015

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**Transit Suitability**

Using a methodology developed by the Delaware Valley Regional Planning Commission (DVRPC), we can assess the appropriateness of various modes and intensities of transit service on a regional scale. The analysis measures the combined impacts of population, employment and zero-car household densities by Traffic Analysis Zone (TAZ) to determine the type(s) of transit that could potentially be supported.

Each of the three land use scenarios were analyzed using the transit score methodology. The chart to the right breaks down the color designations.
DART Service Connecting Middletown with New Castle County and Kent County Communities

DART Routes Serving The Greater Middletown Area

43 – Odessa Park & Ride to Middletown via DE 299
45 – Odessa Park & Ride to Downtown Wilmington via DE 1
47 – Middletown to Downtown Wilmington via US 301 & US 13
301 – Dover to Downtown Wilmington via Odessa Park & Ride & DE 1
302 – Dover to Newark Train Station via Middletown & DE 896

DART’s Vision of The Future for The Greater Middletown Area

• Create Additional Routes Increasing Coverage for Middletown
• Serve More Residents and Businesses
• Improve Frequency of Service
• Expand Hours of Service (Span of Service)
• Schedule Saturday Service
• Offer Better Connectivity with Other DART Routes, along with Amtrak and SEPTA Train Services

DART Future Route Concepts

43 – Split into Two Separate Routes to Provide Better Coverage to Residential and Commercial Developments
45 and 301 – Create a New Service Initiative That Would Offer All-Day Express Service from Kent County to Wilmington; Improve Local Service from Wilmington to Dover
46 – Extend to Middletown from Glasgow
47 – Provide Additional Service to/from Middletown and Future North Middletown Park & Ride
302 – Shorten Route and Schedule More Service between Middletown and Dover

On 10/30, meet DART staff and see what DART is proposing for improving public transit in the greater Middletown area.
Appoquinimink Community Library
651 North Broad Street
5:00 to 7:00 PM.

Service Effective 12/15/2019
SNCC Bike/Ped Network and Initial Recommendations from the Draft NCC Bike Plan*

Legend

Existing Non-Motorized Facilities (Sidewalks, Crosswalks, Footpaths)

Current County / Local Recommendations from the DRAFT NCC Bike Plan*

Municipalities

* Recommendations shown are from the NCC Bike Plan, currently being developed by WILMAPCO. For more information, visit www.wilmapco.org/bikencc