I-95 Interchange Enhancement and Reconstruction

COTTMAN / PRINCETON INTERCHANGE TRAFFIC STUDY

JUNE 2002

Prepared for Pennsylvania Department of Transportation by

Delaware Valley Regional Planning Commission

PENNDOT

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Pennsylvania Department of Transportation
By
Delaware Valley Regional Planning Commission
The Bourse Building
111 South Independence Mall East
Philadelphia, PA 19106-2582

Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty, and intercity agency which provides continuing, comprehensive, and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. DVRPC provides technical assistance and services, conducts high priority studies that respond to the request and demands of member state and local governments, fosters cooperation among various constituents to forge a consensus on diverse regional issues, determines and meets the needs of the private sector, and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the commission.

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.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. This report was primarily funded by the Pennsylvania Department of Transportation and the Federal Highway Administration (FHWA). The authors, however, are solely responsible for its findings and conclusions, which may not represent the official views or policies of the funding agencies.

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EXECUTIVE SUMMARY

This report summarizes traffic forecasts for a No-build and three different build alternatives for the I-95 interchange at the Cottman/Princeton Interchange complex along I-95 in Northeast Philadelphia. Because large portions of I-95 are being rehabilitated over the next several years, detailed studies of several of the interchanges were conducted as a precursor to any changes. Average daily and peak hour traffic forecasts are prepared for each option for 2025.

The limits of the study area run from Levick Street, near the Tacony Palmyra Bridge, to Rhawn Street in northeast Philadelphia. In this section, the alignment of I-95 is approximately northeast/southwest, but it generally follows the alignment of the Delaware River. In this section the mainline of I-95 is elevated, and is located between the AMTRAK Northeast Corridor rail line to the west and the industrial activities which line the Delaware River to the east.

Four improvement alternatives were identified for this interchange, including three construction, or "build" alternatives, and one no action, or "No-build" alternative. For each alternative, regional travel simulation models were used to forecast future travel patterns. They utilize a system of traffic zones that follow Census boundaries and rely on demographic and employment data, land use, and transportation network characteristics to simulate trip-making patterns throughout the region.

Objectives for improvements, which guided the development of the build alternatives, included making improvements to safety and capacity on I-95; improved access to and from I-95; including better signage; minimizing the traffic and truck impacts on local streets; minimizing the barrier effect of I-95 on the community; and implementing incident management technology.

Projected traffic volumes for selected highway links within the study area are presented and analyzed. Average daily traffic volumes and AM and PM peak hour volumes at selected intersections are included for each alternative. The Appendices to this report include current traffic counts of the various roadways examined in the study area.

