

1995 - 2010 TRAVEL TRENDS IN THE DELAWARE VALLEY REGION



OCTOBER 2013

DELAWARE VALLEY
dvrpc
REGIONAL
PLANNING COMMISSION





The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation,

promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region — leading the way to a better future.



The symbol in our logo is adapted from the official DVRPC seal and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the

diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

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- Appendix A. Complete Screenline and Cordon Counts A-1**

Executive Summary

The former Penn Jersey Transportation Study conducted the first large-scale travel data collection effort in the Delaware Valley in 1960. Since 1965, the year the Delaware Valley Regional Planning Commission (DVRPC) was established, DVRPC has continued to monitor and analyze the travel patterns of the nine-county region. This report presents the results of the latest travel survey, conducted in 2010, and assesses highway travel trends by comparing the 2010 volumes with those collected in 1995, 2000, and 2005. Traffic counts were gathered by DVRPC along two cordon lines, seven screenlines, and seven expressways within DVRPC's nine-county boundaries, at a total of 482 stations.

The 2010 data was strongly influenced by the "Great Recession." From December 2007 to June 2009, the United States experienced the most severe economic downturn since the Great Depression (August 1929 to March 1933). Although the DVRPC region was not as hard hit as other parts of the country, it nevertheless experienced a sharp increase in unemployment. The unemployment rate in the Philadelphia-Camden-Wilmington Metropolitan Statistical Area (MSA) was 4.1 percent just before the start of the recession in November 2007, and rose to 9.4 percent in January 2010.¹ The recession also resulted in sharp declines in private and public spending on travel. For example, overnight business trips to Philadelphia decreased by 10 percent from 2007 to 2009,² and funding of public transportation from state sales tax revenue declined by 7.1 percent between August 2008 and September 2009.³

The transportation data collected in 2010 reflect the economic downturn, with widespread decreases in traffic volumes between 2005 and 2010. Every screenline and cordon shows a decrease in highway travel. However, there are a few exceptions, where specific roads or parts of the DVRPC region bucked the trend. For example, the New Jersey portion of the Inner Cordon experienced an increase of 1.6 percent, specifically, the part of the Inner Cordon in Mercer (+6.4 percent) and Camden (+5.8 percent) counties. Both of these counties had several roads that experienced an increase of greater than 20 percent between 2005 and 2010, most notably CR 611 (Scotch Road), CR 672 (South Broad Street), CR 608 (Lawrence Street), NJ 29, CR 704 (Chews Landing-Williamstown Road), and CR 561 (Tansboro Road).

This is the first version of the Travel Trends report to present and analyze data on the vehicle classification and travel speeds of highways, as well as public transit ridership. The vehicle class and speed data was collected at 150 of the traffic monitoring stations. The vast majority of sampled roads are classified as arterials and collectors. DVRPC's traffic counting equipment is not able to accurately classify vehicles on roads with more than two lanes by direction. The data shows that the overwhelming majority (94 percent) of vehicles using the sampled roads are cars, buses, light trucks, and motorcycles. By and large, heavy trucks only comprise a small percentage (six percent) of the traffic on the sampled regional roadways.

In terms of speeds, over the course of an entire weekday (12:00 am to 12:00 am), average speeds across all sampled roads vary between 41.2 and 46.2 miles per hour. During the AM peak hour, the average speed over all sampled roads is 42.8 miles per hour, and during the PM peak hour, it is 41.2 miles per hour. However, the data at any given time on any given day for any specific road may deviate considerably from these regional averages, due to the design of the road and its posted speed; local travel patterns; and weather, accidents, or construction activity.

¹ Bureau of Labor Statistics, Unemployment in the Philadelphia Area by County. <http://www.bls.gov/ro3/urphl.htm>

² Greater Philadelphia Tourism Marketing Corporation. Domestic Visits to Greater Philadelphia by Market Segment. <http://c526532.r32.cf0.rackcdn.com/2011-Visitor-Volume.pdf>

³ Southeastern Pennsylvania Transportation Authority (SEPTA). Fiscal Year 2010 Operating Budget. September 22, 2009.

Public transit ridership data was collected for all major transit routes crossing screenlines and cordons. Although this is the first time that public transit ridership data has been included in this report, data in other comparable documents⁴ indicates that despite the recent decreases in funding levels, public transit ridership in the DVRPC region increased between 2005 and 2010. In particular, SEPTA's regional rail and AMTRAK's Northeast Corridor route⁵ have shown strong growth.

⁴ DVRPC. *1980 – 2010 Travel Trends in the Philadelphia Central Business District*. September 2013.

⁵ USA Today. *AMTRAK Ridership Hits Record Levels*. April 9, 2013.

I. Introduction

The 2010 update of the Travel Trends report presents the latest survey data on travel activity in the Delaware Valley region. **Figure 1** shows the major roadways that cross the two cordon lines (inner and outer), seven screenlines, and seven interstate highways within DVRPC's nine-county boundaries, which include Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania, and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. Three Berks County municipalities were added to the region in 1990 for transportation planning purposes as a consequence of the expansion of the Pottstown Urbanized Area.

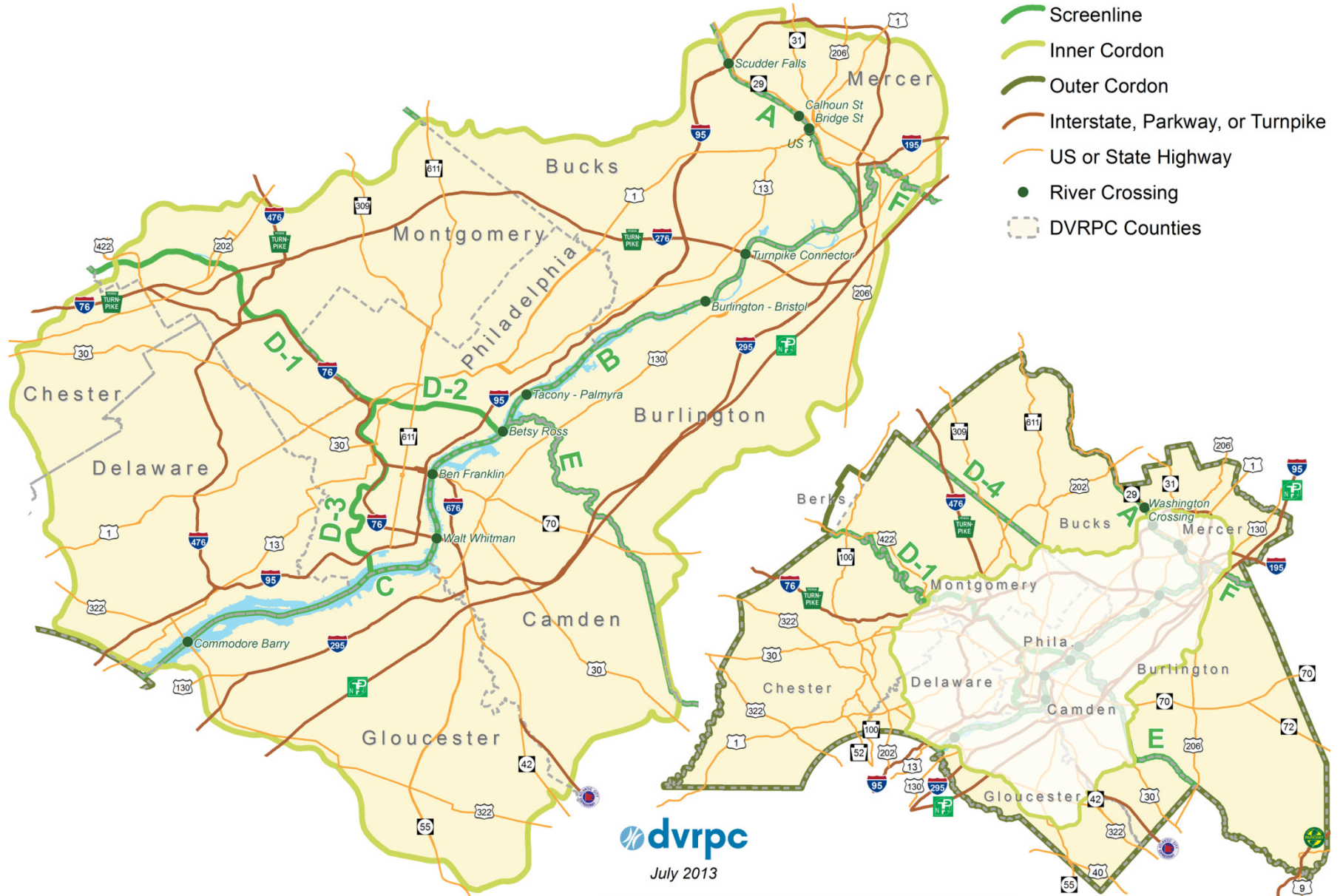
Beginning in 2010, the survey was expanded to include additional data on highway travel (vehicle classification and travel speeds), as well as data on other modes of transportation (public transit ridership). The transit data includes the name of the transit provider, the route number and name, and the daily ridership crossing each of the screenlines and cordons. Daily ridership is based on manual counts of passenger boardings and alightings at every station along each route. **Figure 2** and **Figure 3** show the rail and bus routes, respectively, that cross the screenlines and cordons.

The vehicle classification data breaks down the type of vehicles (cars, buses, light trucks, and heavy trucks) using the roads. The speed data consists of the average speed of all vehicles, by direction and time of day, for each sampled road for an entire weekday. It should be noted that the vehicle class and speed sample data does not include any interstates or any of the bridges crossing the Delaware River. Nevertheless, this data does provide valuable information and insight into the way in which regional roads are being used.

This report also includes a section that looks at regional and national travel trends. In light of the recent economic downturn, it compares how the DVRPC region has fared compared to the rest of the nation and puts the events of the last five years in context. Finally, the complete traffic count data set is included in **Appendix A**.

In terms of data collection, most of the roadway traffic data (traffic counts, vehicle class, and speed data) were collected by DVRPC field personnel, using pneumatic tubes. A traffic counting work program was prepared in 2009, and actual counts were taken throughout 2010. A few counts were repeated in 2011 to compensate for counting equipment malfunction and vandalism, or to offset the impacts of improvement projects underway at surveying time. In total, approximately 500 counts were gathered at selected stations. In general, DVRPC counting equipment was set up at each location for a minimum of 48 continuous hours of a typical weekday (Monday through Friday) and checked for satisfactory performance. These raw counts were then factored to account for truck traffic and seasonal variation, and to convert weekday traffic volumes to Annual Average Daily Traffic (AADT). Unless otherwise noted, all traffic volumes in this report represent AADT volumes.

Figure 1:
Major Roads crossing Screenlines and Cordons












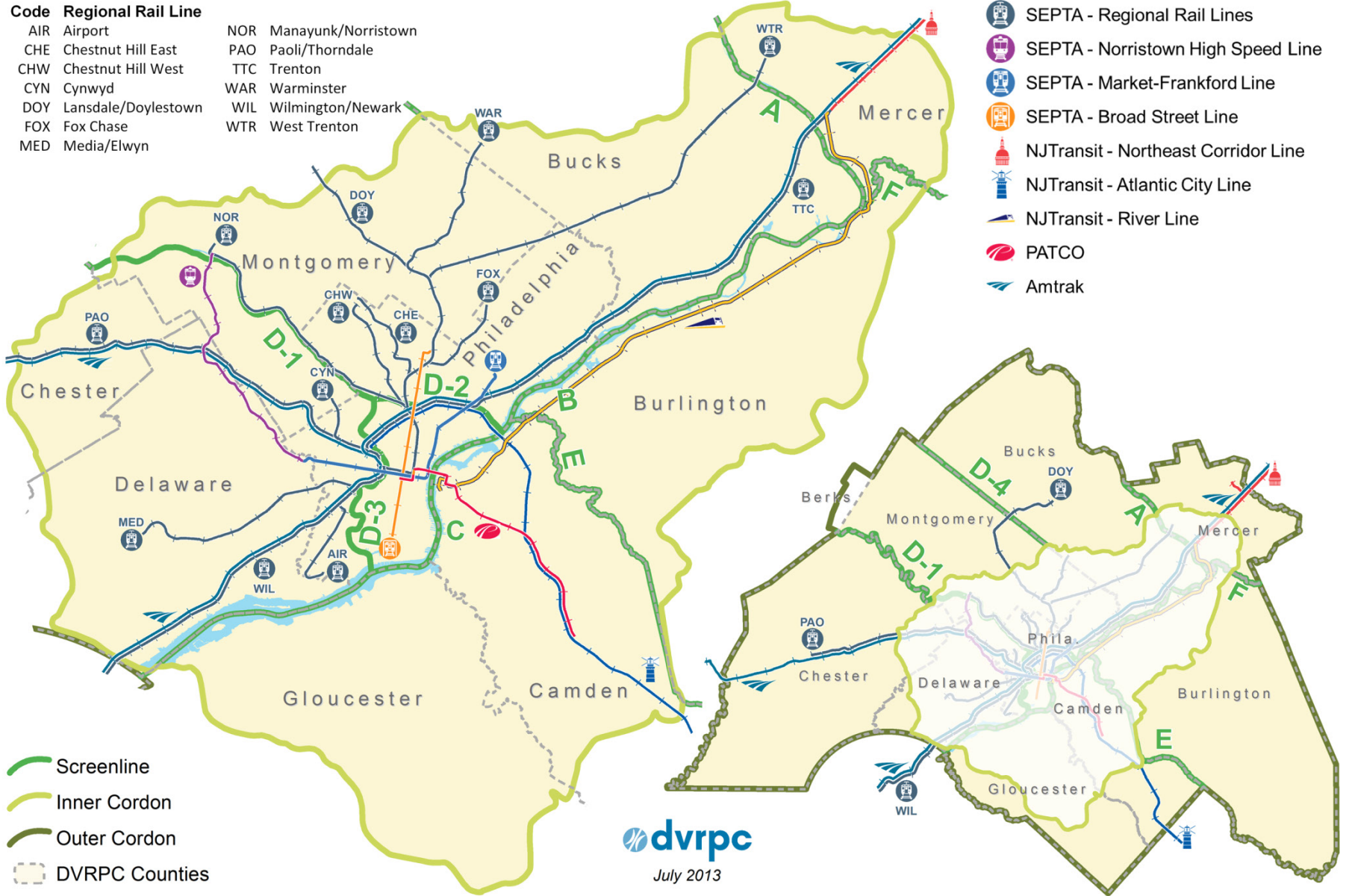
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Figure 2:
Rail Lines crossing Screenlines and Cordons

Code Regional Rail Line

AIR	Airport	NOR	Manayunk/Norristown
CHE	Chestnut Hill East	PAO	Paoli/Thorndale
CHW	Chestnut Hill West	TTC	Trenton
CYN	Cynwyd	WAR	Warminster
DOY	Lansdale/Doylestown	WIL	Wilmington/Newark
FOX	Fox Chase	WTR	West Trenton
MED	Media/Elwyn		

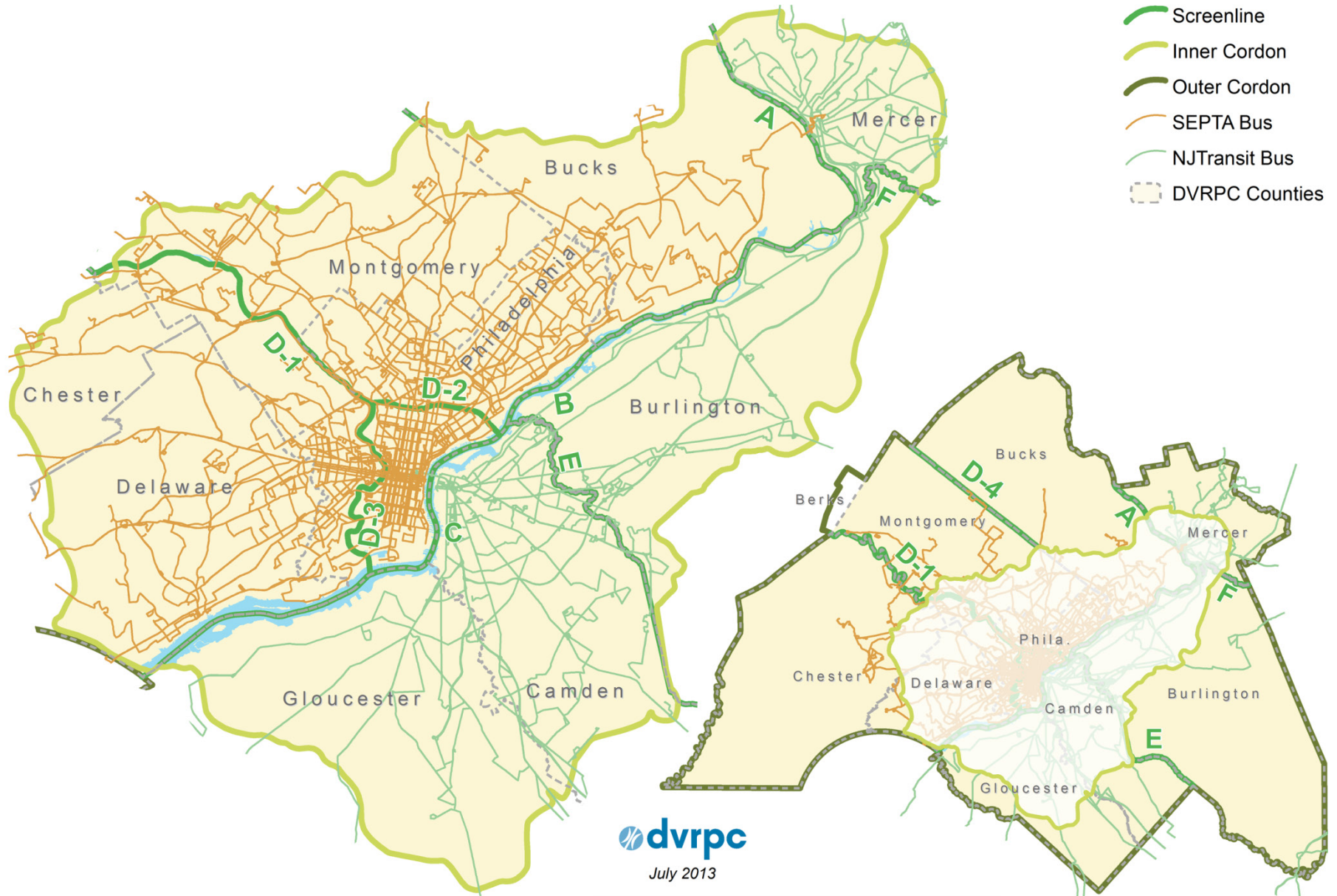
-  SEPTA - Regional Rail Lines
-  SEPTA - Norristown High Speed Line
-  SEPTA - Market-Frankford Line
-  SEPTA - Broad Street Line
-  NJTransit - Northeast Corridor Line
-  NJTransit - Atlantic City Line
-  NJTransit - River Line
-  PATCO
-  Amtrak



-  Screenline
-  Inner Cordon
-  Outer Cordon
-  DVRPC Counties

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Figure 3:
Bus Routes crossing Screenlines and Cordons



The data on toll roads, Delaware River bridges, and public transit ridership was provided by the following agencies:

- South Jersey Transportation Authority;
- Burlington-Bristol Bridge Commission;
- Delaware River Joint Toll Bridge Commission;
- Delaware River Port Authority;
- New Jersey Turnpike Authority;
- Pennsylvania Turnpike Commission;
- Southeastern Pennsylvania Transportation Authority (SEPTA);
- New Jersey Transit (NJT); and
- AMTRAK.

This report would not have been possible without their cooperation, and DVRPC would like to thank them for their generous assistance.

Also, thanks are due to the New Jersey and Pennsylvania departments of transportation for their assistance in providing the data needed to develop seasonal and axle adjustment factors to estimate AADT.



II. County, Regional, and National Trends

In order to provide an assessment of traffic trends at a regional scale, the screenline volumes were added to the cordon line volumes and the Delaware River crossings. **Table 1** presents these combined totals by state and screenline/cordon boundary for 1995, 2000, 2005, and 2010.

At the regional and individual state levels, the amount of traffic crossing the screenlines, cordons, and bridges steadily increased between 1995 and 2005. For the region as a whole, traffic increased by 19.3 percent during this 10-year time period, and by 17.7 percent in Pennsylvania, and by 21.7 percent in New Jersey. In some cases, there were fairly dramatic increases, such as the flow of traffic crossing the Outer Cordon in New Jersey, which increased by 39.2 percent between 1995 and 2000. This growth rate was not sustained between 2000 and 2005, tailing off to 1.9 percent.

However, with the onset of the “Great Recession” in late 2007, the growth trends turned negative. At the regional level, highway volumes decreased by 5.4 percent between 2005 and 2010. For the Pennsylvania part of the region, the decrease was 7.7 percent, and for the New Jersey part of the region, the decrease was 2.2 percent. The most extreme reduction was at the Outer Cordon in Pennsylvania, which experienced a 10 percent decline between 2005 and 2010. This translates to an average annual growth rate of -2.1 percent over this five-year time period. The lone exception to the decline was the Inner Cordon in New Jersey, which saw an increase of 1.6 percent between 2005 and 2010.

The results are very similar for vehicle miles of travel (VMT), as shown in **Table 2**. At the regional level, daily VMT decreased by 4.7 percent between 2005 and 2010. For the Pennsylvania part of the region, the decrease was 5.1 percent, and for the New Jersey part of the region, the decrease was 3.9 percent.

Figure 4 shows the overall trend in annual vehicle miles of travel (VMT) for both the DVRPC region and nationally between 2000 and 2010.⁶ At the national level, VMT only decreased by 0.1 percent between 2005 and 2010. In part, this reflects the disparities between how other states and different parts of the country have weathered the economic downturn. For example, while VMT continues to decline in Pennsylvania and New Jersey, there are a few states where VMT actually increased between 2010 and 2011 (Minnesota, North Dakota, Montana, Hawaii, and Nevada).⁷

⁶ Source: PennDOT, NJDOT, U.S. Census

⁷ U.S. Department of Transportation, Federal Highway Administration. *National Traffic Volume Trends*. August 2011.

