

**New Castle County Transit Origin-Destination Study  
Key Findings through February 24, 2014**

The State Smart Transportation Initiative (SSTI) report titled *Reimagining a Legacy Transit System: Lessons from Wilmington, Delaware* recommended that DTC and DelDOT improve the quality of transit data by completing an origin-destination study. On-board surveys were completed from October 15 through November 22, 2013. 5,198 surveys were distributed and 4,490 completed surveys were returned, for an 86% return rate. All of the surveys were geocoded; complete origin-destination pairs were identified for 2,394 surveys, or 53% of all returned surveys. Key findings to date include:

**Ridership Growth**

- DART First State annual statewide unlinked passenger trips have grown from 8.3 million trips in FY 2007 to 10.1 million trips in FY 13. The growth in statewide unlinked passenger trips has averaged 3.45% per year over that period. During that period New Castle County unlinked passenger trips have grown by more than 750,000 annual trips, or 2.97% average annual growth. Kent and Sussex County unlinked passenger trips have grown by 216,000 annual unlinked passenger trips, or 6.68% average annual growth.
- Routes were grouped by corridor as shown below. From FY 10 through FY 13 the ridership in the urban core is growing and ridership in the suburban areas is growing at a faster rate than the system as a whole.

Corridor	2013 Weekday Riders	Average Annual Change	Corridor	2013 Weekday Riders	Average Annual Change
Philadelphia Pike	7,476	2.7%	Market, Dupont, New Castle	5,718	2.7%
Concord Pike	2,257	0.9%	Christiana Mall / Newark	3,514	4.6%
PA Ave & Lancaster Pike	2,846	-0.8%	Mid County	2,071	3.6%
Kirkwood Highway	3,699	2.3%	Downstate	949	6.7%
Maryland Ave	3,701	5.1%	Total	32,232	2.8%

Source: DART First State June 2013 Operating Data

- The chart below shows ridership growth from FY 07 to FY 11. During that period, DART First State ridership grew at a much faster rate than most other area transit systems.

System	Annual Change	System	Annual Change
Port Authority of Allegheny County	-2.0%	WMATA	-0.3%
Richmond, VA	-1.9%	SEPTA	0.7%
Maryland Transit Administration	-0.8%	Allentown, PA	1.7%
New Jersey Transit	-0.8%	<b>DART First State</b>	<b>3.2%</b>
Rockville, MD	-0.4%	Harrisburg, PA	3.3%

Source: National Transit Database 2011 Time Series

**Trip Type and Mode of Access**

- Over 47% of riders commute to or from their workplace.
- Over 18% of riders use DART First State to travel to and from other destinations.
- Roughly 12% of riders use DART First State as their transportation to or from school.
- Walking is the primary mode of access to the transit system, with approximately 86% of all users walking to and from the bus.

## Transfers

- 41% of all respondents transfer routes to reach their final destination.
- Of the total average weekday unlinked passenger trips, an estimated 29.2% transfer routes.

## Subarea Analysis

A subarea travel analysis generally using New Castle County planning areas and the 2,394 geocoded surveys was completed. Of these surveys:

- 48.5% had origins within the City of Wilmington and 51.5% had origins in other subareas.
- Of the Wilmington-based trips, 46% traveled to destinations within the City of Wilmington, while 54% traveled to destinations outside the City.
- Of the trips from all other subareas, 50% of the trips traveled to the City of Wilmington, 39% of the trips traveled to other subareas, and 11% of trips began and ended in the same subarea.

## Rider Comments

Riders were asked for general comments about the transit service.

- 74% offered no comment.
- 16% suggested service improvements such as more frequent service on some routes.
- 5% identified service problems.
- 3% expressed other specific complaints.

## Observations

- Residents of the City of Wilmington are heavy users of the transit service. On a per capita basis City of Wilmington residents are estimated to make 60 transit trips per person annually while the residents of the remainder of New Castle County make an estimated 10 transit trips per person annually. (This calculation is made by assuming that the trips with a Wilmington origin (48.5%) are made by Wilmington residents and the trips with an origin outside the City of Wilmington (51.5%) are made by New Castle County residents.)
- The DART First State transit service is a robust network that enables 59 percent of customers to reach their destinations without transferring. Convenient transfers enable 41 percent of the customers to reach additional destinations and opportunities.

## Next Steps

- Through an evaluation of latent demand, the study team is evaluating areas where new transit service may attract additional riders.
- To reduce congestion at Rodney Square, the study team is exploring changes in the DART First State service design that may reduce the need for transfers, the amount of bus traffic in the downtown area, and the passenger loads at Rodney Square. These strategies may include:
  - Connecting routes to provide crosstown services
  - Establishing additional suburban transfer locations that could reduce the need for some downtown transfers
  - Developing a split service pattern where commuter routes use different downtown streets than core bus services
  - Establishing a timed transfer at the proposed Christiana Mall Transit Center with 15 minute peak period frequency (or greater) to and from Downtown Wilmington
  - Using alternative downtown streets for select core routes to improve access to some destinations while reducing the amount of bus traffic on other downtown streets