Table 1:

1995–2010 Cordon and Screenline Summary Comparison - Average Annual Daily Traffic (AADT)

Description	1995	2000	2005	2010	Percent Change		Average Annual Change	
					2000 to 2005	2005 to 2010	2000 to 2005	2005 to 2010
PENNSYLVANIA								
All Screenlines (D1, D2, D3, D4)	1,842,734	2,015,480	2,192,168	1,989,616	+8.8%	-9.2%	+1.7%	-1.9%
Inner Cordon	1,216,355	1,283,075	1,376,415	1,321,710	+7.3%	-4.0%	+1.4%	-0.8%
Outer Cordon	564,649	622,751	695,082	625,473	+11.6%	-10.0%	+2.2%	-2.1%
PA Total	3,623,738	3,921,306	4,263,665	3,936,799	+8.7%	-7.7%	+1.7%	-1.6%
Delaware River Bridges	513,903	528,716	569,905	565,780	+7.8%	-0.7%	+1.5%	-0.1%
NEW JERSEY								
All Screenlines (E, F)	747,191	804,448	838,851	803,069	+4.3%	-4.3%	+0.8%	-0.9%
Inner Cordon	1,121,566	1,233,191	1,304,990	1,325,220	+5.8%	+1.6%	+1.1%	+0.3%
Outer Cordon	651,284	906,872	923,889	872,417	+1.9%	-5.6%	+0.4%	-1.1%
NJ Total	2,520,041	2,944,511	3,067,730	3,000,706	+4.2%	-2.2%	+0.8%	-0.4%
REGIONAL TOTAL	6,143,779	6,865,817	7,331,395	6,937,505	+6.8%	-5.4%	+1.3%	-1.1%

Source: Delaware Valley Regional Planning Commission, 2010

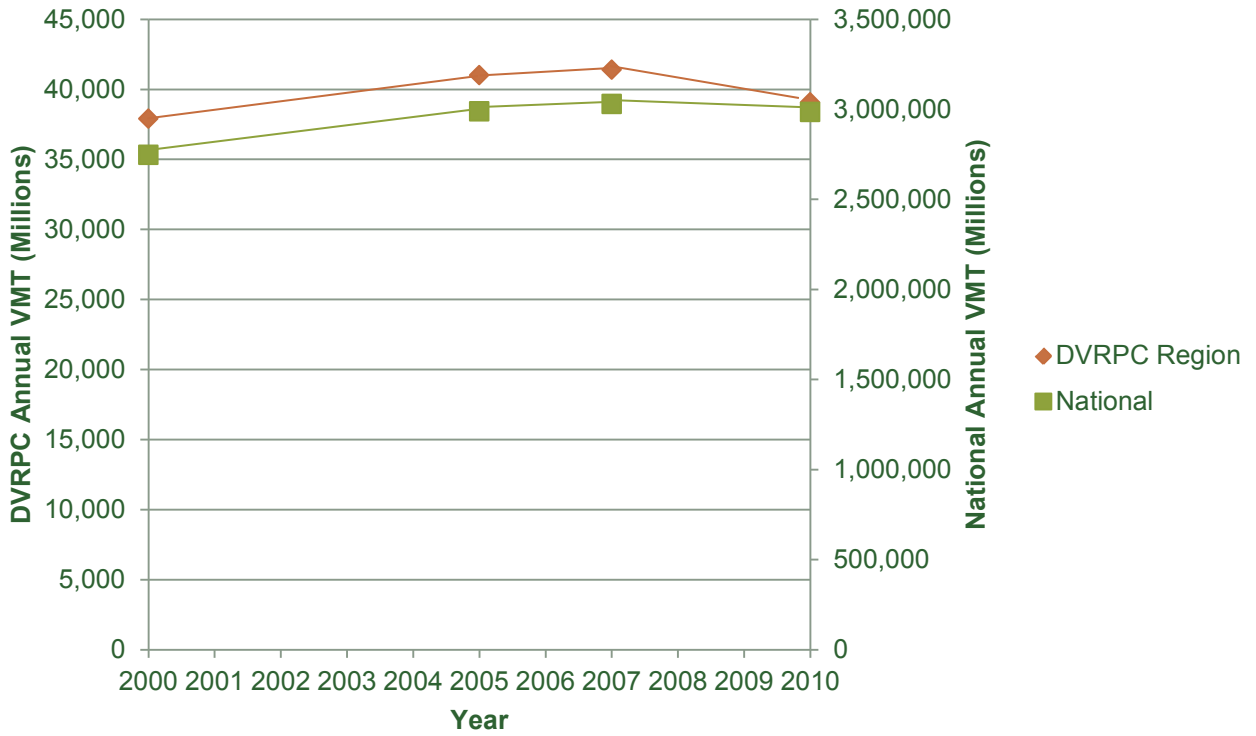
Table 2:

1995–2010 Change in VMT - Average Daily VMT (000s)

Description	1995	2000	2005	2010	Percent Change		Average Annual Change	
					2000 to 2005	2005 to 2010	2000 to 2005	2005 to 2010
PENNSYLVANIA								
Bucks	11,957.9	12,926.8	13,696.1	13,128.5	+6.0%	-4.1%	+1.2%	-0.8%
Chester	9,937.6	10,920.8	11,832.0	11,940.0	+8.3%	+0.9%	+1.6%	+0.2%
Delaware	9,155.1	9,321.6	10,180.6	9,265.9	+9.2%	-9.0%	+1.8%	-1.9%
Montgomery	16,594.3	17,866.0	19,109.5	18,045.3	+7.0%	-5.6%	+1.4%	-1.1%
Philadelphia	15,256.5	15,177.5	16,316.4	15,116.4	+7.5%	-7.4%	+1.5%	-1.5%
PA Total	62,901.4	66,212.7	71,134.6	67,496.2	+7.4%	-5.1%	+1.4%	-1.0%
NEW JERSEY								
Burlington	na	12,170.9	13,365.5	12,454.6	+9.8%	-6.8%	+1.9%	-1.4%
Camden	na	10,684.0	10,855.2	10,545.9	+1.6%	-2.8%	+0.3%	-0.6%
Gloucester	na	6,615.8	7,430.7	7,468.5	+12.3%	+0.5%	+2.4%	+0.1%
Mercer	na	8,247.4	9,488.2	9,052.4	+15.0%	-4.6%	+2.8%	-0.9%
NJ Total		37,718.1	41,139.6	39,521.4	+9.1%	-3.9%	+1.8%	-0.8%
REGIONAL TOTAL		103,930.8	112,274.2	107,017.5	+8.0%	-4.7%	+1.6%	-1.0%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 4:
VMT Trends



Source: United States Department of Transportation, and Delaware Valley Regional Planning Commission, 2010



III. Screenlines and Cordons

A screenline represents a sequence of locations that define a natural or man-made barrier where the counting of crossing vehicles can readily be accomplished. The screenlines used by DVRPC capture the flow of traffic into and out of the Philadelphia Central Business District (CBD),⁸ across the Delaware River between the states of New Jersey and Pennsylvania, and across the Schuylkill River, the Bucks/Montgomery county line in Pennsylvania, the Burlington/Mercer county line in New Jersey, and the Burlington/Camden county line in New Jersey.

The Inner Cordon Line encloses the most heavily urbanized portion of the Delaware Valley region. While only comprising approximately one-third of the land area in the region, it contains three quarters of its total population. The Inner Cordon consists of 91 traffic monitoring stations in Pennsylvania and 91 stations in New Jersey.

In 1976, the study area was expanded to the Outer Cordon Line, encompassing nine counties (Bucks, Chester, Montgomery, Delaware, and Philadelphia in Pennsylvania, and Mercer, Burlington, Camden, and Gloucester in New Jersey) and approximately 3,817 square miles.

In 1990, the study area was pushed further outward to include three municipalities in Berks County designated by the U.S. Census as part of the Pottstown Urbanized Area.

Surveys were conducted in 1975, 1985, 1990, 1995, 2000, 2005, and 2010. Data from the last four surveys (1995, 2000, 2005, and 2010) are included in this report.

⁸ Delaware Valley Regional Planning Commission. *1980-2010 Travel Trends in the Philadelphia Central Business District*. September 2013.

Screenline A-B-C (Delaware River)

The Delaware River screenline is regionally important because it monitors the flow of traffic between the States of New Jersey and Pennsylvania. It consists of the following twelve bridges:

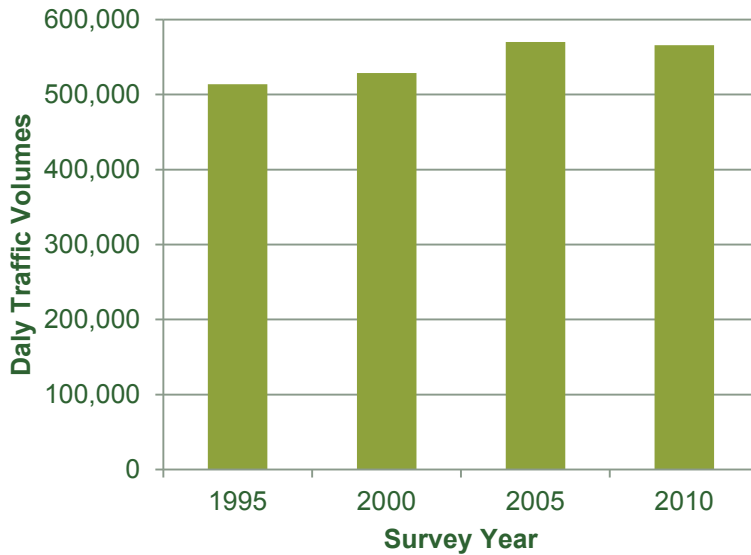
- Washington Crossing Bridge;
- Scudders Falls (I-95) Bridge;
- Calhoun Street Bridge;
- Bridge Street (US Business 1) Bridge;
- Trenton Freeway (US 1) Bridge;
- PA/NJ Turnpike (I-276) Bridge;
- Burlington-Bristol (PA 413) Bridge;
- Tacony-Palmyra (PA/NJ 73) Bridge;
- Betsy Ross (NJ 90) Bridge;
- Ben Franklin (I-676, US 30) Bridge;
- Walt Whitman (I-76) Bridge; and
- Commodore Barry Bridge (US 322).

Unlike the other screenlines and cordons, DVRPC relies on the agencies that operate these bridges and toll facilities for traffic count data. Several of the statistics that DVRPC tracks for the other screenlines were unavailable for these bridges for 2010. The data that was available are presented in **Tables 3 and 4**, and **Figure 5**.

In 2010, daily traffic crossing the Delaware River was approximately 565,780 vehicles per day (vpd), for a slight decrease in total AADT of 0.7 percent from 2005 to 2010. Seven of the 12 Delaware River bridges experienced lower traffic in 2010 than in 2005. The Betsy Ross Bridge declined by 15.1 percent, the Walt Whitman Bridge by 8.8 percent, the PA/NJ Turnpike Bridge by 5.9 percent, the Ben Franklin Bridge by 4.5 percent, the Scudder Falls Bridge by 1.8 percent, the Commodore Barry Bridge by 1.4 percent, and the Calhoun Street Bridge by 0.6 percent. However, three of the bridges experienced significant increases in daily traffic from 2005 to 2010: Tacony-Palmyra (+24.6 percent), Bridge Street (+20.5 percent), and Trenton Freeway (+10.8 percent). The remaining two bridges experienced slight increases.

Public transit ridership crossing the A-B-C screenline each day is displayed in **Table 4**. The total number of transit passengers crossing the Delaware River each day is 64,606. The PATCO line, running between Philadelphia and Lindenwold, New Jersey, carries 31,590 passengers per day. AMTRAK's Northeast Corridor route carries 23,102 passengers each day. New Jersey Transit bus service carries 6,562, SEPTA rail service carries 3,191, and SEPTA bus service carries 161 passengers.

Figure 5:
1995–2010 Traffic Volumes for the Delaware River Bridge
Crossings Screenlines (A-B-C)



Source: Delaware River Port Authority, Delaware River Joint Toll Bridge Commission, 2010

Table 3:
Screenline A-B-C Traffic
Volumes

Year	Volume
1995	513,903
2000	528,716
2005	569,905
2010	565,780
1995-2000 Change	2.9%
2000-2005 Change	7.8%
2005-2010 Change	-0.7%
1995-2010 Change	10.1%

Source: Delaware River Port Authority, Delaware River Joint Toll Bridge Commission, 2010

Table 4:
Average Weekday Transit Passengers Crossing
Screenline A-B-C

Carrier	Routes	Daily Passengers
SEPTA Bus	127	161
SEPTA Rail	West Trenton, Trenton	3,191
New Jersey Transit Bus	313, 315, 317, 318, 400, 401, 402, 404, 405, 406, 407, 408, 409, 410, 412, 417, 551	6,562
AMTRAK	NE Corridor	23,102
PATCO		31,590
TOTAL		64,606

Source: Southeastern Pennsylvania Transportation Authority, New Jersey Transit, AMTRAK, Port Authority Transit Corporation, 2010

Screenline D-1 (Upper Schuylkill River)

Screenline D-1 extends south and east from the Berks County, Pennsylvania, boundary to the US 1 Roosevelt Expressway Bridge in Philadelphia. This screenline consists of 20 traffic monitoring stations.

Figure 6 and **Table 5** display the trend in average daily traffic volumes crossing the D-1 screenline. Between 1995 and 2005, traffic volumes crossing this screenline increased from 687,067 to 778,321 vehicles per day. However, in 2010, traffic crossing D-1 decreased to 728,664 vehicles per day, a decline of 6.4 percent.

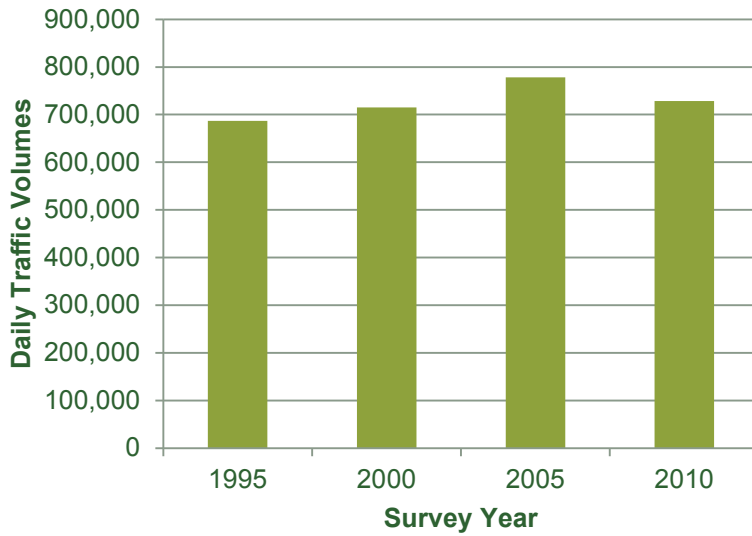
Figure 7 shows the time-of-day distribution of traffic crossing this screenline. There are pronounced peaks during both the morning and afternoon rush hours. During the AM peak period, volumes in the southbound direction are significantly higher than volumes in the northbound direction. The reverse occurs during the PM peak period, with higher volumes occurring in the northbound direction. As shown in **Table 6**, the percent of daily traffic that occurs during the AM and PM peak hours has remained relatively stable since 1995, with about seven percent occurring during the AM peak hour and about eight percent during the PM peak hour.

Speed and vehicle classification data was collected at eight of the 20 traffic monitoring station roads. The average speed of all vehicles crossing Screenline D-1 is 33.5 miles per hour. As shown in **Figure 8**, about 15 percent of vehicles cross this screenline at 25 mph or slower. Approximately 60 percent of vehicles are traveling between 26 and 45 miles per hour. The remaining 25 percent of vehicles have speeds greater than 45 miles per hour, in part reflecting the more rural nature of this screenline.

Vehicle classification data is displayed in **Table 7**. Relatively few trucks cross this screenline. Cars and light trucks (2-axle, 4-tire single unit trucks) account for about 93 percent of all vehicles. Most of the remaining vehicles are panel trucks and single-unit trucks with two axles. Less than one percent of crossing vehicles are tractor-trailers.

Public transit ridership data for Screenline D-1 is displayed in **Table 8**. Eleven SEPTA bus routes and the Norristown High Speed Line heavy rail service cross the D-1 Screenline. Together, they carry 13,961 transit passengers across Screenline D-1 each weekday. Most of these passengers (11,519, or 82.5 percent) are carried by the SEPTA bus service lines. There are also 2,442 passengers who ride SEPTA's Norristown High Speed Rail Line at this screenline's crossing between Norristown and Bridgeport boroughs.

Figure 6:
Average Daily Traffic Volumes for Screenline D-1



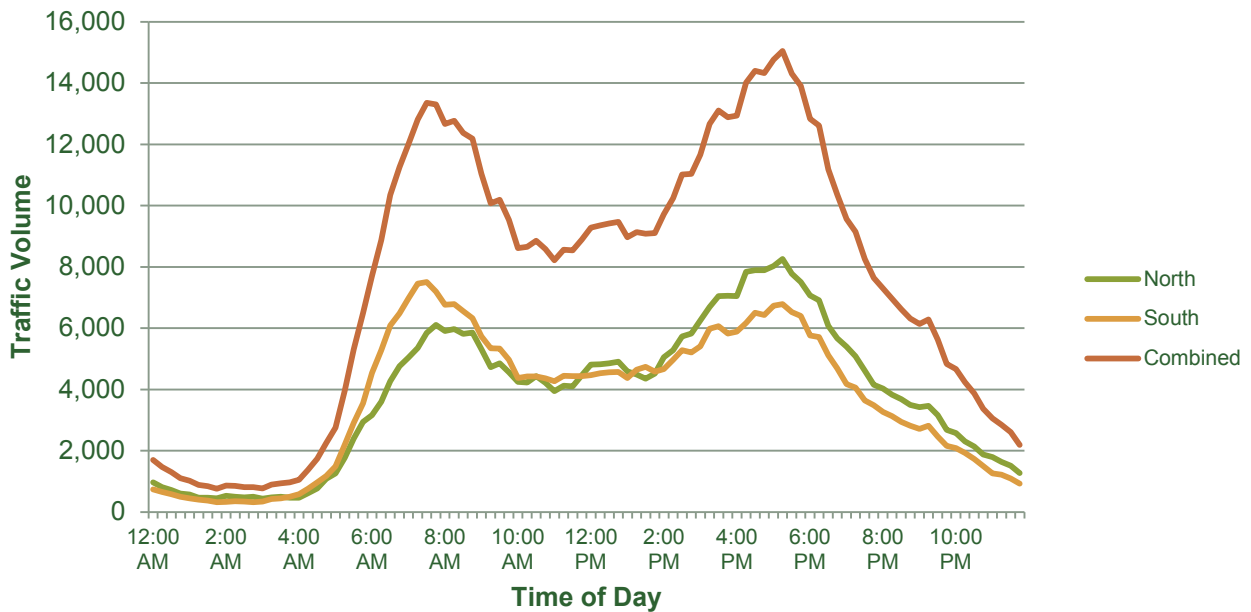
Source: Delaware Valley Regional Planning Commission, 2010

Table 5:
Screenline D-1 Traffic Volumes

Year	Volume
1995	687,067
2000	715,035
2005	778,321
2010	728,664
1995-2000 Change	4.1%
2000-2005 Change	8.9%
2005-2010 Change	-6.4%
1995-2010 Change	6.1%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 7:
Screenline D-1 Time-of-Day Variation



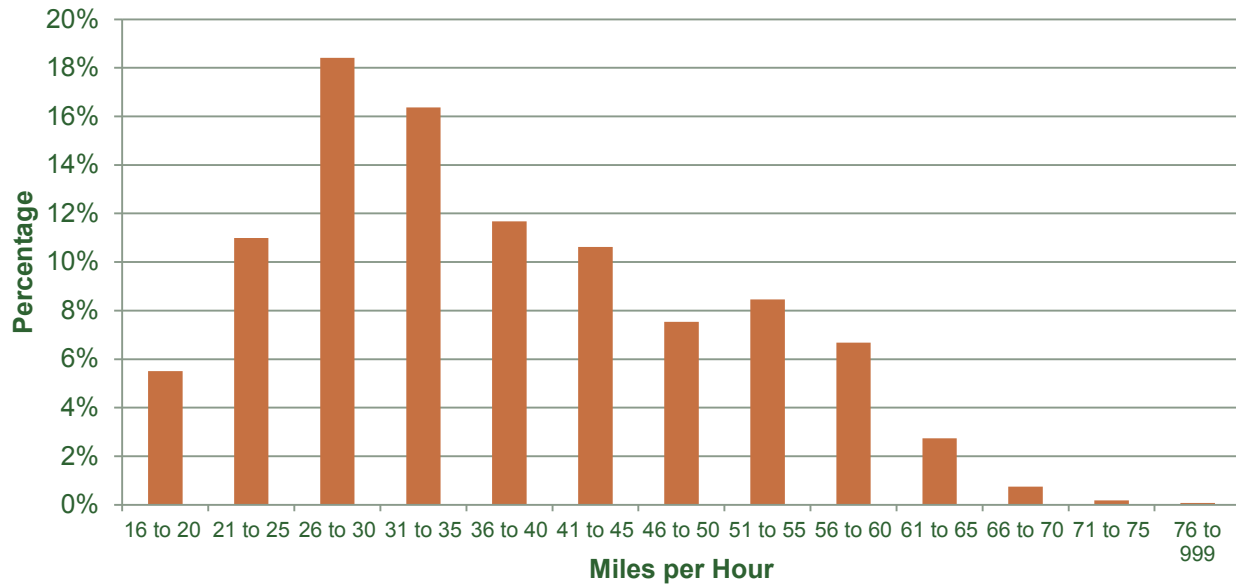
Source: Delaware Valley Regional Planning Commission, 2010

Table 6:
Percent of Traffic During Peak Hours

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
7.5%	7.1%	7.3%	7.1%	8.1%	7.8%	8.1%	8.0%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 8:
Screenline D-1 Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 7:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	1.0%
Passenger Car	79.0%
2-Axle, 4-Tire Single-Unit Truck	14.0%
School & Commercial Bus	1.0%
2-Axle, 6-Tire Single-Unit Truck	4.0%
3-Axle Single-Unit Truck	0.1%
4-Axle Single-Unit Truck	0.1%
4- or Less Axle Single Trailer Truck	0.1%
5-Axle Single Trailer Truck	0.1%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.1%
6-Axle Multitrailer Truck	0.1%
7- or More Axle Multitrailer Truck	0.1%
All Trucks and Buses	19.8%
Heavy Trucks	4.8%
Tractor-Trailers	0.6%

Source: Delaware Valley Regional Planning Commission, 2010

Table 8:
Average Weekday Transit Passengers
Crossing Screenline D-1

Carrier	Routes	Daily Passengers
SEPTA Bus	1, 9, 27, 38, 62, 65, 95, 99, 124, 125, 139	11,519
SEPTA Rail	Norristown High Speed Line	2,442
TOTAL		13,961

Source: Southeastern Pennsylvania Transportation Authority, 2010

Screenline D-2 (North Philadelphia)

Screenline D-2 follows the SEPTA and AMTRAK railroad tracks from the Schuylkill River in the west to the Delaware River in the east. It runs between Westmoreland Street and Allegheny Avenue west of Broad Street, between Sedgley Avenue and Glenwood Avenue east of Broad Street, and meets the Delaware River just south of the Betsy Ross Bridge. It monitors the flow of traffic between the core of the region and the north. It has 37 traffic monitoring locations, the highest number of all of the screenlines. Daily traffic crossing the D-2 screenline is displayed in **Table 9**, and was approximately 499,486 vehicles per day in 2010. This represents a 5.9 percent decrease from 2005. The total vehicular volume crossing this screenline is approximately 15 percent of the regional total (sum of the seven screenlines).

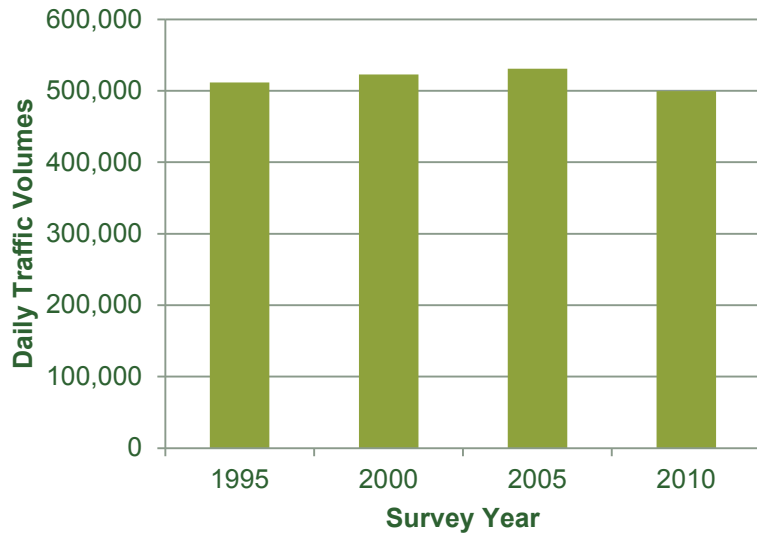
The time-of-day distribution of traffic is displayed in **Figure 10**. The peak directions are southbound toward the central business district in the morning, and northbound toward Cheltenham, Northwest Philadelphia, Northeast Philadelphia, Jenkintown, Willow Grove, Manayunk, and points beyond the Pennsylvania Turnpike in Montgomery and Bucks counties in the afternoon. Approximately 6.5 percent of daily traffic occurs during the morning peak hour, and 7.1 percent occurs during the afternoon peak hour.

Speed and vehicle classification data was collected at 13 of the 37 traffic monitoring stations. The histogram of the speeds of vehicles crossing D-2 is displayed in **Figure 11**. The average speed is 29.8 miles per hour, the lowest of all of the screenlines. Less than five percent of vehicles were observed to be traveling greater than 45 miles per hour. The lower speeds reflect the proximity to downtown and the denser development patterns. Several roads were observed to have lower speeds as a result of congestion during the morning and afternoon peak hours. There are also several streets, such as Sedgley Avenue, that were observed to have relatively low speeds (less than 25 mph) throughout the entire day.

Vehicle classification data is displayed in **Table 11**. Approximately 93 percent of the vehicles crossing D-2 are cars and light trucks, and only 1.3 percent of observed vehicles are tractor-trailers.

The total transit ridership crossing Screenline D-2 each day (**Table 12**) is 234,344 passengers. This is the highest number of all of the screenlines and represents 43 percent of the regional total. The overwhelming majority are SEPTA rail passengers (176,659) commuting into the Philadelphia urban core on regional rail and the Market-Frankford and Broad Street subway lines. SEPTA bus service also carries 34,592 passengers each day across Screenline D-2, and AMTRAK's Northeast Corridor line carries 23,093 passengers per day from points north (Trenton and New York).

Figure 9:
1995–2010 Traffic Volumes for D-2



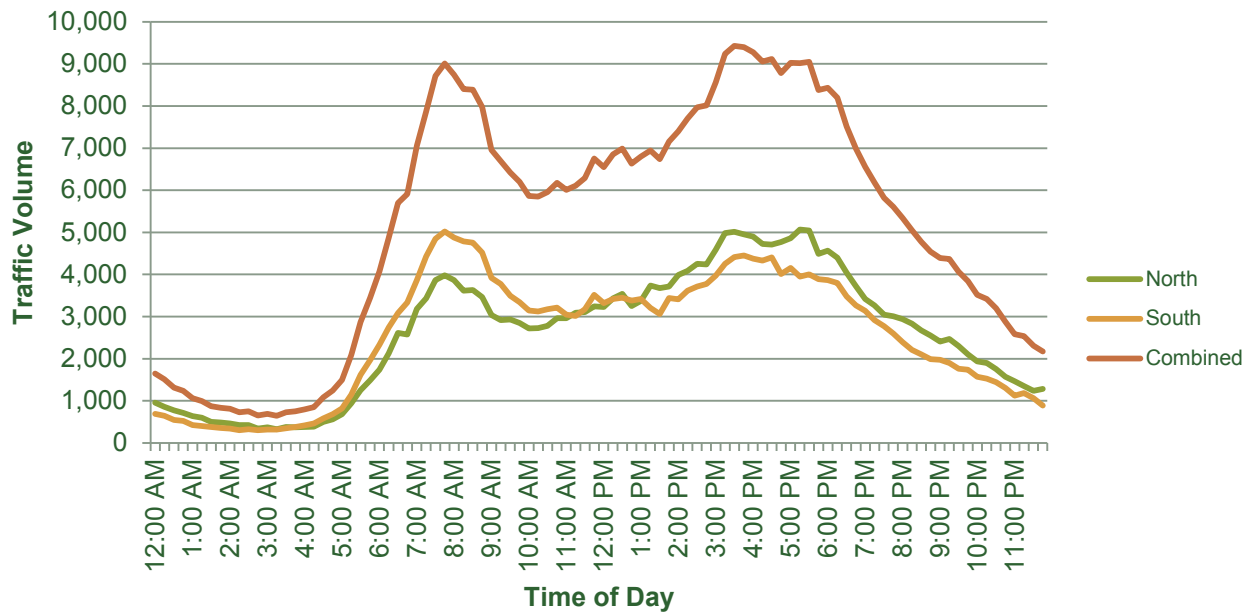
Source: Delaware Valley Regional Planning Commission, 2010

Table 9:
Screenline D-2 Traffic Volumes

Year	Volume
1995	511,558
2000	522,991
2005	530,743
2010	499,486
1995-2000 Change	2.2%
2000-2005 Change	1.5%
2005-2010 Change	-5.9%
1995-2010 Change	-2.4%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 10:
Screenline D-2 Time-of-Day Variation



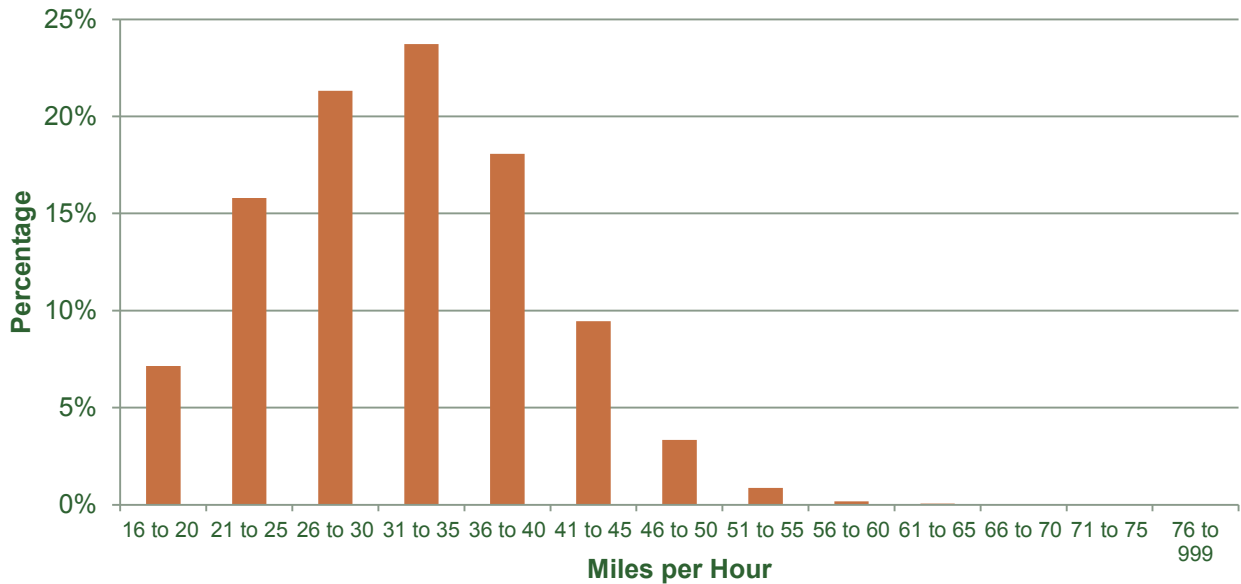
Source: Delaware Valley Regional Planning Commission, 2010

Table 10:
Percent of Traffic During Peak Hours

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
7.1%	6.9%	6.9%	6.5%	7.5%	7.3%	7.6%	7.1%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 11:
Screenline D-2 Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 11:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	0.8%
Passenger Car	79.9%
2-Axle, 4-Tire Single-Unit Truck	13.5%
School & Commercial Bus	1.6%
2-Axle, 6-Tire Single-Unit Truck	2.3%
3-Axle Single-Unit Truck	0.6%
4-Axle Single-Unit Truck	0.0%
4-or Less Axle Single Trailer Truck	0.9%
5-Axle Single Trailer Truck	0.3%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.0%
6-Axle Multitrailer Truck	0.0%
7- or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	19.3%
Heavy Trucks	4.2%
Tractor-Trailers	1.3%

Source: Delaware Valley Regional Planning Commission, 2010

Table 12:
Average Weekday Transit Passengers
Crossing Screenline D-2

Carrier	Routes	Daily Passengers
SEPTA Bus	1, 2, 3, 5, 23, 25, 32, 33, 47, 57, 61, 73, 78, 89, C, R	34,592
SEPTA Rail	Manayunk/Norristown, Chestnut Hill East, Chestnut Hill West, Fox Chase, Warminster, West Trenton, Trenton, Lansdale/Doylestown, Market-Frankford, Broad Street	176,659
AMTRAK	NE Corridor	23,093
TOTAL		234,344

Source: Southeastern Pennsylvania Transportation Authority, AMTRAK, 2010

Screenline D-3 (Lower Schuylkill River)

Screenline D-3 represents the lower section of the Schuylkill River that extends from the Strawberry Mansion Bridge in the north to the Girard Point Bridge (I-95) crossing in South Philadelphia. This screenline monitors the flow of traffic entering and exiting the core of the region from the west. It includes the following 16 bridges:

- Strawberry Mansion Bridge;
- Girard Avenue Bridge;
- Spring Garden Street Bridge;
- West River Drive Bridge;
- I-676 Vine Expressway Bridge;
- John F. Kennedy Boulevard Bridge;
- Market Street Bridge;
- Chestnut Street Bridge;
- Walnut Street Bridge;
- South Street Bridge;
- I-76 Schuylkill Expressway Bridge;
- University Avenue Bridge;
- Grays Ferry Avenue Bridge;
- Passyunk Avenue Bridge;
- Platt Memorial Bridge (PA-291); and the
- I-95 Girard Point Bridge.

Daily traffic crossing the D-3 screenline was approximately 605,020 vehicles per day in 2010. This represents a 12.6 percent decrease from 2005. The total vehicular volume crossing this screenline is approximately 18 percent of the regional total.

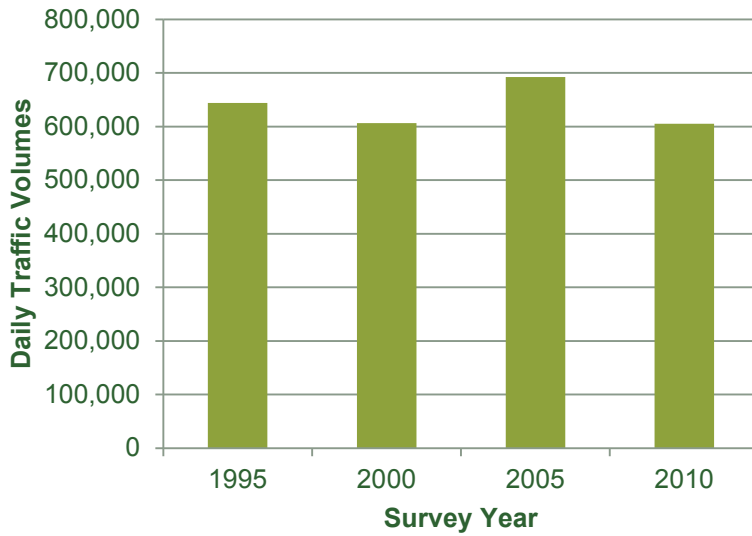
Figure 13 shows the time-of-day distribution of traffic crossing D-3. The morning and afternoon peaks and the midday off-peak are clearly identifiable. There is very little difference between the eastbound and westbound flow of traffic throughout the day, indicating no clear peak direction. Six and a half percent of daily traffic occurs during the AM peak hour, and 6.9 percent occurs during the PM peak hour.

Speed and vehicle classification data was collected at two of the 16 bridges crossing D-3. A histogram of the speeds of vehicles crossing this screenline is displayed in **Figure 14**. The average speed of vehicles is 41.7 miles per hour. However, speeds during the morning and afternoon peaks can be substantially lower as a result of congestion. For example, the average speed of eastbound traffic crossing the Platt Memorial Bridge during the PM peak hour was observed to decrease from 46 to 35 miles per hour.

Vehicle classification data is displayed in **Table 15**. The vast majority of vehicles crossing this screenline are cars and light trucks (93 percent). Only 1.2 percent of vehicles are tractor-trailers.

Screenline D-3 has the second highest number of transit passengers crossing each day. In 2010, there were 222,424 passengers, which is approximately 41 percent of the total for all screenlines. As with Screenline D-2, the vast majority of these are passengers on SEPTA rail commuting into the Philadelphia urban core from the west. There are also 23,093 rail passengers commuting to Philadelphia each day from points south (Wilmington, Delaware). SEPTA's bus service carries an additional 70,385 passengers each day across Screenline D-3.

Figure 12:
1995–2010 Traffic Volumes for D-3



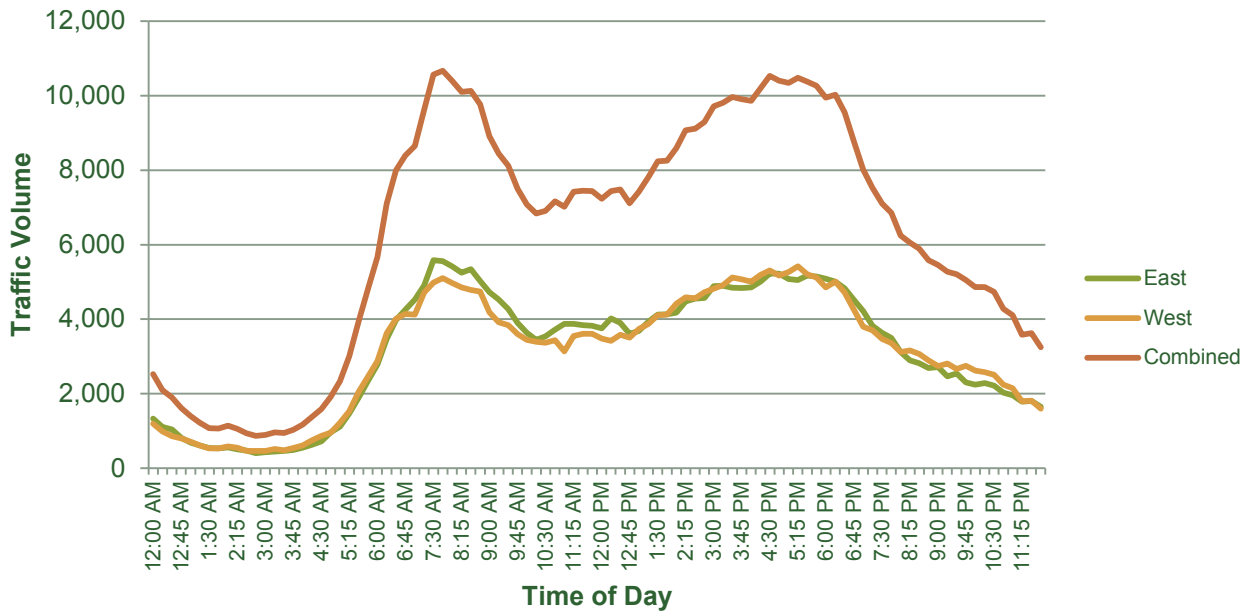
Source: Delaware Valley Regional Planning Commission, 2010

Table 13:
Screenline D-3 Traffic Volumes

Year	Volume
1995	644,109
2000	606,590
2005	692,103
2010	605,020
1995-2000 Change	-5.8%
2000-2005 Change	14.1%
2005-2010 Change	-12.6%
1995-2010 Change	-6.1%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 13:
Screenline D-3 Time-of-Day Variation



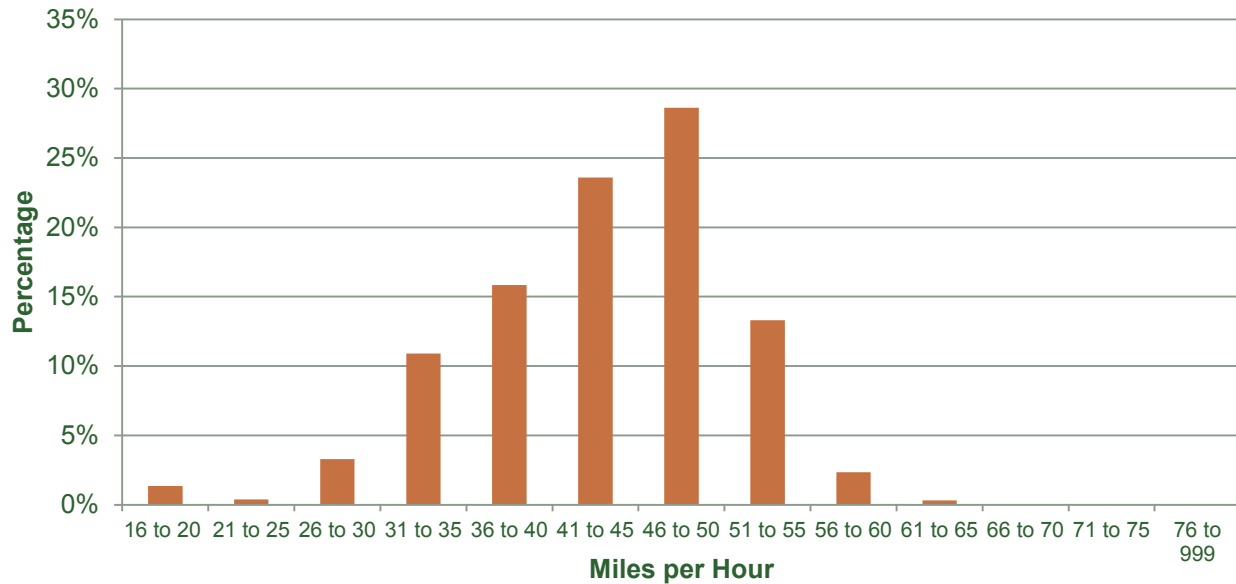
Source: Delaware Valley Regional Planning Commission, 2010

Table 14:
Percent of Traffic During Peak Hours

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
6.4%	6.4%	6.5%	6.5%	6.9%	7.2%	7.0%	6.9%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 14:
Screenline D-3 Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 15:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	2.3%
Passenger Car	82.9%
2-Axle, 4-Tire Single-Unit Truck	10.1%
School & Commercial Bus	1.2%
2-Axle, 6-Tire Single-Unit Truck	1.3%
3-Axle Single-Unit Truck	0.8%
4-Axle Single-Unit Truck	0.4%
4- or Less Axle Single Trailer Truck	0.7%
5-Axle Single Trailer Truck	0.3%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.1%
6-Axle Multitrailer Truck	0.0%
7- or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	14.9%
Heavy Trucks	3.6%
Tractor-Trailers	1.2%

Source: Delaware Valley Regional Planning Commission, 2010

Table 16:
Average Weekday Transit Passengers
Crossing Screenline D-3

Carrier	Routes	Daily Passengers
SEPTA Bus	9, 10, 12, 21, 27, 31, 37, 38, 40, 42, 43, 44, 62, 64, 68, 78, 124, 125, G	39,976
SEPTA Trolley	11, 13, 15, 34, 36	30,409
SEPTA Rail	Chestnut Hill West, Trenton, Paoli/Thorndale, Cynwyd, Media/Elwyn, Airport, Newark/Wilmington, Market-Frankford	128,946
AMTRAK	NE Corridor	23,093
TOTAL		222,424

Source: Southeastern Pennsylvania Transportation Authority, AMTRAK, 2010

Screenline D-4 (Montgomery/Bucks County Line)

Screenline D-4 follows the Montgomery/Bucks County border (County Line Road) south and east from Lehigh County in Pennsylvania to the point where PA 611 intersects the Inner Cordon Line. This screenline is represented by 19 traffic monitoring stations and is relatively new, counted for the first time in 2000. As a result, fewer years of data are available for analysis.

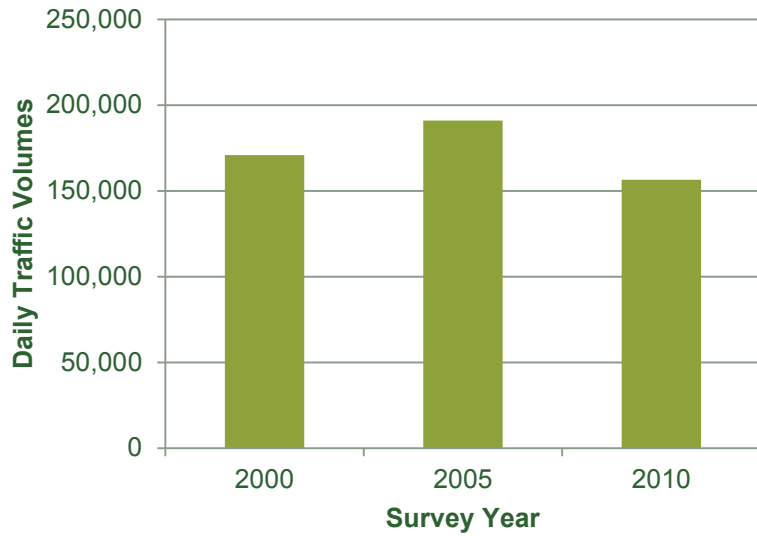
Daily traffic crossing the D-4 screenline was approximately 156,446 vehicles per day in 2010. This represents an 18.1 percent decrease from 2005. The total vehicular volume crossing this screenline only comprises five percent of the regional screenline total.

Speed and vehicle classification data was collected at seven of the 19 traffic monitoring stations. The speed data is displayed in **Figure 17**. The average speed for vehicles crossing D-4 is 46.6 miles per hour. The histogram displays a wide range of speeds, with two peaks at 41 to 45 mph, and 56 to 60 mph. Doylestown Road/Butler Avenue is representative of the lower peak. It is a two-lane road that crosses the screenline in a more urban and developed area (Montgomeryville/Lansdale). The higher speed range is reflected by roads such as PA 309. It is a four-lane facility with a median barrier, wider paved shoulders, and observed speeds between 55 and 60 mph throughout most of the day.

Vehicle classification data is displayed in **Table 19**. As with several of the other screenlines, the vast majority of vehicles crossing this D-4 are passenger cars and light trucks (91.7 percent). However, a relatively higher percentage of tractor-trailers (2.2 percent) and heavy trucks (7.1 percent) were observed crossing D-4, as compared to the other screenlines.

The number of transit passengers crossing Screenline D-4 is displayed in **Table 20**. Indicative of the suburban nature of this screenline, there are only 1,102 transit passengers crossing D-4 between Bucks and Montgomery counties each day. This is only 0.2 percent of the total for all screenlines.

Figure 15:
1995–2010 Traffic Volumes for D-4



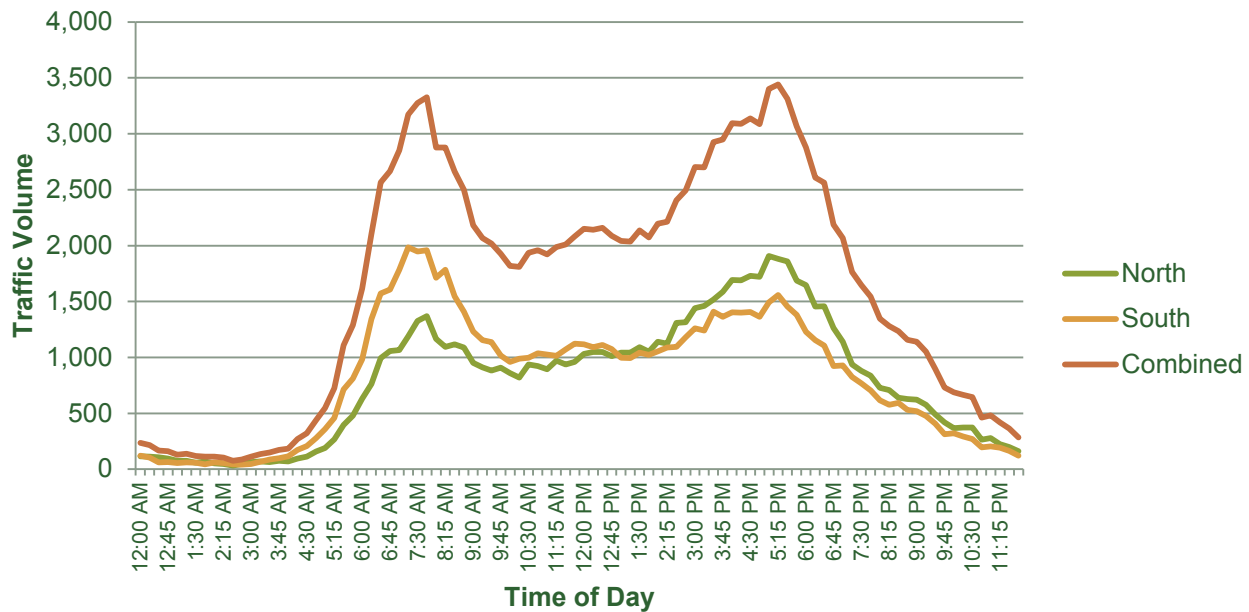
Source: Delaware Valley Regional Planning Commission, 2010

Table 17:
Screenline D-4 Traffic Volumes

Year	Volume
1995	NA
2000	170,864
2005	191,001
2010	156,446
1995-2000 Change	NA
2000-2005 Change	11.8%
2005-2010 Change	-18.1%
1995-2010 Change	NA

Source: Delaware Valley Regional Planning Commission, 2010

Figure 16:
Screenline D-4 Time-of-Day Variation



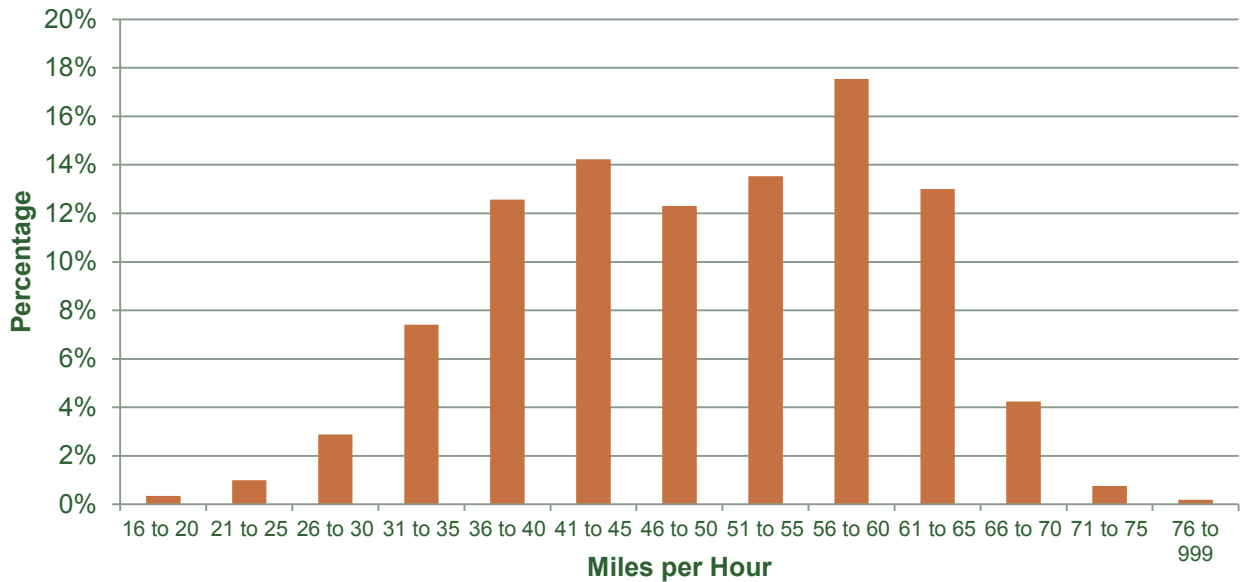
Source: Delaware Valley Regional Planning Commission, 2010

Table 18:
Percent of Traffic During Peak Hours

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
NA	7.2%	7.3%	8.1%	NA	8.3%	8.6%	8.5%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 17:
Screenline D-4 Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 19:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	0.3%
Passenger Car	75.9%
2-Axle, 4-Tire Single-Unit Truck	15.8%
School & Commercial Bus	1.0%
2-Axle, 6-Tire Single-Unit Truck	4.3%
3-Axle Single-Unit Truck	0.5%
4-Axle Single-Unit Truck	0.2%
4- or Less Axle Single Trailer Truck	0.8%
5-Axle Single Trailer Truck	1.3%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.0%
6-Axle Multitrailer Truck	0.0%
7- or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	23.8%
Heavy Trucks	7.1%
Tractor-Trailers	2.2%

Source: Delaware Valley Regional Planning Commission, 2010

Table 20:
Average Weekday Transit Passengers
Crossing Screenline D-4

Carrier	Routes	Daily Passengers
SEPTA Bus	132	119
SEPTA Rail	Lansdale/Doylestown	983
TOTAL		1,102

Source: Southeastern Pennsylvania Transportation Authority, 2010

Screenline E (Pennsauken Creek)

Screenline E generally follows the border between Burlington and Camden counties in New Jersey, from the Delaware River east to the Atlantic County, New Jersey border. Daily traffic crossing Screenline E was approximately 569,032 vehicles per day in 2010. This represents a 2.1 percent decrease from 2005. The total vehicular volume crossing this screenline is approximately 17 percent of the regional total.

Figure 19 shows the time-of-day distribution of traffic for Screenline E. Both the north and southbound directions are nearly identical throughout the day, indicating no clear peak direction. Also, Screenline E does not have a clearly defined midday off-peak. There is a sharp drop-off to the AM peak period, and the midday off-peak appears to begin around 10:30 AM. From that point, traffic volumes steadily increase throughout the rest of the day, until 5:15 PM.

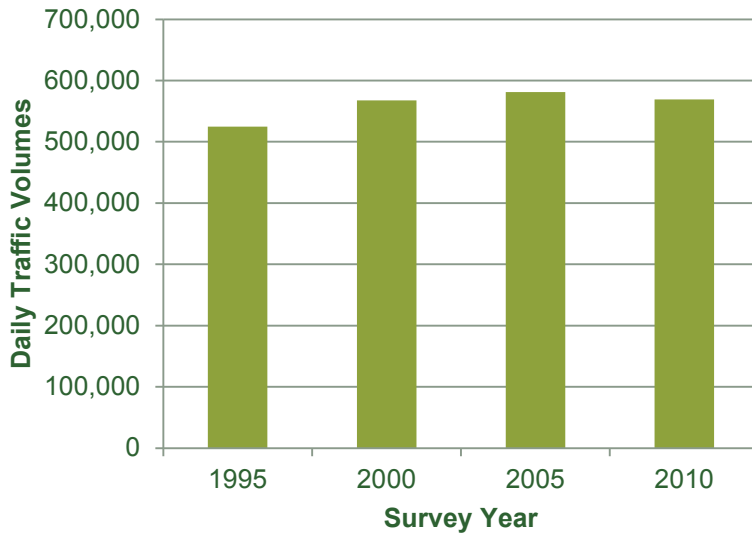
Table 22 shows the percentage of daily traffic that occurs in the AM and PM peak hours. Approximately 7.3 percent of daily traffic occurs during the AM peak hour of 7:00 to 8:00 AM, and 8.3 percent occurs during the PM peak hour of 5:00 to 6:00 PM.

Vehicle classification and speed data was collected at nine of the 29 traffic monitoring stations. The average speed of vehicles crossing Screenline E on these roads is 40.5 miles per hour. The speed histogram (**Figure 20**) is relatively symmetric, e.g., approximately the same percentage of traffic is traveling in each corresponding bin on either side of the mean. This suggests that roughly the same number of vehicles cross this screenline traveling between 26 and 30 mph as the number that travels between 56 and 60 mph. This might be an indication of stop-and-go traffic, for example, on the Marlton Pike (Route 70) east of the New Jersey Turnpike. This road is characterized by a lot of curb cuts and adjacent development.

Vehicle classification data is displayed in **Table 23**. As with the other screenlines, the majority of traffic (91.2 percent) crossing this screenline on the sampled facilities are passenger cars and light trucks. Tractor-trailers only comprise 1.7 percent of traffic.

Approximately 7,483 transit passengers cross Screenline E each weekday, which is approximately one percent of the regional total. Most are passengers on New Jersey Transit's Riverline (4,601), which links the suburbs and cities on the New Jersey side of the Delaware River (Burlington, Cinnaminson, and Palmyra) with Camden, and via transfer with Philadelphia. There are also 2,882 passengers who ride New Jersey Transit buses across Screenline E each day.

Figure 18:
1995–2010 Traffic Volumes for E



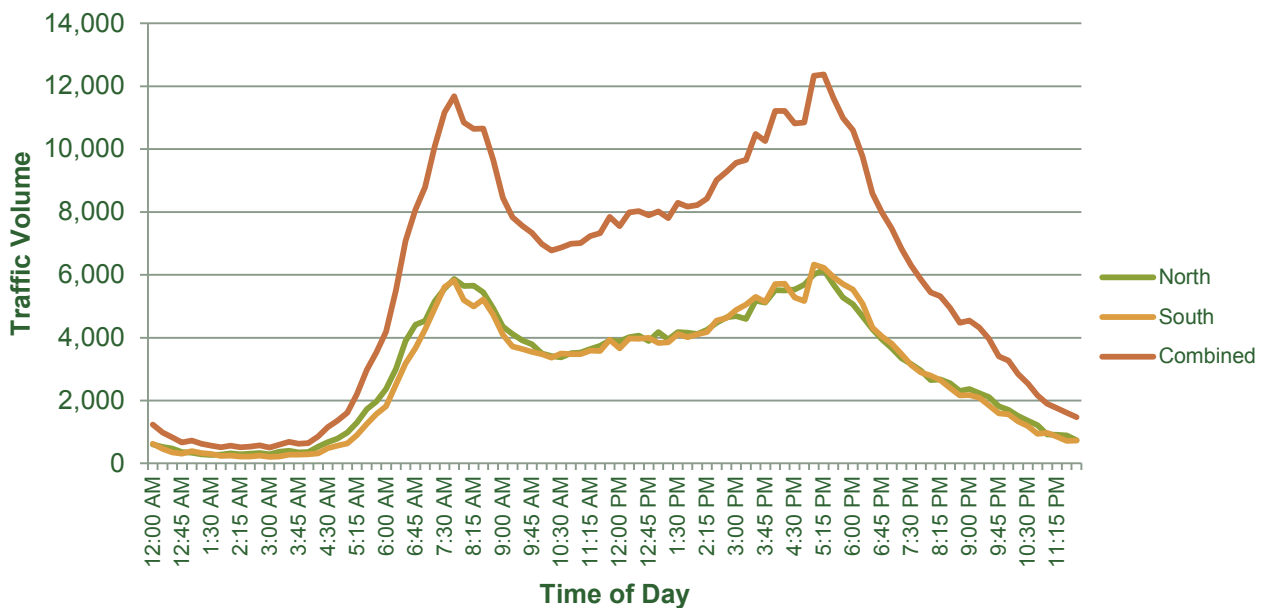
Source: Delaware Valley Regional Planning Commission, 2010

Table 21:
Screenline E Traffic Volumes

Year	Volume
1995	524,650
2000	567,839
2005	581,479
2010	569,032
1995-2000 Change	8.2%
2000-2005 Change	2.4%
2005-2010 Change	-2.1%
1995-2010 Change	8.5%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 19:
Screenline E Time-of-Day Variation



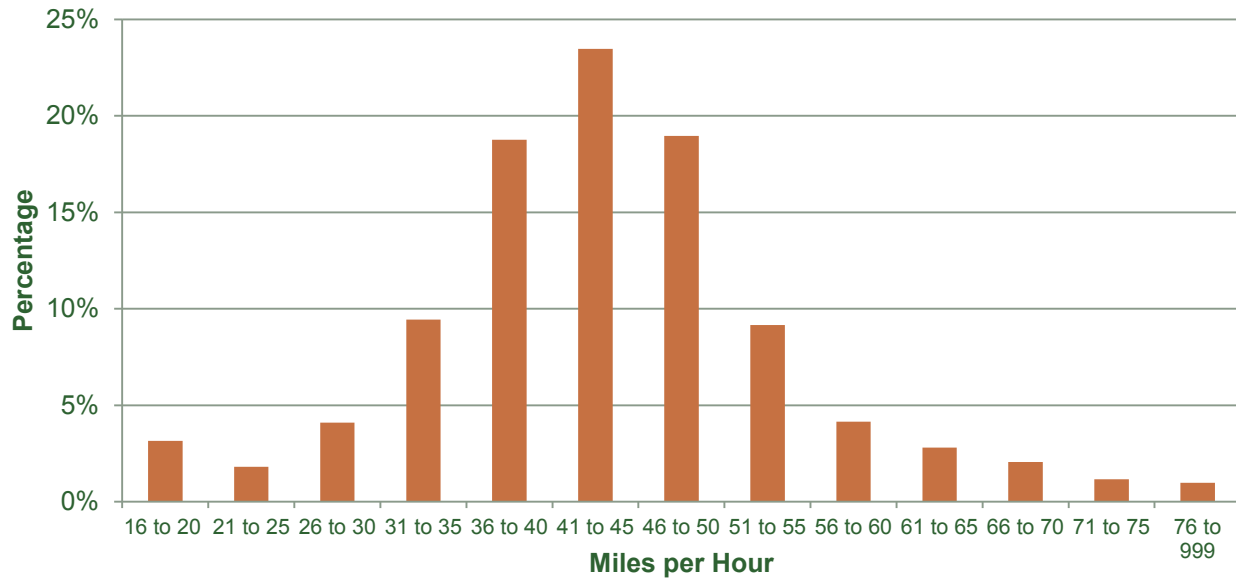
Source: Delaware Valley Regional Planning Commission, 2010

Table 22:
Percent of Traffic During Peak Hours

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
6.5%	7.4%	7.2%	7.3%	8.2%	8.1%	8.1%	8.3%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 20:
Screenline E Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 23:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	3.0%
Passenger Car	76.9%
2-Axle, 4-Tire Single-Unit Truck	14.3%
School & Commercial Bus	0.8%
2-Axle, 6-Tire Single-Unit Truck	2.8%
3-Axle Single-Unit Truck	0.5%
4-Axle Single-Unit Truck	0.1%
4- or Less Axle Single Trailer Truck	0.9%
5-Axle Single Trailer Truck	0.7%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.0%
6-Axle Multitrailer Truck	0.0%
7- or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	20.1%
Heavy Trucks	5.0%
Tractor-Trailers	1.7%

Source: Delaware Valley Regional Planning Commission, 2010

Table 24:
Average Weekday Transit Passengers
Crossing Screenline E

Carrier	Routes	Daily Passengers
NJ Transit Bus	317, 406, 407, 409, 413, 417, 418, 419, 457	2,882
NJ Transit Rail	Riverline	4,601
TOTAL		7,483

Source: New Jersey Transit, 2010

Screenline F (Crosswicks Creek)

This screenline follows the border between Burlington and Mercer counties in New Jersey, from the Delaware River to the Monmouth County border. It has nine traffic monitoring locations and tracks the flow of traffic between Mercer County and the rest of the DVRPC region. Daily traffic crossing Screenline F was approximately 234,037 vehicles per day in 2010. This represents a 9.1 percent decrease from 2005. The total vehicular volume crossing this screenline is approximately seven percent of the regional total.

Figure 22 shows the time-of-day distribution for F. Screenline F is distinguishable from the other screenlines for a number of reasons. It is characterized by well-defined, and relatively compressed, morning and afternoon peaks. It has very clear peak directions, with most traffic moving north toward employment opportunities in Trenton, northern New Jersey and New York in the morning, and south in the afternoon. Screenline F has the highest percentage of daily traffic in the AM and PM peak hours. Approximately 8.9 percent of the daily traffic crossing this screenline occurs in the AM peak hour, and 9.3 percent occurs in the PM peak hour. Also, this screenline appears to have a greater drop-off after the morning rush hour, with midday traffic levels falling to between 2,356 and 2,849 vehicles in each 15 minute interval between 10:00 AM and 2:00 PM. This is only approximately 44 percent of the peak levels.

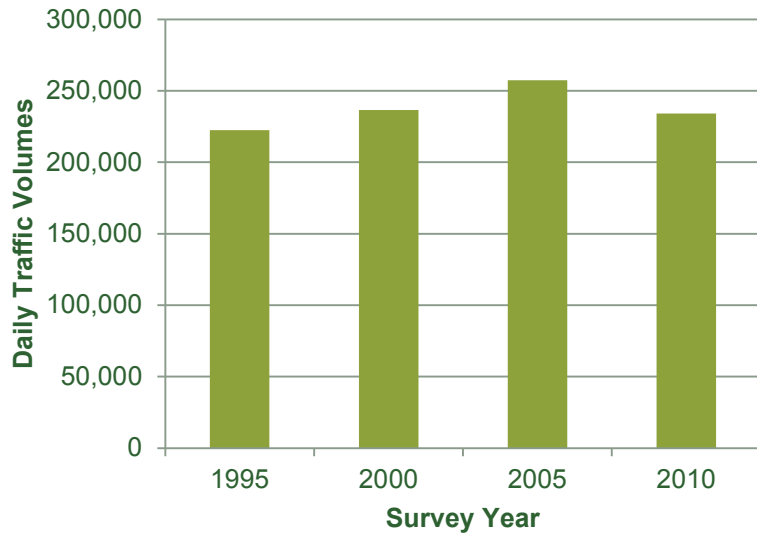
Table 26 shows that for Screenline F, the percentage of daily traffic occurring in the AM and PM peak hours has increased more than any of the other screenlines between 2005 and 2010.

Vehicle classification and speed data was collected at three of the nine traffic monitoring locations. A histogram of the speeds of vehicles crossing F is displayed in **Figure 23**. The average speed for vehicles crossing Screenline F is 49.8 miles per hour, which is the highest of all of the screenlines. US 206 is a good example of one of the roads crossing F, with observed speeds that stay between 50 and 55 miles per hour throughout the day.

Vehicle classification data is displayed in **Table 27**. Screenline F is very similar to the other screenlines. Most of the traffic crossing F (94.2 percent) is either passenger cars or light trucks. Only 1.8 percent of vehicles are tractor-trailers.

At just under 4,000 passengers, Screenline F has the second lowest number of transit passengers each day. This represents 0.7 percent of the regional total. This screenline runs parallel to Screenline E, but further north, toward Trenton. Therefore, it is traversed by several of the same transit routes as Screenline E, in particular New Jersey Transit's Riverline and Bus Routes 409 and 418.

Figure 21:
1995–2010 Traffic Volumes for Screenline F



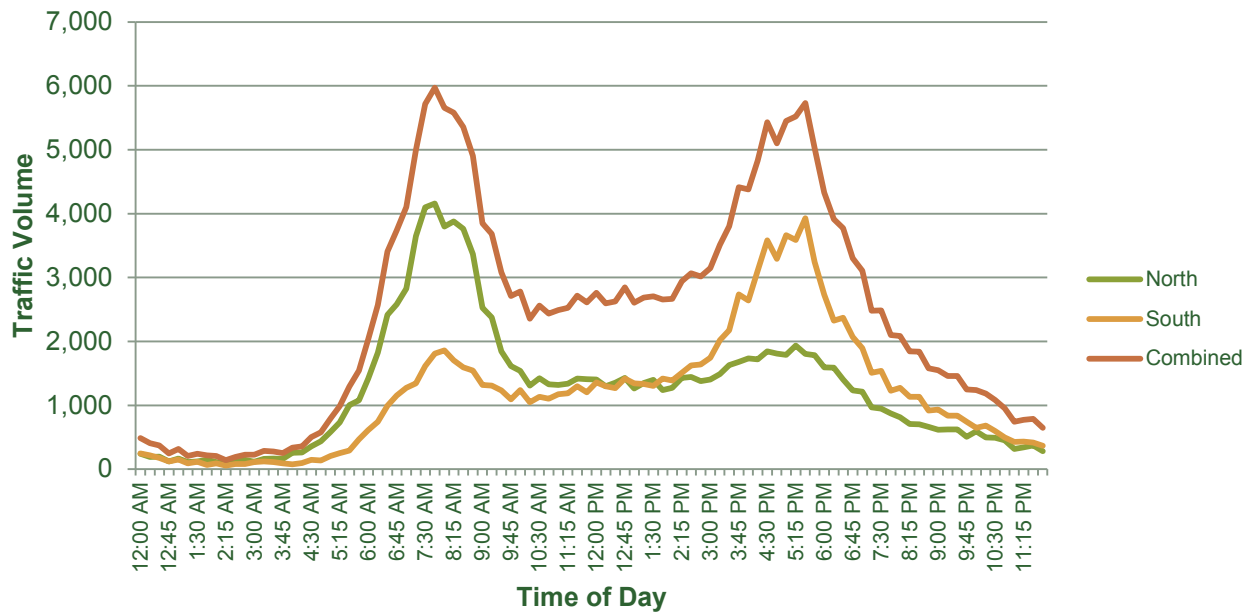
Source: Delaware Valley Regional Planning Commission, 2010

Table 25:
Screenline F Traffic Volumes

Year	Volume
1995	222,541
2000	236,609
2005	257,372
2010	234,037
1995-2000 Change	6.3%
2000-2005 Change	8.8%
2005-2010 Change	-9.1%
1995-2010 Change	5.2%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 22:
Screenline F Time-of-Day Variation



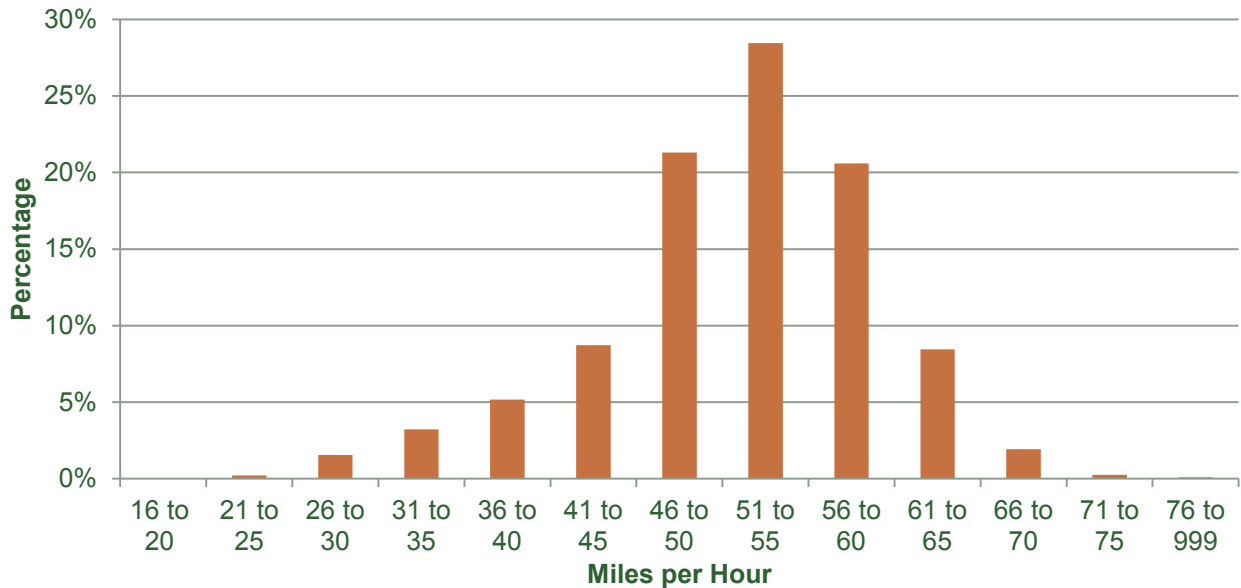
Source: Delaware Valley Regional Planning Commission, 2010

Table 26:
Percent of Traffic During Peak Hours

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
8.0%	8.1%	7.9%	8.9%	7.9%	8.7%	8.7%	9.3%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 23:
Screenline F Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 27:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	0.3%
Passenger Car	80.8%
2-Axle, 4-Tire Single-Unit Truck	13.4%
School & Commercial Bus	0.4%
2-Axle, 6-Tire Single-Unit Truck	2.8%
3-Axle Single-Unit Truck	0.4%
4-Axle Single-Unit Truck	0.0%
4- or Less Axle Single Trailer Truck	0.7%
5- Axle Single Trailer Truck	0.9%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.0%
6-Axle Multitrailer Truck	0.0%
7- or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	18.9%
Heavy Trucks	5.1%
Tractor-Trailers	1.8%

Source: Delaware Valley Regional Planning Commission, 2010

Table 28:
Average Weekday Transit Passengers
Crossing Screenline F

Carrier	Routes	Daily Passengers
NJ Transit Bus	409,418	294
NJ Transit Rail	Riverline	1,806
TOTAL		3,977

Source: New Jersey Transit, 2010

Inner Cordon

A summary of the traffic movements crossing the Inner Cordon is presented in **Table 29**. **Figure 24** displays changes in traffic that occurred along the Pennsylvania and New Jersey portions of the Inner Cordon in 1995, 2000, 2005, and 2010.

In 2010, approximately 2.65 million vehicles crossed the Inner Cordon daily. Since 1995, total growth for the entire Inner Cordon has increased by approximately 309,000 vehicles per day, or 13.2 percent. However, for the 2005 to 2010 time period, volume actually decreased by 1.3 percent, due in large part to the recession of 2007 to 2009. The average annual growth for this same five-year period was -0.3 percent.

Although the total amount of traffic decreased between 2005 and 2010, it actually increased for roads crossing the Inner Cordon in Mercer and Camden counties. Traffic increased by 6.4 percent in Mercer County, from 464,656 vehicles per day (vpd) in 2005 to 494,592 vpd in 2010. In Camden County, traffic increased by 5.8 percent, from 161,411 vpd in 2005 to 170,816 vpd in 2010.

Figure 25 shows the time-of-day distribution for the Inner Cordon. As shown in **Table 30**, 7.5 percent of daily traffic occurs during the AM peak hour, and 8.4 percent occurs during the PM peak hour. These percentages vary from county to county. For the AM peak hour, it varies from 6.9 percent for the portion of the Inner Cordon in Bucks County, Pennsylvania, to eight percent in Camden County, New Jersey. For the PM peak hour, it varies from 8.1 percent for the Inner Cordon in Montgomery County, Pennsylvania, to 8.9 percent in Mercer County, New Jersey.

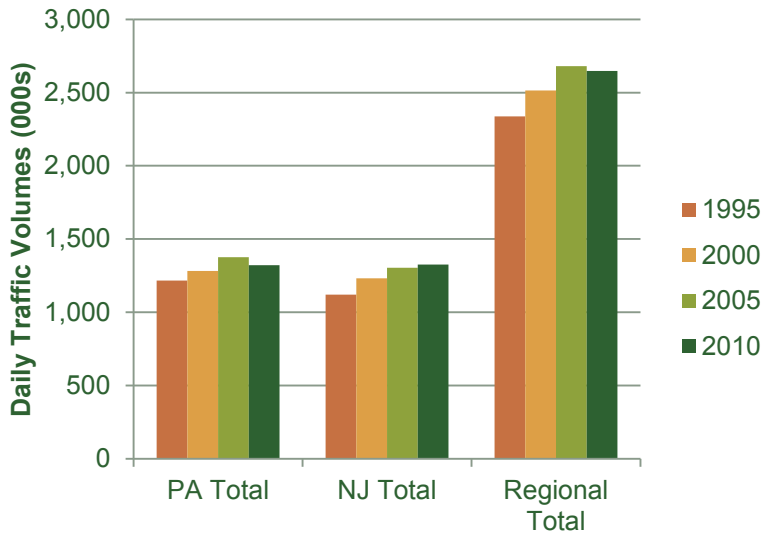
Figure 26 displays the speed data for vehicles crossing the Inner Cordon. The average speed for all vehicles crossing the Inner Cordon is 42.7 miles per hour. However, this can vary substantially by road, direction of travel, and time of day. For example, average speeds on NJ 45 in Gloucester County, New Jersey, tend to stay between 30 and 37 miles per hour throughout most of the day. But average speeds for this road in the northbound direction were observed to decrease to 10 to 15 miles per hour during the AM peak hour due to congestion.

Table 31 displays the vehicle classification data for roads crossing the Inner Cordon. Approximately 92.8 percent of vehicles were passenger cars and light trucks, and only 1.6 percent were tractor-trailers.

Transit ridership crossing the Inner Cordon is displayed in **Table 32**. Approximately 72,893 transit passengers cross the Inner Cordon every weekday. AMTRAK carries 46,575 (64 percent), SEPTA carries 20,268 (28 percent), and New Jersey Transit buses carry 6,050 (eight percent).⁹

⁹ New Jersey Transit rail ridership data was not available.

Figure 24:
1995–2010 Daily Traffic Volumes for the Inner Cordon



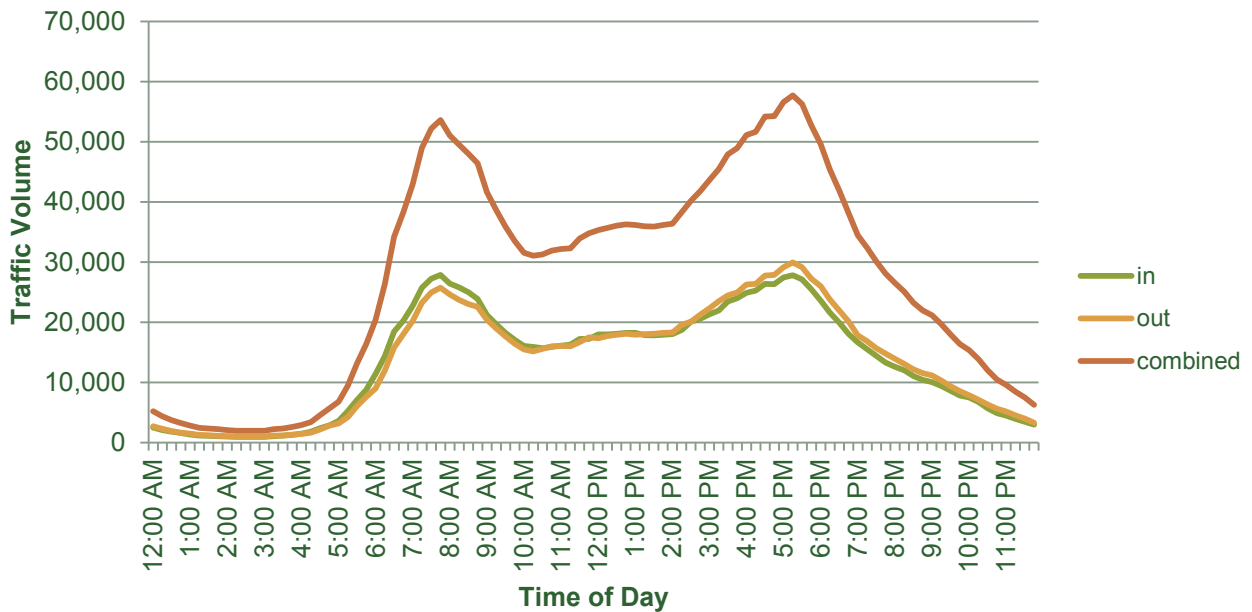
Source: Delaware Valley Regional Planning Commission, 2010

Table 29:
Inner Cordon Traffic Volumes

Year	Volume
1995	2,337,921
2000	2,516,266
2005	2,681,405
2010	2,646,930
1995-2000 Change	7.6%
2000-2005 Change	6.6%
2005-2010 Change	-1.3%
1995-2010 Change	13.2%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 25:
Inner Cordon Time-of-Day Variation



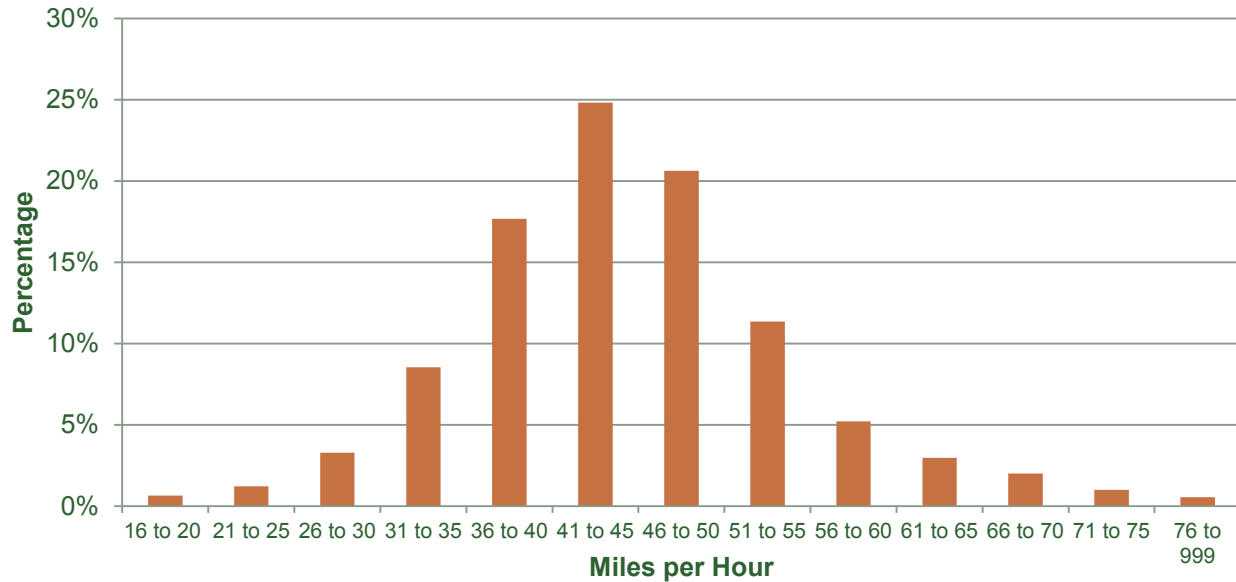
Source: Delaware Valley Regional Planning Commission, 2010

Table 30:
Percent of Traffic During Peak Hours – Inner Cordon

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
NA	NA	NA	7.5%	NA	NA	NA	8.4%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 26:
Inner Cordon Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 31:
Percent of Traffic by Vehicle Type

Vehicle Type	Percent of Traffic
Motorcycle	0.5%
Passenger Car	77.1%
2-Axle, 4-Tire Single-Unit Truck	15.7%
School & Commercial Bus	0.8%
2-Axle, 6-Tire Single-Unit Truck	3.6%
3-Axle Single-Unit Truck	0.5%
4-Axle Single-Unit Truck	0.2%
4- or Less Axle Single Trailer Truck	0.8%
5-Axle Single Trailer Truck	0.7%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.0%
6-Axle Multitrailer Truck	0.0%
7-or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	22.4%
Heavy Trucks	5.9%
Tractor-Trailers	1.6%

Source: Delaware Valley Regional Planning Commission, 2010

Table 32:
Average Weekday Transit Passengers
Crossing Inner Cordon

Carrier	Daily Passengers
AMTRAK NE Corridor	42,266
AMTRAK Keystone	4,309
SEPTA Rail	14,393
SEPTA Bus	5,875
NJ Transit Bus	6,050
NJ Transit Rail	Not Available
TOTAL	72,893

Source: Southeastern Pennsylvania Transportation Authority, New Jersey Transit, AMTRAK, 2010

Outer Cordon

In 2010, approximately 1.50 million vehicles per day crossed the Outer Cordon. Since 1995, there has been a 23 percent increase in traffic crossing the Outer Cordon. However, between 2005 and 2010, the volume of traffic actually decreased by 7.5 percent. New Jersey's 72 stations along the Outer Cordon account for 58.2 percent of the total volume, while Pennsylvania's 83 stations account for the remaining 41.8 percent. In terms of average annual growth rate, the entire Outer Cordon decreased from a growth rate of +1.0 percent between 2005 and 2010, to a rate of -1.5 percent between 2005 and 2010. A summary of traffic crossing the Outer Cordon Line by county and state is presented in **Table 33** and **Figure 27**.

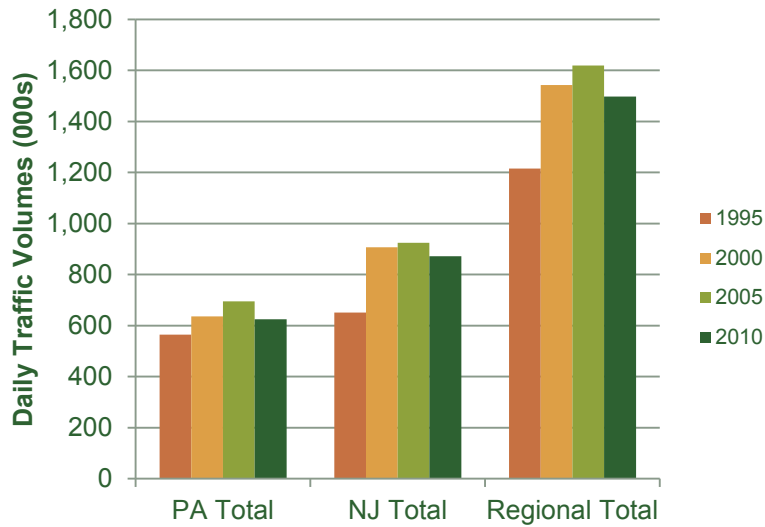
Time-of-day data is displayed in **Figure 28** and the percentage of daily traffic occurring in the AM and PM peak hours is shown in **Table 34**. For the entire Outer Cordon, 7.3 percent of traffic occurs during the AM peak hour and 8.2 percent occurs during the PM peak hour. However, there can be substantial variation in the time-of-day distribution from county to county. **Figure 28** shows the time-of-day distribution of all traffic crossing the Outer Cordon.

A histogram of the speeds of vehicles crossing the Outer Cordon is shown in **Figure 29**. The average speed for all vehicles is 45.7 miles per hour.

Vehicle classification data for the Outer Cordon is shown in **Table 35**. Approximately 89 percent of vehicles crossing the Outer Cordon are passenger cars and light trucks, which is several percentage points lower than the other screenlines. Also, the percentage of tractor-trailers is higher (3.2 percent). This is twice as high as the percentage of tractor-trailers crossing the Inner Cordon.

Table 36 displays public transit ridership crossing the Outer Cordon. Approximately 50,826 passengers cross the Outer Cordon every weekday. AMTRAK's Northeast Regional and Keystone passenger rail service carries 47,566, or approximately 94 percent, of these passengers. The Northeast Regional service connects Philadelphia with New York and Boston to the north, and with Wilmington, Baltimore, and Washington to the south. The Keystone service connects Philadelphia with Harrisburg. The remaining transit passengers crossing the Outer Cordon are carried by New Jersey Transit (3,138) and SEPTA (122) bus routes. Approximately 46 percent of regional transit passengers cross the Outer Cordon in Pennsylvania, and 54 percent cross in New Jersey.

Figure 27:
1995–2010 Daily Traffic Volumes for the Outer Cordon



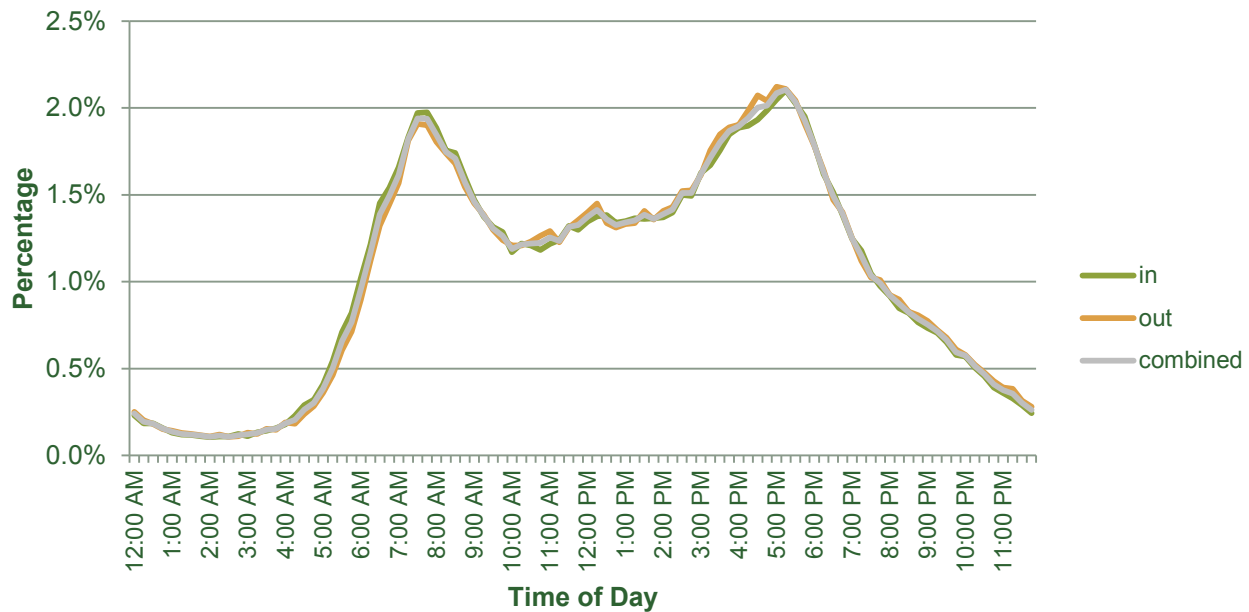
Source: Delaware Valley Regional Planning Commission, 2010

Table 33:
Outer Cordon Traffic Volumes

Year	Volume
1995	1,215,933
2000	1,529,623
2005	1,618,971
2010	1,497,890
1995-2000 Change	25.8%
2000-2005 Change	5.8%
2005-2010 Change	-7.5%
1995-2010 Change	23.2%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 28:
Outer Cordon Time-of-Day Variation



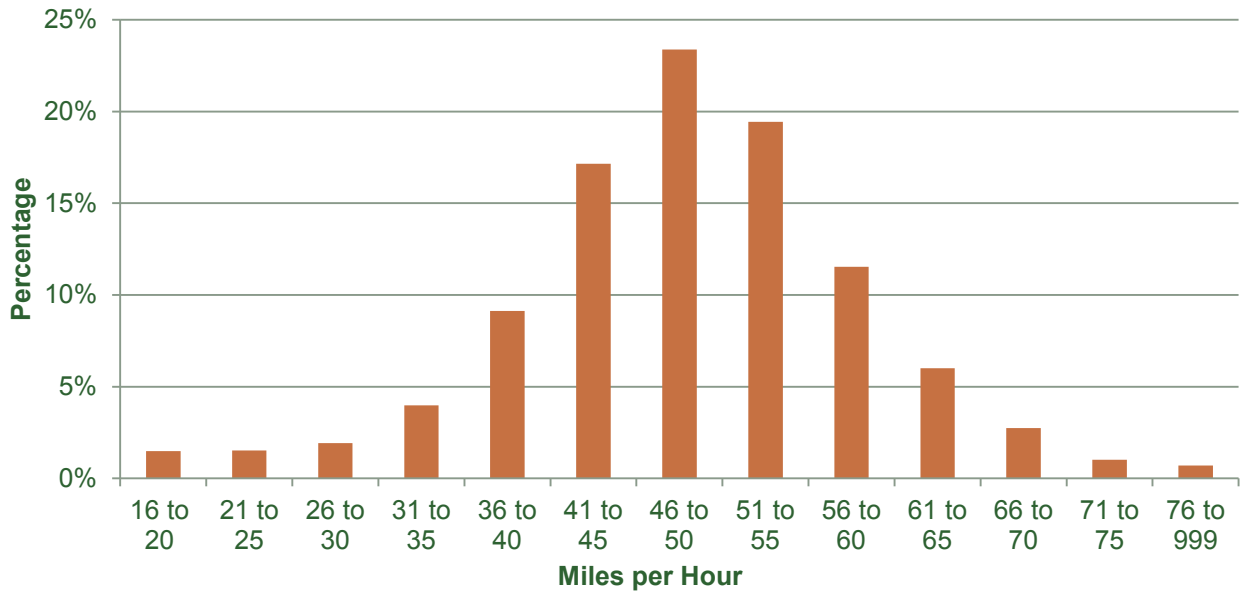
Source: Delaware Valley Regional Planning Commission, 2010

Table 34:
Percent of Traffic During Peak Hours Outer Cordon

AM Peak Hour				PM Peak Hour			
1995	2000	2005	2010	1995	2000	2005	2010
NA	NA	NA	7.3%	NA	NA	NA	8.2%

Source: Delaware Valley Regional Planning Commission, 2010

Figure 29:
Outer Cordon Speed Histogram



Source: Delaware Valley Regional Planning Commission, 2010

Table 35:
Percent of Traffic by Vehicle Type

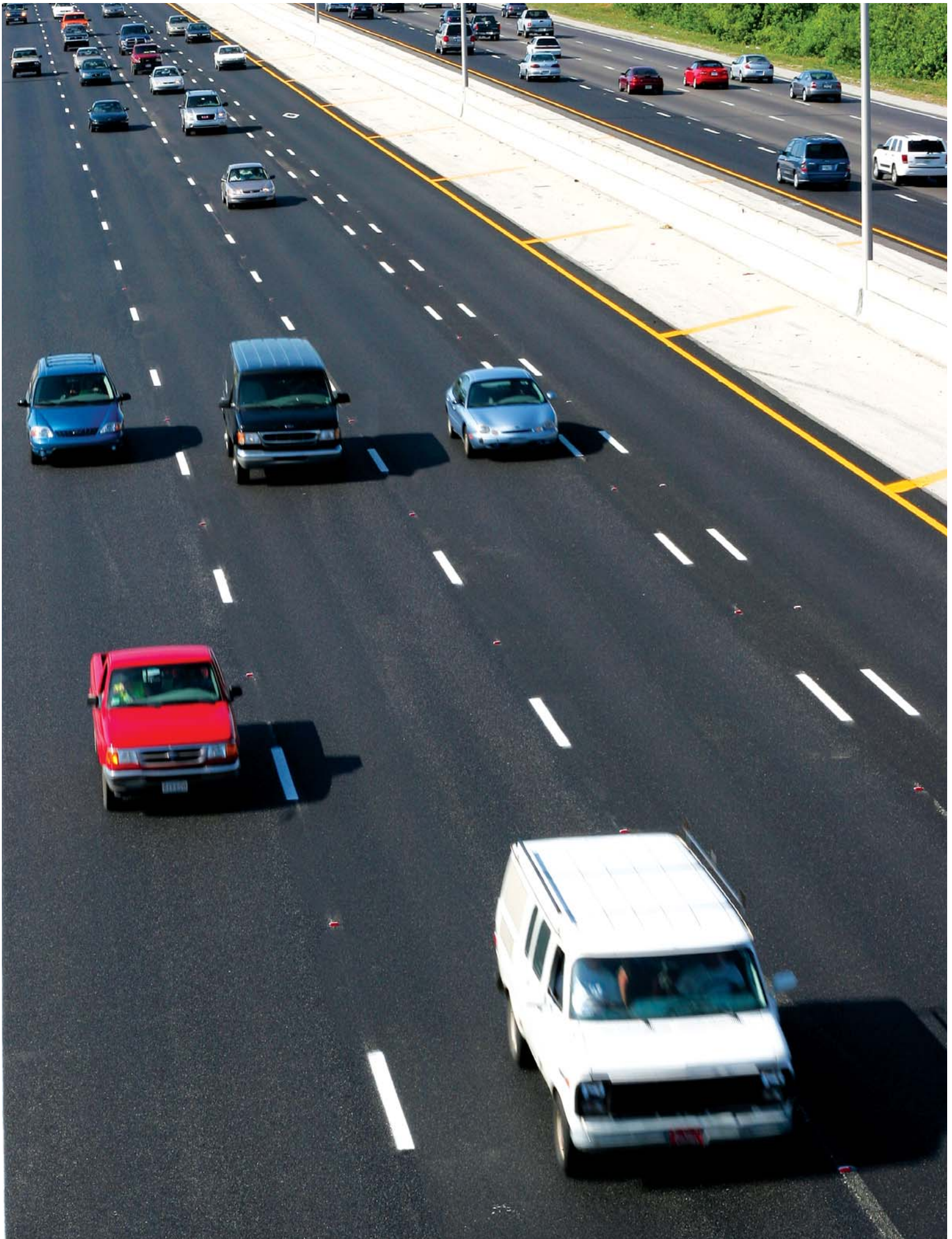
Vehicle Type	Percent of Traffic
Motorcycle	0.4%
Passenger Car	71.6%
2-Axle, 4-Tire Single-Unit Truck	17.4%
School & Commercial Bus	1.2%
2-Axle, 6-Tire Single-Unit Truck	5.1%
3-Axle Single-Unit Truck	0.7%
4-Axle Single-Unit Truck	0.3%
4- or Less Axle Single Trailer Truck	0.8%
5-Axle Single Trailer Truck	2.3%
6- or More Axle Single Trailer Truck	0.1%
5-Axle Multitrailer Truck	0.0%
6-Axle Multitrailer Truck	0.0%
7- or More Axle Multitrailer Truck	0.0%
All Trucks and Buses	28.0%
Heavy Trucks	9.3%
Tractor-Trailers	3.2%

Source: Delaware Valley Regional Planning Commission, 2010

Table 36:
Average Weekday Transit Passengers
Crossing Outer Cordon

Carrier	Daily Passengers
AMTRAK NE Corridor	43,617
AMTRAK Keystone	3,949
SEPTA Bus	122
NJ Transit Bus	3,138
TOTAL	50,826

Source: Southeastern Pennsylvania Transportation Authority, New Jersey Transit, AMTRAK, 2010



IV. Turnpikes and Interstates

Much of the through traffic in the region is carried by the two toll facilities that serve the Delaware Valley: the Pennsylvania and New Jersey turnpikes. The respective commissions have supplied interchange-to-interchange counts, which are shown in **Figure 30** through **Figure 36**, and **Table 37**. A brief analysis of the findings is described below.

Pennsylvania Turnpike

The traffic statistics for this facility were provided by the Pennsylvania Turnpike Commission and reflect Average Annual Daily Traffic (AADT) volumes derived from annual counts collected and processed by that agency. The growth in traffic volumes on individual links is displayed in **Figure 30**.

Within the DVRPC region, the Pennsylvania Turnpike carried between 37,200 and 118,200 vehicles on an average day in 2010. Daily volumes on the turnpike decreased between 2005 and 2010, with the range of annual growth varying from -4.4 percent on the segment between Delaware Valley (Interchange 358) and Bensalem (Interchange 351), to -0.5 percent between Bensalem and Fort Washington (Interchange 339). The Northeast Extension carried between 51,000 and 65,500 vpd in 2010. This section of the turnpike had a positive average annual growth rate of between +0.3 percent and +1.0 percent.

New Jersey Turnpike

The 2010 traffic volumes for the New Jersey Turnpike were obtained from the New Jersey Turnpike Authority. **Figure 31** presents a schematic of the facility for sections between the Delaware Memorial Bridge (Interchange 1) and Cranbury-Jamesburg (Interchange 8A). The New Jersey Turnpike carried between 41,000 and 114,900 vehicles on an average day in 2010. The Turnpike Extension carried between 34,100 and 38,100 vehicles per day in 2010.

With the exception of the section between the Delaware Memorial Bridge (Interchange 1) and Woodbury-South Camden (Interchange 3), volumes on the New Jersey Turnpike decreased between 2005 and 2010. The biggest decrease was between Hightstown-Freehold (Interchange 8) and Cranbury-Jamesburg (Interchange 8A), where the average annual growth was -3.3 percent between 2005 and 2010. Growth was positive at the Delaware Memorial Bridge, with an average annual growth rate of +2.4 percent.

I-95 Delaware Expressway

2010 daily traffic volumes on I-95 between the Delaware/Pennsylvania state line and Exit 8 (Lawrence-Princeton Pike/CR 583) in New Jersey are displayed in **Figure 32**.

Within the DVRPC region, daily two-way volume on the Delaware Expressway varied between a low of 53,700 vpd between Exits 2 and 3 in New Jersey, and a high of 165,000 vpd (just on the inner lanes) between Exits 4 and 5 in Pennsylvania.

I-195

2010 daily traffic volumes on I-195 between the I-295 interchange in Trenton and the Allentown/CR-524 interchange are displayed in **Figure 33**.

The highest two-way volumes on I-195 (81,600 vpd) were recorded between the I-295 interchange in Trenton (Exit 60) and Exit 1 (Bordentown-White Horse). Volumes gradually decrease as one travels eastward, declining to 47,600 vpd between Exit 7 (Washington-Allentown) and Exit 8 (Allentown/CR-524).

I-295

2010 daily traffic volumes on I-295 between Exit 10 (Swedesboro-Center Square Road) and Exit 67 (New Brunswick/Trenton-Brunswick Pike) are displayed in **Figure 34**.

Two-way daily volumes within the DVRPC region vary between a low of 37,000 vpd between Exits 7 (Auburn – Pedricktown Road) and 10 (Swedesboro-Center Square Road), and a high of 114,300 vpd between Exits 32 (Haddonfield/Voorhees/Gibbsboro-Haddonfield-Berlin Road) and 34 (Marlton/Cherry Hill/Camden-Marlton Pike).

I-476 Mid-County Expressway

2010 daily traffic volumes on I-476 between I-95 Delaware Expressway in Chester and Exit 19 (Plymouth Meeting – Germantown Pike) are displayed in **Figure 35**.

Two-way daily volumes within the DVRPC region vary between a low of 83,600 vpd between I-95 and Exit 1 (MacDade Boulevard/East 22nd Street) and a high of 131,300 vpd at the Schuylkill River crossing, between Exit 16 (Philadelphia – Valley Forge – Schuylkill Expressway) and Exit 18 (Conshohocken – Norristown).

I-76 Schuylkill Expressway

2010 daily traffic volumes on I-76 between I-276 and the Walt Whitman Bridge crossing the Delaware River are displayed in **Figure 36**.

Two-way daily volumes within the DVRPC region vary between a low of 57,500 vpd between Exits 348 (Penrose Avenue/PA 291 West) and 349 (Broad Street/PA 611) to a high of 179,800 vpd between Exits 342 (Girard Avenue/US 13) and 343 (Spring Garden Street/Haverford Avenue).

Figure 30:
 Pennsylvania Turnpike



Figure 31:
New Jersey Turnpike



Figure 32:
I-95 Delaware Expressway



Figure 33:
I-195



Figure 34:
I-295

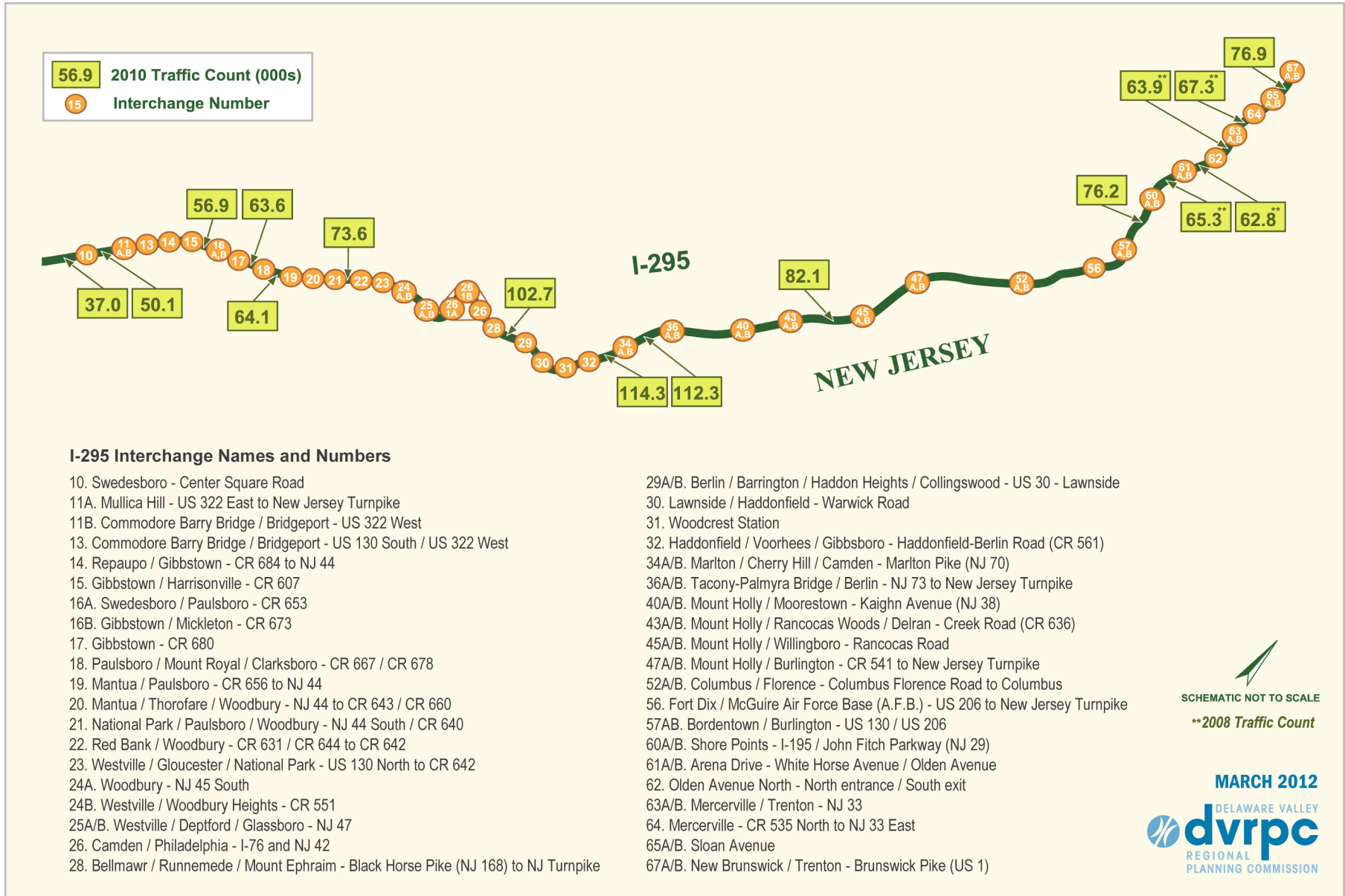


Figure 35:
Mid-County Expressway (I-476)



Figure 36:
Schuylkill Expressway (I-76)

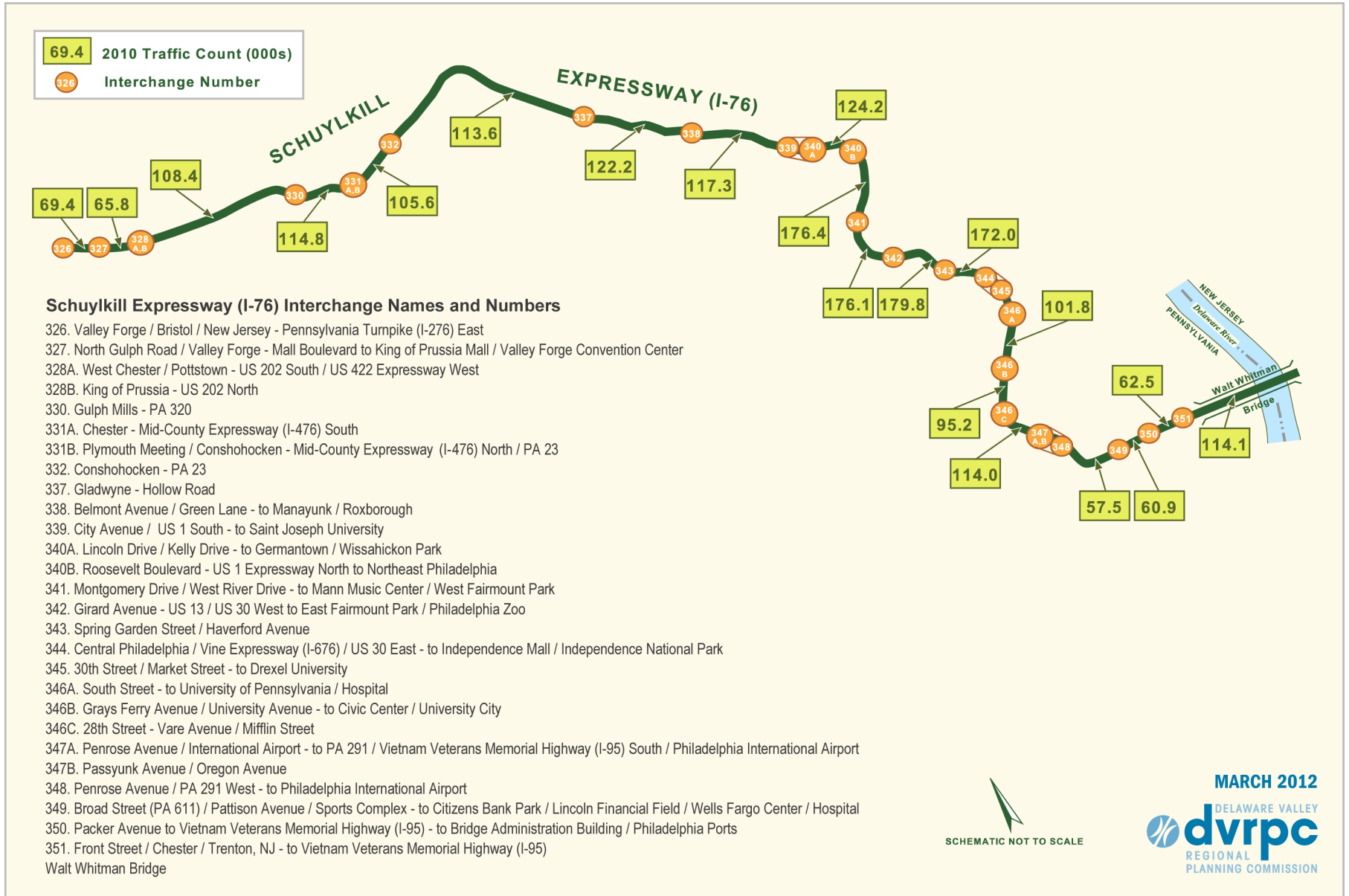


Table 37:
Turnpikes and Interstates (two-way volume in thousands)

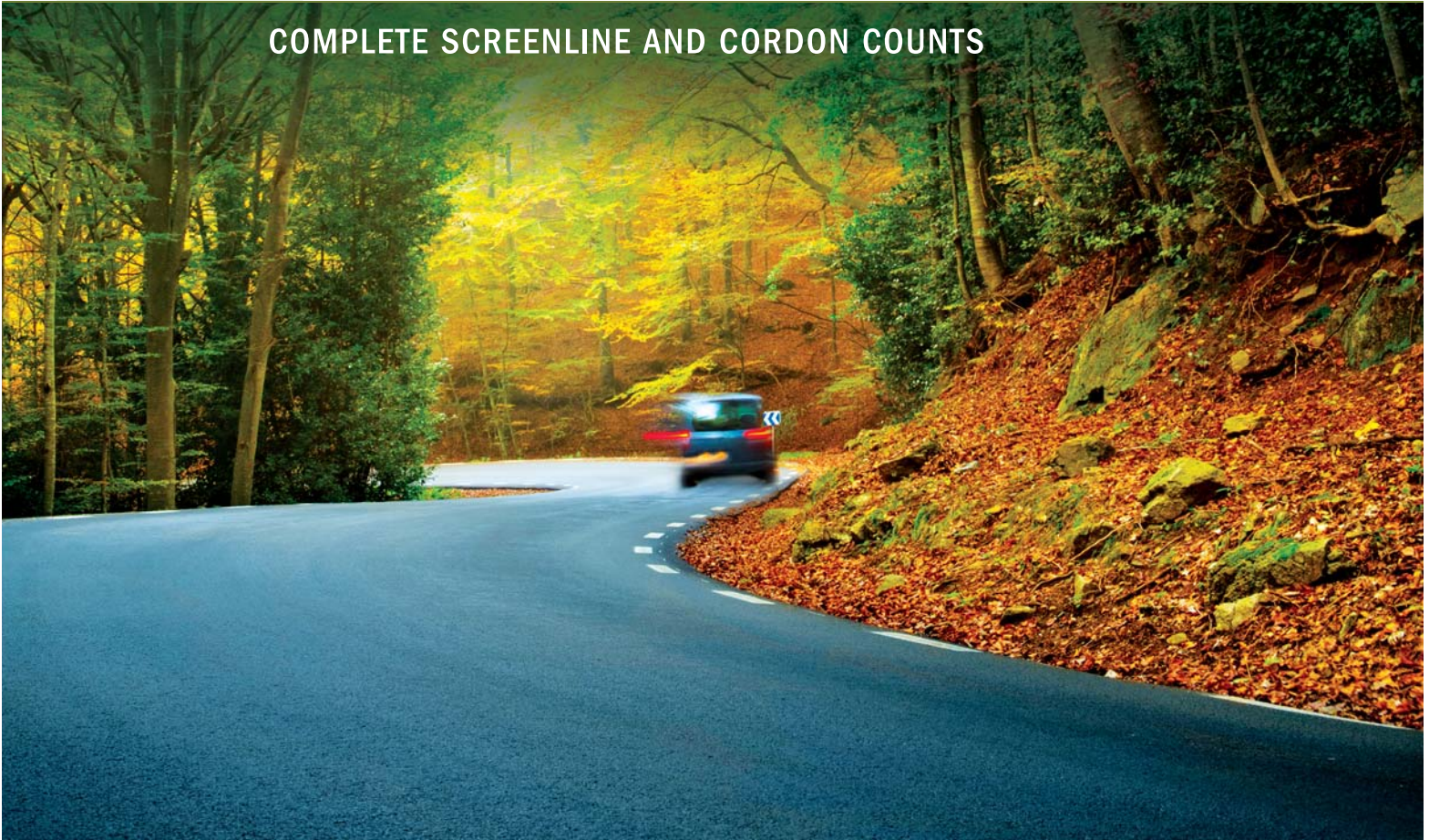
Turnpike	From Exit	To Exit	Volume (thousands)				Percentage Change			Average Annual Change		
			1995	2000	2005	2010	1995 to 2000	2000 to 2005	2005 to 2010	1995 to 2000	2000 to 2005	2005 to 2010
Pennsylvania Turnpike	312	326	35.8	41.6	47.0	44.8	16.2%	13.0%	-4.7%	3.0%	2.5%	-1.0%
	326	333	49.5	54.9	66.3	64.5	10.9%	20.8%	-2.7%	2.1%	3.8%	-0.5%
	333	20	60.8	71.8	79.8	77.4	18.1%	11.1%	-3.0%	3.4%	2.1%	-0.6%
	20	339	92.5	105.6	122.5	118.2	14.2%	16.0%	-3.5%	2.7%	3.0%	-0.7%
	339	343	84.8	95.8	108.1	105.5	13.0%	12.8%	-2.4%	2.5%	2.4%	-0.5%
	343	351	75.1	84.1	94.4	91.9	12.0%	12.2%	-2.6%	2.3%	2.3%	-0.5%
	351	358	36.1	41.0	46.5	37.2	13.6%	13.4%	-20.0%	2.6%	2.5%	-4.4%
	358	359	33.3	37.4	43.2	40.6	12.3%	15.5%	-6.0%	2.3%	2.9%	-1.2%
	20	31	44.6	56.5	64.5	65.5	26.7%	14.2%	1.6%	4.8%	2.7%	0.3%
	31	44	35.1	43.5	48.6	51.0	23.9%	11.7%	4.9%	4.4%	2.2%	1.0%
New Jersey Turnpike	1	2	36.8	42.9	36.4	41.0	16.6%	-15.2%	12.6%	3.1%	-3.2%	2.4%
	2	3	38.2	45.1	40.6	43.9	18.1%	-10.0%	8.1%	3.4%	-2.1%	1.6%
	3	4	43.0	51.6	53.2	52.9	20.0%	3.1%	-0.6%	3.7%	0.6%	-0.1%
	4	5	56.2	66.0	67.4	65.4	17.4%	2.1%	-3.0%	3.3%	0.4%	-0.6%
	5	6	61.4	68.2	73.5	70.2	11.1%	7.8%	-4.5%	2.1%	1.5%	-0.9%
	6	7	84.5	97.6	101.9	95.6	15.5%	4.4%	-6.2%	2.9%	0.9%	-1.3%
	7	7A	95.4	108.8	114.1	101.7	14.0%	4.9%	-10.9%	2.7%	1.0%	-2.3%
	7A	8	102.6	119.2	129.9	111.2	16.2%	9.0%	-14.4%	3.0%	1.7%	-3.1%
	8	8A	105.9	123.9	135.6	114.9	17.0%	9.4%	-15.3%	3.2%	1.8%	-3.3%
	6	6A	28.0	32.6	38.9	34.1	16.4%	19.3%	-12.3%	3.1%	3.6%	-2.6%
	6A	359	33.3	38.3	42.2	38.1	15.0%	10.2%	-9.7%	2.8%	2.0%	-2.0%

Source: Pennsylvania Turnpike Commission, New Jersey Turnpike Authority, 2010



APPENDIX A

COMPLETE SCREENLINE AND CORDON COUNTS





Screen Line/Cordon Line AADT Volumes 1995 - 2010

	1995 AADT	2000 AADT	2005 AADT	2010 AADT
PENNSYLVANIA SCREEN LINES, 92 STATIONS (+12 Bridges)				
SCREEN LINE A-B-C (DELAWARE RIVER BRIDGES)				
COMMODODE BARRY (US 322)	31,592	36,036	38,588	38,038
WALT WHITMAN (I-76)	97,090	100,350	115,522	105,316
BEN FRANKLIN (I-676, US 30)	96,242	98,734	106,090	101,342
BETSY ROSS (NJ 90)	37,126	36,066	39,800	33,779
TACONY - PALMYRA (PA/NJ 73)	53,597	51,756	48,147	60,000
BURLINGTON - BRISTOL (PA 413)	24,664	22,650	23,973	24,000
PA/NJ TURNPIKE (I-276)	33,271	37,435	43,179	40,629
TRENTON FREEWAY (US 1)	48,508	48,543	53,301	59,076
BRIDGE STREET (US BUS 1)	13,403	13,272	16,674	20,100
CALHOUN STREET	20,343	21,776	18,507	18,400
SCUDDERS FALLS (I-95)	51,958	55,314	59,251	58,200
WASHINGTON CROSSING	6,109	6,784	6,873	6,900
TOTAL	513,903	528,716	569,905	565,780
SEGMENT D-1 EXTENSION (UPPER SCHUYLKILL RIVER)				
SL - 601 US 422, POTTSTOWN BYP	29,176	28,335	27,484	30,162
SL - 602 PA 100 BRIDGE	28,523	32,173	33,646	30,446
SL - 603 HANOVER ST BRIDGE	12,080	8,379	14,170	13,093
SL - 604 KEIM ST BRIDGE	13,257	9,532	9,583	8,744
SL - 605 US 422, POTTSTOWN BYP	39,849	44,311	50,603	49,111
SL - 606 LINFIELD RD BRIDGE	4,093	6,056	7,416	10,669
SL - 607 MAIN ST BRIDGE	14,669		15,612	17,058
SL - 608 PA 113, BLACK ROCK RD BRIDGE	5,198	5,595	7,321	6,565
SL - 609 PA 29, BRIDGE ST	17,385	17,802	18,216	17,971
SL - 610 PAWLINGS RD BRIDGE	7,153	8,799	8,897	11,038
TOTAL	171,383	160,982	192,948	194,856
SEGMENT D-1 (UPPER SCHUYLKILL RIVER)				

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
N/A	OLD BETZWOOD BRIDGE				
SL - 611	US 422, POTTSTOWN EXPY BRIDGE	76,515	90,745	102,162	88,782
SL - 612	US 202, DANNEHOWER BRIDGE	26,291	27,257	28,870	25,267
SL - 613	US 202, DEKALB ST BRIDGE	19,026	22,912	19,581	16,891
SL - 614	I-276, PA TPKE BRIDGE	49,528	54,689	66,275	64,477
SL - 615	I-476, MID - COUNTY EXPY BRIDGE	105,577	103,145	113,394	105,890
SL - 616	FAYETTE ST BRIDGE	32,373	38,344	38,373	33,601
SL - 617	GREEN LANE BELMONT AVE BRIDGE	25,737	26,197	24,776	23,472
SL - 618	US 1, CITY AVE BRIDGE	58,415	60,409	56,524	48,762
SL - 619	FALLS BRIDGE	9,255	12,086	18,229	13,293
SL - 620	US 1, ROOSEVELT EXPY BRIDGE	112,967	118,269	117,189	113,373
	TOTAL	515,684	554,053	585,373	533,808

SEGMENT D-2 (NORTH PHILADELPHIA)

SL - 621	KELLY DR	29,768	27,275	27,033	20,589
SL - 622	RIDGE AVE	12,191	12,865	13,672	12,789
SL - 623	SCOTTS LINE	1,147	1,430	1,763	2,376
SL - 624	HENRY AVE	15,695	16,278	15,115	16,085
SL - 625	US 13, HUNTING PARK AVE	13,709	14,214	14,342	14,419
SL - 626	FOX ST	10,521	10,421	11,327	10,990
SL - 627	22ND ST	9,549	9,778	7,218	7,411
SL - 628	21ST ST	2,480	2,525	2,453	2,244
SL - 629	20TH ST	1,580	1,664	1,342	1,271
SL - 630	19TH ST	1,986	1,012	642	852
SL - 631	17TH ST	8,458	9,113	8,114	8,215
SL - 632	16TH ST	1,610	2,775	1,703	1,767
SL - 633	15TH ST	2,177	2,671	2,038	1,807
SL - 634	CARLISLE ST	862	802	759	894
SL - 635	PA 611, BROAD ST	50,183	53,308	40,018	31,937
SL - 636	PARK AVE	1,810	1,920	1,576	1,744
SL - 637	13TH ST	1,118	1,444	814	974

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
SL - 638	GERMANTOWN AVE	11,738	14,425	13,143	11,342
SL - 639	11TH ST	862	927	559	455
SL - 640	GOODMAN ST	1,308		158	2,459
SL - 641	WESTMORELAND ST	3,058	2,759	2,212	2,173
SL - 642	9TH ST	2,260	2,178	2,326	1,876
SL - 643	SEDGELY AVE	6,834	7,079	10,282	5,060
SL - 644	6TH ST	10,525	7,639	6,887	6,325
SL - 645	5TH ST	7,762	11,795	11,192	9,372
SL - 646	2ND ST	12,078	15,255	12,653	7,953
SL - 647	FRONT ST	13,195	13,664	14,949	18,309
SL - 648	B ST	19,887	14,736	10,227	17,308
SL - 649	G ST	6,490	4,033	6,609	6,762
SL - 650	I ST	12,671	11,236	12,886	12,439
SL - 651	K ST	4,856	4,175	3,599	4,549
SL - 652	KENSINGTON AVE	7,547	9,395	10,988	9,013
SL - 653	CASTOR AVE	17,615	14,478	14,473	12,933
SL - 654	FRANKFORD AVE	10,909	11,464	14,317	14,538
SL - 655	ARAMINGO AVE	24,958	26,338	33,086	25,963
SL - 656	I-95, DELAWARE EXPY	158,317	163,520	184,329	180,247
SL - 657	RICHMOND ST	13,844	18,401	15,939	14,047
	TOTAL	511,558	522,991	530,743	499,486

SEGMENT D-3 (LOWER SCHUYLKILL RIVER)

SL - 658	STRAWBERRY MANSION BRIDGE	13,188	13,196	16,421	16,317
SL - 659	US 13, GIRARD AVE BRIDGE	27,885		32,986	30,309
SL - 660	SPRING GARDEN ST BRIDGE	20,123	23,526	22,919	19,171
SL - 661	WEST RIVER DR BRIDGE	18,501	18,591	21,656	17,714
SL - 662	I-676, VINE ST EXPY BRIDGE	126,541	117,614	134,643	111,705
SL - 663	J F KENNEDY BLVD BRIDGE	13,880	13,618	15,007	11,102
SL - 664	MARKET ST BRIDGE	23,017	22,617	20,451	15,676
SL - 665	CHESTNUT ST BRIDGE	15,098	14,151	14,036	13,076
SL - 666	WALNUT ST BRIDGE	21,714	19,104	18,086	14,978
SL - 667	SOUTH ST BRIDGE	25,995	22,791	19,143	20,416

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
SL - 668	I-76, SCHUYLKILL EXPY BRIDGE	84,552	82,106	98,263	89,392
SL - 669	UNIVERSITY AVE BRIDGE	33,293	32,198	30,972	27,383
SL - 670	GRAYS FERRY AVE BR	22,734	27,420	32,437	25,660
SL - 671	PASSYUNK AVE BRIDGE	39,935	30,288	45,565	39,507
SL - 672	PA 291, PLATT BRIDGE	42,973	53,171	56,713	47,694
SL - 673	I-95, GIRARD POINT BRIDGE	114,680	116,199	112,805	104,920
	TOTAL	644,109	606,590	692,103	605,020

SEGMENT D-4 (BUCKS / MONTGOMERY LINE)

SL - 674	SLEEPY HOLLOW RD		1,191	1,141	1,176
SL - 675	GERYVILLE PIKE		3,269	3,570	3,835
SL - 676	PA 663		13,672	18,177	15,110
SL - 677	UPPER RIDGE RD		1,915	2,699	2,259
SL - 678	ALLENTOWN RD		4,710	4,871	1,093
SL - 679	PA 563 RIDGE RD		7,847	6,836	7,561
SL - 680	CAT HILL RD		2,297	2,035	1,830
SL - 681	CHURCH RD		11,338	12,389	9,986
SL - 682	PA 113, SOUDERTON RD		16,358	20,579	17,922
SL - 683	BETHLEHEM PIKE		16,965	17,513	9,371
SL - 684	FAIRHILL RD		1,065	1,334	1,190
SL - 685	PA 309		29,233	35,076	29,556
SL - 686	CHURCH RD		1,722	2,240	2,121
SL - 687	TOWNSHIP LINE RD		10,272	11,146	7,275
SL - 688	PA 202		17,604	17,746	16,639
SL - 689	UPPER STATE RD		10,336	9,846	9,848
SL - 690	PA 152		6,035	6,965	5,126
SL - 691	LOWER STATE RD		11,322	11,413	8,940
SL - 692	FOLLY RD		3,714	5,425	5,607
	TOTAL		170,864	191,001	156,446

NEW JERSEY screen line, 39 STATIONS

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
SEGMENT E (PENNSAUKEN CREEK)					
SL - 693	CR 543, RIVER RD	9,216	9,060	6,739	5,074
SL - 694	NATIONAL HWY	4,352	5,413	4,647	4,285
SL - 695	US 130, BURLINGTON PIKE	53,628	40,549	40,407	42,588
SL - 696	OLD HADDONFIELD RD	1,727	2,320	2,232	1,911
SL - 697	CR 644, HADDONFIELD RD	15,740	18,458	15,282	15,754
SL - 698	NJ 90	21,759	23,551	26,204	21,229
SL - 699	PARK AVE	5,582	4,034	3,722	3,344
SL - 700	CR 537, MAPLE AVE	10,649	12,092	10,924	7,647
SL - 701	COLES AVE	4,924	7,499	6,582	6,521
SL - 702	MILL RD	2,762	3,415	3,568	4,307
SL - 703	NJ 38, KAIGHN AVE	49,945	46,897	49,118	44,349
SL - 704	NJ 41 KINGS HWY	19,916	21,115	23,224	22,406
SL - 705	CR 616, CHURCH RD	18,548	22,956	20,230	20,397
SL - 706	I-295	78,703	99,030	107,354	112,324
SL - 707	NJ TPKE	42,989	51,615	53,166	52,922
SL - 708	CR 673, SPRINGDALE RD	17,131	15,634	19,656	17,717
SL - 709	CR 674, GREEN TREE RD	13,643	14,261	14,082	13,599
	TOTAL	371,214	397,899	407,137	396,371
SEGMENT E EXTENSION (PENNSAUKEN CREEK)					
SL - 710	NJ 70, MARLTON PK	47,720	48,420	47,778	44,330
SL - 711	CROPWELL RD	11,864	12,225	13,810	13,056
SL - 712	BRICK RD	6,522	7,730	8,072	8,952
SL - 713	CR 544, EVESHAM RD	24,892	23,202	24,863	27,943
SL - 714	CR 671, KRESSON RD	5,450	11,238	8,113	9,269
SL - 715	NJ 73	36,932	41,810	39,922	40,306
SL - 716	TAUNTON AVE	1,686	2,533	3,119	3,980
SL - 717	CR 536 SPUR, HOPEWELL RD	4,047	8,112	9,034	8,112
SL - 718	COOPER RD	2,154	2,229	2,453	2,818
SL - 719	JACKSON RD	378	327	404	218

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
SL - 720	CR 534, JACKSON RD	4,198	4,555	5,378	4,629
SL - 722	US 206	7,593	7,559	11,396	9,047
TOTAL		153,436	169,940	174,342	172,660
SEGMENT F (CROSSWICKS CREEK)					
SL - 723	I-295	45,541	62,197	76,482	76,157
SL - 724	US 206	47,156	31,190	30,621	21,268
SL - 725	US 130	28,178	26,372	27,964	25,923
SL - 726	GROVEVILLE RD	1,060	1,300	1,055	1,224
TOTAL		121,935	121,059	136,122	124,571
SEGMENT F EXTENSION (CROSSWICKS CREEK)					
SL - 727	NJ TPKE	95,351	108,815	114,111	101,703
SL - 728	CR 660, CHURCH ST	4,041	4,236	5,494	5,765
SL - 729	IRON BRIDGE RD	169	299	226	436
SL - 730	EXTONVILLE RD	257	656	472	595
SL - 731	PROVINCE LINE RD	788	1,544	947	967
TOTAL		100,606	115,550	121,250	109,467
PENNSYLVANIA INNER CORDON, 91 STATIONS					
DELAWARE COUNTY					
IC - 275	PA 352, MIDDLETOWN RD	14,641	17,751	17,341	17,386
IC - 276	CREEK RD	1,280	2,175	1,956	2,154
IC - 277	GLEN MILLS RD	857	2,888	3,176	3,592
IC - 278	US 1, BALTIMORE PK	20,024	22,334	27,628	23,058
IC - 279	SMITH BRIDGE RD	2,877	4,526	5,045	5,613

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
IC - 280	CONCORD RD	5,466	6,142	6,686	6,617
IC - 281	US 322, CONCHESTER RD	23,133	25,253	28,656	24,560
IC - 282	GARNET MINE RD	1,614	2,034	1,899	1,844
IC - 283	BETHEL RD	1,052	1,533	1,786	1,459
IC - 284	KIRK RD	1,148	2,058	2,488	2,140
IC - 285	PA 491, NAAMANS CREEK RD	6,729	7,591	8,606	7,381
IC - 286	PA 261, FOULK RD	7,300	7,542	9,584	8,657
IC - 287	CARPENTER RD	5,210	7,544	9,656	7,345
IC - 288	I-95, DELAWARE EXPY	102,353	105,230	107,174	121,050
IC - 289	PA 491, NAAMANS CREEK RD	3,573	3,361	3,547	2,851
IC - 290	RIDGE RD	5,995	7,355	8,870	6,881
IC - 291	US 13, POST RD	6,520	6,089	7,060	5,369
	TOTAL	209,772	231,406	251,158	247,957
CHESTER COUNTY					
IC - 261	YELLOW SPRINGS RD	1,610	2,531	2,326	1,640
IC - 262	I-76, PA TPKE	35,775	41,647	47,056	44,837
IC - 263	N VALLEY RD	5,145	7,353	6,897	6,091
IC - 264	SWEDES FORD RD	9,104	12,334	9,283	9,141
IC - 265	US 202	69,438	62,081	87,361	80,438
IC - 266	PA 29, MOREHALL RD	19,680	26,014	26,232	22,479
IC - 267	PA 401, CONESTOGA RD	10,835	10,821	9,928	9,749
IC - 268	US 30, LINCOLN HWY	19,098	20,128	19,925	17,076
IC - 269	KING RD	8,342	9,283	8,059	7,813
IC - 270	PAOLI PK	14,121	13,146	10,192	11,323
IC - 271	BOOT RD	1,265	2,609	2,905	2,619
IC - 272	STRASBURG RD	2,189	3,689	3,769	3,284
IC - 273	PA 3, WEST CHESTER PK	24,517	18,946	25,124	22,248
IC - 274	PA 926, STREET RD	5,427	5,812	6,449	6,327
	TOTAL	226,546	236,393	265,506	245,065

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
MONTGOMERY COUNTY					
IC - 226	COUNTY LINE RD	14,684	15,932	19,715	16,506
IC - 227	PA 463, HORSHAM RD	14,985	18,137	15,654	21,092
IC - 228	NORRISTOWN RD	15,058	14,287	13,716	13,598
IC - 229	PA 63, WELSH RD	18,145	18,142	19,241	16,906
IC - 230	PA 152, LIMEKILN PK	9,780	10,451	11,893	10,978
IC - 231	BUTLER PK	10,425	9,717	10,345	10,725
IC - 232	TENNIS AVE	4,836	4,984	6,025	5,180
IC - 233	PA 309, FT WASHINGTON EXPY	45,034	48,109	38,982	42,908
IC - 234	BETHLEHEM PK	14,538	16,758	16,485	15,922
IC - 235	DAGER RD	4,411	5,396	5,740	5,160
IC - 236	PEN AMBLER RD	2,368	2,473	3,708	3,634
IC - 237	MORRIS RD	6,224	9,007	14,243	12,081
IC - 238	PA 73, SKIPPACK PK	24,209	16,146	17,613	15,837
IC - 239	PENLLYN - BLUE BELL PK	15,279	13,446	12,501	11,248
IC - 240	UNION MEETING RD	13,339	9,843	8,703	7,513
IC - 241	I-476, PA TPKE NE EXT	44,567	47,648	64,529	65,483
IC - 242	JOLLY RD	11,178	10,123	9,907	9,431
IC - 243	US 202, DEKALB PK	26,230	22,672	27,522	24,927
IC - 244	YOST RD	5,238	3,322	3,546	3,559
IC - 245	TOWNSHIP LINE RD	12,389	12,230	11,552	10,861
IC - 246	NORTH WALES RD	4,915	4,912	3,704	4,314
IC - 247	GERMANTOWN PK	22,147	22,109	24,611	19,918
IC - 248	WHITEHALL RD	10,791	10,916	13,138	12,310
IC - 249	BURNSIDE AVE	5,710	5,909	6,610	6,357
IC - 250	TROOPER RD	18,214	11,768	12,986	12,735
IC - 251	PA 363, PARK AVE	13,378	12,485	15,790	14,843
IC - 252	RIDGE PK	17,072	19,486	19,218	17,691
IC - 253	SUNNYSIDE AVE	2,350	3,140	3,080	2,928
IC - 254	PARK AVE	10,625	9,249	8,670	8,567
IC - 255	EGYPT RD	15,022	16,976	21,154	19,462
IC - 256	AUDUBON RD	7,090	9,418	7,645	9,195
IC - 257	US 422, POTTSTOWN EXPY	47,882	56,998	69,021	58,294

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
IC - 258	PA 23, VALLEY FORGE RD	13,188	14,105	13,257	11,737
IC - 259	GULPH RD	2,070	2,000	2,060	1,542
IC - 260	PA 252, VALLEY CREEK RD	7,502	7,215	6,507	6,448
	TOTAL	510,873	515,510	559,071	529,891
BUCKS COUNTY					
IC - 201	PA 32, RIVER RD	3,158	2,787	2,469	2,383
IC - 202	UPPER RIVER RD	8,282	9,821	10,568	9,372
IC - 203	DOLINGTON RD	4,218	4,692	5,490	4,738
IC - 204	WOODSIDE RD	728	2,750	1,606	1,643
IC - 205	QUARRY RD	2,591	2,921	2,776	2,192
IC - 206	PA 332, NEWTOWN - YARDLEY RD	37,590	42,362	37,936	42,935
IC - 207	WOODBOURNE RD	11,908	16,520	12,236	10,588
IC - 208	FULLING MILL RD	2,608	3,086	2,706	2,038
IC - 209	PA 413, NEWTOWN PK	19,854	19,822	19,978	16,758
IC - 210	STONY FORD RD	1,505	3,422	3,930	3,519
IC - 211	PA 532, BUCK RD	11,691	12,521	10,624	10,312
IC - 212	OLD JORDAN RD	2,012	2,918	2,110	1,746
IC - 213	HOLLAND RD	10,116	11,934	11,118	9,685
IC - 214	BUSTLETON PK	10,861	9,908	10,323	10,485
IC - 215	PA 232, SECOND STREET PK	14,373	13,988	14,192	13,586
IC - 216	HATBORO RD	8,140	7,901	7,858	9,052
IC - 217	BRISTOL RD	13,843	16,132	16,869	19,211
IC - 218	PA 332, JACKSONVILLE RD	11,555	12,587	15,655	15,089
IC - 219	MEARNS RD	10,058	10,051	7,962	10,083
IC - 220	PA 263, YORK RD	25,275	23,947	22,699	31,548
IC - 221	PA 132, STREET RD	25,155	27,249	35,693	30,893
IC - 222	NORRISTOWN RD	5,727	7,097	6,734	4,942
IC - 223	DELMONT AVE	2,909	3,674	3,439	3,912
IC - 224	VALLEY RD	2,454	4,669	4,871	4,999
IC - 225	PA 611, EASTON RD	22,553	27,007	30,838	27,089

Screen Line/Cordon Line AADT Volumes 1995 - 2010

	1995 AADT	2000 AADT	2005 AADT	2010 AADT
TOTAL	269,164	299,766	300,680	298,797
NEW JERSEY INNER CORDON, 91 STATIONS				
MERCER COUNTY				
IC - 401 NJ 29, DANIEL BRAY HWY	11,740	11,762	12,120	14,671
IC - 402 CR 579, BEAR TAVERN RD	4,403	7,368	7,319	2,547
IC - 403 SCOTCH RD	7,918	9,732	7,727	17,954
IC - 404 REED RD	3,211	4,208	3,392	3,205
IC - 405 I-95	61,190	58,305	56,667	65,202
IC - 406 NJ 31, PENNINGTON RD	16,229	16,337	19,250	16,456
IC - 407 FEDERAL CITY RD	10,638	14,560	14,203	14,216
IC - 408 US 206, LAWRENCEVILLE RD	17,700	21,664	19,720	17,654
IC - 409 CR 583, PRINCETON PK	15,446	9,889	10,523	9,803
IC - 410 CR 546, FRANKLIN CORNER RD	12,081	12,366	13,021	12,594
IC - 411 US 1, BRUNSWICK PK	50,590	53,711	47,943	45,824
IC - 412 I-295	60,541	63,274	69,731	76,903
IC - 413 CR 608, LAWRENCE STATION RD	2,875	3,829	4,334	5,368
IC - 414 CR 533, QUAKER BRIDGE RD	25,229	26,197	25,793	25,142
IC - 415 CR 535, OLD TRENTON RD	22,778	14,871	17,127	15,846
IC - 416 LINE RD	1,971	1,547	1,959	1,917
IC - 417 HUTCHINSON RD	4,864	5,689	5,643	5,555
IC-418 NOTTINGHAM WAY - From Burtis Ave to Crest Ave				8,598
IC - 419 NJ 33, FREEHOLD RD	21,775	26,981	21,788	16,647
IC - 420 KUSER RD	680	1,761	1,749	2,025
IC - 421 I-195	34,432	50,138	60,882	67,374
IC - 422 US 130	23,713	26,922	27,379	30,398
IC - 423 EDGEBROOK RD	748	259	2,593	2,676
IC - 424 CR 524, YARDVILLE - ALLENTOWN RD	3,607	5,142	6,178	6,556
IC - 425 CROSSWICKS - HAMILTON SQUARE RD	2,798	2,937	4,065	4,572
IC - 426 CR 672, S BROAD ST	2,700	5,251	3,550	4,885
TOTAL	419,857	454,699	464,656	494,592

Screen Line/Cordon Line AADT Volumes 1995 - 2010

	1995 AADT	2000 AADT	2005 AADT	2010 AADT
BURLINGTON COUNTY				
IC - 427 CR 528, BORDENTOWN - CHESTERFIELD RD	8,616	6,459	7,220	7,619
IC - 428 CR 545, GEORGETOWN RD	3,721	5,609	6,512	7,165
IC - 429 NJ TPKE	95,351	108,815	114,111	101,703
IC - 430 CR 660, OLD YORK RD	712	1,070	1,098	1,107
IC - 431 NJ 68	9,020	10,385	12,658	11,811
IC - 432 MANSFIELD - GEORGETOWN RD	896	864	1,401	3,211
IC - 433 CR 543, MT PLEASANT RD	2,938	3,663	4,467	4,310
IC - 434 COLUMBUS - JOBSTOWN RD	1,834	1,345	1,477	1,517
IC - 435 CR 670, JACKSONVILLE - JOBSTOWN RD	3,073	3,324	3,907	3,868
IC - 436 CR 537, MONMOUTH RD	6,816	7,685	10,095	9,545
IC - 437 CR 669, JULIUSTOWN RD	2,412	2,882	2,394	2,532
IC - 438 US 206	14,219	15,097	17,327	14,746
IC - 439 CR 630, WOODLANE RD	10,605	11,484	10,746	13,320
IC - 440 CR 621, POWELL RD	4,610	4,025	4,230	4,480
IC - 441 NJ 38, SOUTH PEMBERTON RD	26,201	22,465	32,718	29,100
IC - 442 CR 612, EAYRESTOWN RD	5,860	6,108	8,061	6,888
IC - 443 CR 541, MAIN ST	11,300	11,308	13,451	13,237
IC - 444 CR 641, CHESTNUT ST	2,023	2,054	1,742	1,673
IC - 445 CR 640, CREEK RD	557	2,270	1,944	1,827
IC - 446 CR 636, MASONVILLE - FOSTERTOWN RD	2,194	2,848	4,548	4,260
IC - 447 ARK RD	3,187	3,720	4,494	4,629
IC - 448 CR 686, HARTFORD RD	9,213	9,397	9,594	10,691
IC - 449 CR 603, MOORESTOWN - MT LAUREL RD	6,962	7,236	8,775	9,234
IC - 450 CR 612, ELBO LA	2,640	3,910	4,620	4,879
IC - 451 CR 616, CHURCH RD	5,474	7,997	8,172	8,377
IC - 452 CR 618, EVESBORO - MEDFORD RD	8,138	14,593	16,746	18,466
IC - 453 NJ 70	27,325	27,092	28,902	25,410
IC - 454 CR 620, E MAIN ST	12,647	13,289	13,416	11,923
IC - 455 CR 619, WILLOW BEND RD	7,268	7,012	8,788	8,684
IC - 456 CR 619, MARLTON PKWY	12,845	13,392	14,457	13,933
IC - 457 BRADDOCK MILL RD	3,303	4,113	5,368	4,571

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
IC - 458	SYCAMORE AVE	6,635	2,917	2,809	3,980
IC - 459	HOPEWELL RD	6,230	7,230	8,153	7,557
TOTAL		324,825	351,657	394,401	376,254
CAMDEN COUNTY					
IC - 460	CR 534, JACKSON RD	12,629	13,374	12,589	11,994
IC - 461	US 30, WHITE HORSE PK	21,934	22,461	22,020	22,088
IC - 462	NJ 73	19,697	17,343	17,545	20,466
IC - 463	CR 536 SPUR, TAUNTON RD	6,563	8,563	10,021	9,271
IC - 464	CR 561, TANSBORO RD	3,643	4,699	3,369	4,035
IC - 465	CR 720, BERLIN - NEW FREEDOM RD	8,019	7,787	10,495	9,388
IC - 466	CR 706, CHEWS LANDING - BLACKWOOD RD	5,873	9,255	11,592	9,282
IC - 467	CR 704, CHEWS LANDING - WILLIAMSTOWN RD	4,642	7,239	8,619	10,418
IC - 468	CR 705, SICKLERVILLE RD	11,245	14,308	15,034	14,531
IC - 469	ATLANTIC CITY EXPY	56,675	59,842	50,127	59,343
TOTAL		150,920	164,871	161,411	170,816
GLOUCESTER COUNTY					
IC - 470	NJ 42, BLACK HORSE PK	25,977	24,061	27,636	28,051
IC - 471	CR 654, CROSS KEYS - WILLIAMSTOWN RD	7,998	8,986	9,434	10,095
IC - 472	CR 555, TUCKAHOE RD	7,284	7,928	12,447	10,892
IC - 473	US 322, GLASSBORO - WILLIAMSTOWN RD	9,396	9,466	10,539	12,021
IC - 474	CR 610, CLAYTON - WILLIAMSTOWN RD	4,629	5,055	7,239	5,904
IC - 475	CR 655, FRIES MILL RD	4,074	5,137	6,018	5,695
IC - 476	NJ 47	9,311	9,022	7,795	8,207
IC - 477	BROAD ST	790	972	1,177	1,156
IC - 478	CR 608, SILVER LAKE RD	3,315	3,228	4,115	3,779
IC - 479	CR 553, CENTERTON - GLASSBORO RD	4,626	6,210	5,389	5,310
IC - 480	NJ 55 FWY	24,861	34,574	39,928	45,948
IC - 481	CR 667, RICHMOND - AURA RD	1,292	1,231	1,316	1,058
IC - 482	CR 619, WOODSTOWN - GLASSBORO RD	1,908	2,305	2,703	2,762

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
IC - 483	CR 609, ELMER - BARNESBORO RD	1,058	1,417	1,720	2,485
IC - 484	CR 641, ELLIS MILL RD	2,175	2,623	4,991	5,221
IC - 485	CR 618 RICHWOOD - HARRISONVILLE RD	3,330	4,278	5,948	6,662
IC - 486	NJ 45, MAIN ST	13,437	16,767	17,689	12,936
IC - 487	NJ TPKE	36,829	42,912	36,398	40,991
IC - 488	CR 551, KINGS HWY	6,591	6,967	7,534	8,345
IC - 489	CR 653, PAULSBORO - SWEDESBORO RD	5,816	6,644	5,986	3,596
IC - 490	CR 671, LOCKE AVE	1,096	1,411	3,201	2,607
IC - 491	I-295	40,358	51,275	52,863	50,087
IC - 492	US 130, CROWN POINT RD	9,813	8,977	12,456	9,750
TOTAL		225,964	261,446	284,522	283,558

PENNSYLVANIA OUTER CORDON, 83 STATIONS

DELAWARE COUNTY

OC - 1	US 13, POST RD	6,520	6,089	7,060	5,369
OC - 2	RIDGE RD	5,995	7,815	8,870	6,881
OC - 3	PA 491, NAAMANS CREEK RD	3,573	3,361	3,547	2,851
OC - 4	I-95, DELAWARE EXPY	102,353	105,230	107,174	121,050
OC - 5	CARPENTER RD	5,424	7,544	9,661	6,915
OC - 6	MARSH RD - From Hettering Rd to Ryans Run				1,193
OC - 7	ZEBLEY RD		4,849	4,138	3,523
OC - 8	PA 261, FOULK RD	8,176	7,181	8,342	8,573
OC - 9	EBRIGHT RD		3,378	4,013	3,424
OC - 10	US 202, WILMINGTON - W CHESTER PIKE	32,532	34,945	41,904	29,129
OC - 11	BEAVER VALLEY RD	681	602	498	625
OC - 12	SMITH BRIDGE RD	947	1,556	1,095	1,341
OC - 13	RIDGE RD	546	661	792	866
TOTAL		166,747	183,213	197,094	191,740

CHESTER COUNTY

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
OC - 14	PA 100, CHADDS FORD RD	2,026	2,103	2,335	2,104
OC - 15	PA 52, KENNETT PK	10,665	12,242	12,935	10,664
OC - 16	CENTER MILL RD		346	447	524
OC - 17	OLD KENNETT RD	1,961	2,180	2,723	2,876
OC - 18	PA 82, CREEK RD	766	974	973	1,020
OC - 19	EWART RD		2,128	2,604	2,571
OC - 20	PA 41, GAP - NEWPORT RD	11,637	13,454	14,168	11,044
OC - 21	LIMESTONE RD	11,819	11,544	16,176	12,561
OC - 22	NEWARK RD		4,911	5,299	5,562
OC - 23	YEATMANS STATION RD		1,175	1,302	1,145
OC - 24	PA 896, NEW LONDON RD	6,466	6,963	7,825	6,289
OC - 25	ELKTON RD		1,555	1,818	1,279
OC - 26	PA 841, WEST GROVE - LEWISVILLE RD	3,047	3,156	2,233	4,412
OC - 27	STATE RD		420	566	566
OC - 28	PA 272, CHROME - CALVERT RD	6,006	6,725	6,967	5,592
OC - 29	US 1, CONOWINGO RD	7,324	8,234	8,532	8,779
OC - 30	FREEMONT RD	534	628	775	366
OC - 31	PA 272, CHRISTINE RD WEST	4,290	4,511	5,102	4,591
OC - 32	FORGE RD	763	659	760	783
OC - 33	PA 472, LANCASTER PK	4,387	5,865	5,562	5,257
OC - 34	STREET RD		290	323	246
OC - 35	PA 896, NEWARK RD	1,992	2,582	2,579	2,150
OC - 36	SCHOFF RD		448	479	448
OC - 37	PA 372, GERMANTOWN AVE	2,461	2,005	1,902	1,902
OC - 38	ZION HILL RD	3,752	2,699	1,403	1,678
OC - 39	PA 41, NEWPORT - LANCASTER PK	16,005	15,279	15,423	9,107
OC - 40	US 30, LINCOLN HWY	15,830	18,286	22,243	15,994
OC - 41	STRASBURG RD		1,489	1,642	1,578
OC - 42	PA 340, PHILADELPHIA PK	3,624	4,114	4,620	4,239
OC - 43	BEAVER DAM RD	712	572	718	336
OC - 44	MAIN ST		849	724	645
OC - 45	US 322, WHITE HORSE PK	7,348	11,885	8,114	6,674
OC - 46	PA 10, CONESTOGA RD	7,397	7,592	8,510	6,582
OC - 47	MORGANTOWN RD	914	1,814	1,947	2,072

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
OC - 48	I-76, PA TPKE	32,628	39,152	46,215	45,245
OC - 49	PA 401, CONESTOGA RD	4,256	4,341	6,166	5,871
OC - 50	PA 23, MAIN ST	3,975	7,364	8,060	5,771
OC - 51	PA 82, WATER ST	866	924	926	743
OC - 52	HARMONYVILLE RD - From Park Rd to Pine Swamp Rd				210
OC - 53	PA 345, PINE SWAMP RD	1,417	1,077	1,303	982
OC - 54	UNIONVILLE RD	787	758	985	855
OC - 55	PA 724, SCHUYLKILL RD	5,545	4,834	5,817	5,916
	TOTAL	181,200	218,127	239,201	207,230
BERKS COUNTY					
OC - 56	US 422, POTTSTOWN BYP	26,844	25,468	33,454	27,639
OC - 57	BENJAMIN FRANKLIN HWY	11,040	10,918	11,975	9,102
OC - 58	PINE FORGE RD	772	906	869	849
OC - 59	PA 562, READING AVE	7,285	7,116	7,747	8,076
OC - 60	PA 73, W PHILADELPHIA AVE	9,115	11,232	9,416	9,681
OC - 61	PA 100	17,794	17,629	17,745	15,968
	TOTAL	72,850	73,268	81,206	71,315
MONTGOMERY COUNTY					
OC - 62	HOFFMANSVILLE RD	2,143	1,994	2,233	2,408
OC - 63	NIANTIC RD	1,660	2,218	2,907	2,524
OC - 64	PHILADELPHIA - KUTZTOWN RD	1,663	1,261	1,607	1,226
OC - 65	PA 29, GRAVEL PK	10,446	10,426	11,824	9,988
OC - 66	WASSER RD				131
	TOTAL	15,912	15,899	18,571	16,277
BUCKS COUNTY					
OC - 67	GERYVILLE PK		2,493	2,791	2,872

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
OC - 68	SPINNERSTOWN RD		2,259	2,719	2,591
OC - 69	I-476, PA TPKE NE EXT	30,825	38,295	48,581	46,081
OC - 70	CASELL RD		503	577	789
OC - 71	ALLENTOWN RD	2,648	3,099	3,244	3,030
OC - 72	OLD BETHLEHEM PK	3,524	3,512	3,768	3,371
OC - 73	PA 309, BETHLEHEM PK	35,864	32,466	37,834	28,011
OC - 74	STATE RD	1,341	2,366	1,705	1,437
OC - 75	RICHLANDTOWN PK	2,762	4,822	3,923	3,874
OC - 76	PA 412 HELLERTOWN RD	5,089	5,022	5,984	5,001
OC - 77	SPRINGTOWN RD		787	997	783
OC - 78	DURHAM RD		668	656	558
OC - 79	PA 611 EASTON RD	5,231	5,786	5,002	4,825
OC - 80	RIEGELSVILLE BRIDGE	3,532	4,055	3,840	3,277
OC - 81	MILFORD - UPPER BLACK EDDY BRIDGE	5,184	4,284	4,088	
OC - 82	FRENCHTOWN - UHLERSTOWN BRIDGE	5,586	4,644	4,119	7,985
OC - 83	CENTER BRIDGE - STOCKTON BRIDGE	4,681	5,064	4,846	3,842
OC - 84	US 202 BRIDGE	8,514	9,779	11,145	9,472
OC - 85	PA 179, NEW HOPE - LAMBERTVILLE BRIDGE	13,159	15,949	13,191	11,111
	TOTAL	127,940	145,855	159,010	138,911

NEW JERSEY OUTER CORDON, 72 STATIONS

MERCER COUNTY

OC - 86	NJ 29, RIVER RD	10,201	12,571	10,721	9,689
OC - 87	CR 518, LAMBERTVILLE - HOPEWELL TPKE	6,451	5,843	4,887	4,509
OC - 88	CR 579, HARBOURTON - ROCKTOWN RD	4,511	5,126	7,390	7,100
OC - 89	NJ 31	15,030	16,138	15,333	15,279
OC - 90	CR 607, HOPEWELL - WERTZVILLE RD	2,261	3,751	3,407	3,130
OC - 91	CR 518, HOPEWELL - ROCKY HILL RD	11,815	14,120	11,122	9,731
OC - 92	CR 601, GREAT RD	7,508	9,170	9,129	10,470
OC - 93	US 206	21,480	22,826	20,616	19,690
OC - 94	PRINCETON AVE		5,190	7,888	6,747

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
OC - 95	CR 605, RIVER RD		2,764	4,928	5,332
OC - 96	NJ 27, LINCOLN HWY	11,765	11,755	14,002	12,130
OC - 97	US 1, BRUNSWICK PK	61,303	74,571	84,210	75,503
OC - 98	MILLSTONE RD - From Stults Dr to Joanne St				8,564
OC - 99	CR 615, CRANBURY RD	4,836	5,783	6,930	6,212
OC - 100	SOUTHFIELD RD		4,311	4,219	3,865
OC - 101	CR 535, OLD TRENTON RD	10,236	8,739	11,163	11,085
OC - 102	US 130	27,097	29,589	25,209	28,158
OC - 103	CR 539, N MAIN ST	8,090	7,798	6,966	7,075
OC - 104	NJ TPKE	105,859	123,900	135,596	114,949
OC - 105	PROBASCO RD - From Wycoff Mills Rd to Twin Rivers Dr N				1,942
OC - 106	NJ 33, FREEHOLD RD	20,554	24,098	27,467	28,032
OC - 107	CR 571, ETRA RD	2,873	4,509	4,097	3,708
OC - 108	HERBERT RD		5,685	3,441	3,304
OC - 109	I-195	23,815	37,545	47,972	47,632
OC - 110	CR 526, ROBBINSVILLE - ALLENTOWN RD	8,308	13,614	8,115	7,397
OC - 111	CR 524, YARVILLE - ALLENTOWN RD	3,727	2,208	5,224	4,943
OC - 112	OLD YORK RD		1,555	1,840	1,927
	TOTAL	367,720	453,160	481,872	458,102
BURLINGTON COUNTY					
OC - 113	ELLISDALE RD		540	490	435
OC - 114	CR 664, CHESTERFIELD - ARNEYTOWN RD	1,019	1,371	2,435	1,650
OC - 115	CR 537, MONMOUTH RD	4,963	7,061	6,984	6,585
OC - 116	CR 528, JACOBSTOWN - NEW EGYPT RD	4,986	4,125	4,401	3,966
OC - 117	CR 616, COOKSTOWN - NEW EGYPT RD	4,963	5,128	5,072	4,792
OC - 118	BUNTING BRIDGE RD		1,607	1,449	1,495
OC - 119	NJ 70	7,274	9,928	9,829	10,135
OC - 120	NJ 72, BARNEGAT RD	6,079	7,038	7,779	5,977
OC - 121	GARDEN STATE PKWY		42,277	47,676	38,780
OC - 122	STAGE RD	1,512	1,878	1,197	826
OC - 123	US 9, NEW YORK RD	9,731	10,340	10,103	9,548
OC - 124	CR 563, GREEN BANK - CHATSWORTH RD	681	732	904	687

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
OC - 125	GARDEN STATE PKWY		49,267	55,559	46,790
OC - 126	CR 542, NESCO - BATSTO RD	1,965	2,502	2,416	2,005
OC - 127	US 206	9,583	12,128	12,288	9,047
	TOTAL	52,756	155,921	168,582	142,719
CAMDEN COUNTY					
OC - 128	CR 536, CHEW RD	3,106	1,042	930	974
OC - 129	UNION RD		404	486	221
OC - 130	US 30, WHITE HORSE PK	10,981	12,310	12,766	10,957
OC - 131	CR 724, WILTSEYS MILL RD		2,111	2,701	2,849
OC - 132	CR 561, CEDARBROOK RD	5,514	5,430	4,733	5,225
OC - 133	ATLANTIC CITY EXPY	46,286	49,063	44,199	47,317
OC - 134	CR 561 SPUR MAYS LANDING RD	5,289	5,556	5,000	5,492
	TOTAL	71,176	75,916	70,815	73,035
GLOUCESTER COUNTY					
OC - 135	US 322, BLACK HORSE PK	9,961	12,263	11,467	12,634
OC - 136	JACKSON RD				330
OC - 137	US 40, HARDING HWY	8,546	8,345	9,426	7,356
OC - 138	CR 555, MAIN RD	8,796	9,262	10,374	9,841
OC - 139	CR 615, WEST BLVD		5,381	4,744	4,961
OC - 140	NJ 47, DELSEA DR	6,100	10,172	7,169	7,170
OC - 141	NJ 55 FRWY	22,084	35,100	37,177	31,610
OC - 142	US 40, HARDING HWY	10,282	12,593	11,331	8,975
OC - 143	WILLOW GROVE RD		766	744	881
OC - 144	CR 553, CENTERTON - GLASSBORO RD	4,673	5,124	5,677	5,180
OC - 145	DUTCH ROW RD - From Garrison Rd to CR 604				1,725
OC - 146	CR 604, FRANKLINVILLE - MONROEVILLE RD	1,657	1,676	2,211	2,151
OC - 147	CR 609, ELMER - BARNSBORO RD		1,407	1,343	1,516
OC - 148	NJ 77, BRIDGETON PK	4,167	5,530	5,886	5,415
OC - 149	CR 694, MONROEVILLE RD		1,897	2,725	2,693
OC - 150	CR 581, COMMISSIONERS RD	1,273	1,472	917	1,318

Screen Line/Cordon Line AADT Volumes 1995 - 2010

	1995 AADT	2000 AADT	2005 AADT	2010 AADT
OC - 151 CR 617, MULLICA HILL RD		789	766	777
OC - 152 NJ 45, WOODSTOWN - MULLICA HILL RD	4,249	3,183	3,764	3,876
OC - 153 CR 605, WOODSTOWN RD		2,958	3,743	3,460
OC - 154 NJ TPKE	36,829	42,912	36,398	40,991
OC - 155 CR 551, AUBURN RD	1,956	1,979	2,112	2,493
OC - 156 I-295	34,064	49,728	37,175	37,034
OC - 157 CR 601, PEDRICKTOWN - CENTER SQUARE RD		1,393	1,702	1,212
OC - 158 US 130, CROWN POINT RD	4,995	7,946	5,769	4,964
TOTAL	159,632	221,875	202,620	198,561

PENNSYLVANIA TURNPIKE**Between****Interchanges**

312 and 326 Downingtown and Valley Forge	35,775	41,647	47,056	44,837
326 and 333 Valley Forge and Norristown	49,528	54,869	66,275	64,477
333 and 20 Norristown and Mid-County	60,759	71,765	79,836	77,393
20 and 339 Mid-County and Fort Washington	92,516	105,584	122,537	118,174
339 and 343 Fort Washington and Willow Grove	84,791	95,778	108,069	105,465
343 and 351 Willow Grove and Philadelphia	75,096	84,119	94,409	91,887
351 and 358 Philadelphia and Delaware Valley	36,121	41,046	46,469	37,205
358 and 359 Delaware Valley and Turnpike Bridge	33,271	37,435	43,179	40,629
TOTAL	467,857	532,243	607,830	580,067

I-476 / Northeast Extension

20 and 31 Mid-County and Lansdale	44,567	56,542	64,529	65,483
31 and 44 Lansdale and Quakertown	35,063	43,531	48,581	50,960
TOTAL	79,630	100,073	113,110	116,443

NEW JERSEY TURNPIKE

Screen Line/Cordon Line AADT Volumes 1995 - 2010

		1995 AADT	2000 AADT	2005 AADT	2010 AADT
Between Interchanges					
1 and 2	Delaware Memorial Bridge and Swedesboro	36,829	42,912	36,398	40,991
2 and 3	Swedesboro and Woodbury	38,212	45,126	40,614	43,890
3 and 4	Woodbury and Camden	42,989	51,615	53,166	52,922
4 and 5	Camden and Burlington	56,204	65,964	67,408	65,446
5 and 6	Burlington and Pennsylvania Turnpike	61,363	68,203	73,550	70,198
6 and 7	Pennsylvania Turnpike and Bordentown	84,483	97,566	101,950	95,644
7 and 7A	Bordentown and Trenton	95,351	108,815	114,111	101,703
7A and 8	Trenton and Hightstown	102,609	119,170	129,917	111,177
8 and 8A	Hightstown and Cranbury	105,859	123,900	135,596	114,949
TOTAL		623,899	723,271	752,710	696,920
NJ Turnpike Extension					
6 and 6A	New Jersey Turnpike mainline and Florence	27,986	32,591	38,930	34,132
6A and 30	Florence and PA Turnpike/Del River Bridge	33,271	38,295	42,254	38,080
TOTAL		61,257	70,886	81,184	72,212

1995–2010 Travel Trends

In the Delaware Valley Region

Publication Number: 13052

Date Published: October 2013

Geographic Area Covered: Delaware Valley region comprising five counties in Pennsylvania (Bucks, Chester, Delaware, Montgomery, and Philadelphia), and four counties in New Jersey (Burlington, Camden, Gloucester, and Mercer).

Key Words:

Traffic count, traffic volume, daily transit passengers, cordon line, screenline, Annual Average Daily Traffic (AADT), vehicles per day (vpd), vehicle miles of travel (VMT), traffic growth, peak hour volume, vehicle trips, person trips, vehicle classification, time-of-day variation, speed histogram.

Abstract:

This report assesses trends in auto vehicle trips and transit passenger trips crossing selected screenlines, and cordon lines in the Delaware Valley region. The data is compared for the years 1995, 2000, 2005, and 2010.

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