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I. INTRODUCTION

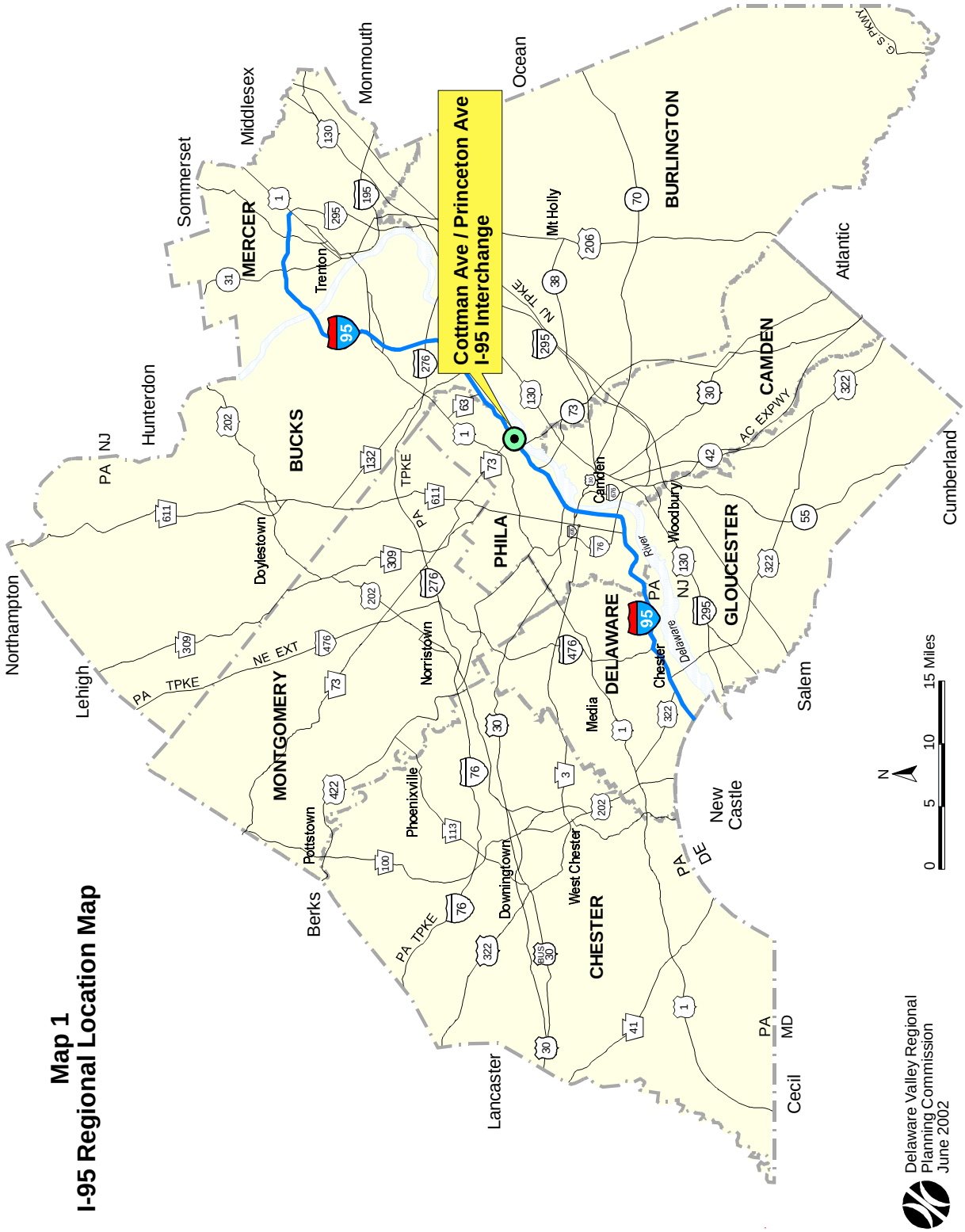
This report summarizes traffic forecasts for a No-build and three different build alternatives for the I-95 Cottman/Princeton Interchange complex along I-95 in Northeast Philadelphia (Maps 1 and 2). It was prepared at the request of the Pennsylvania Department of Transportation (PennDOT) and their consultants, who are conducting a Point of Access Study for the interchange area. Because large portions of I-95 are being rehabilitated over the next several years, detailed studies of several of the interchanges were conducted as a precursor to any changes. The forecasts in this report are prepared for 2025.

I-95 in Pennsylvania was constructed in sections beginning in the middle 1960s, and it was not until the 1990s that a continuous roadway between the State of Delaware and New Jersey boundaries was available to travelers. Traveling north, the highway enters Pennsylvania in Lower Chichester Township, Delaware County, and follows the Delaware River corridor. North of the City of Chester, I-476 becomes a spur heading northwest toward the Pennsylvania Turnpike interchange in Plymouth Meeting. I-95, which is at-grade to this point, continues past the Philadelphia Airport, where it enters the City of Philadelphia.

Once past the Airport, the highway becomes elevated, and passes the Philadelphia stadium complex, the Walt Whitman Bridge, and the Penn's Landing areas. The section within Center City is depressed until just south of the Benjamin Franklin Bridge where it emerges to become elevated once again. The highway remains elevated until well north of the study area, giving access to the various port-related industrial and commercial activities, which are the traditional land uses along the Delaware River, as well as to adjacent residential areas. North of Pennypack Creek I-95 returns to an at-grade alignment and continues at-grade through the residential and commercial areas of Philadelphia and Bucks County until it crosses out of Pennsylvania at the Scudders Falls Bridge northwest of Trenton, New Jersey.

In recent years, pavement, bridges, and overpasses have begun to deteriorate, and beginning in 2000 PennDOT began a four-phase series of repairs of I-95 from Center City Philadelphia northward into Bucks County. Planned projects include rebuilding numerous bridges, expanding the Intelligent Transportation System (ITS) by installing closed circuit TV cameras, dynamic message signs, and microwave sensors, and upgrading the following interchanges:

- I-676 (Vine Street)
- Girard Avenue
- Allegheny/Castor Avenue
- Betsy Ross Bridge
- Bridge Street
- Cottman/Princeton Avenue, and
- PA Route 132 (Street Road)


Cottman Ave / Princeton Ave
I-95 Interchange
Northampton
Lehigh
Hunterdon
Sommerset
Middlesex
Monmouth
Ocean
Atlantic
Cumberland
Salem
Cecil
Lancaster
Berks
Chester
New Castle
BUCKS
MERCER
BURLINGTON
CAMDEN
GLOUCESTER
PHILA
MONTGOMERY
DELAWARE
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Norristown
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Downingtown
West Chester
Media
Chester
Delaware River
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AC EXPWY
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0 5 10 15 Miles
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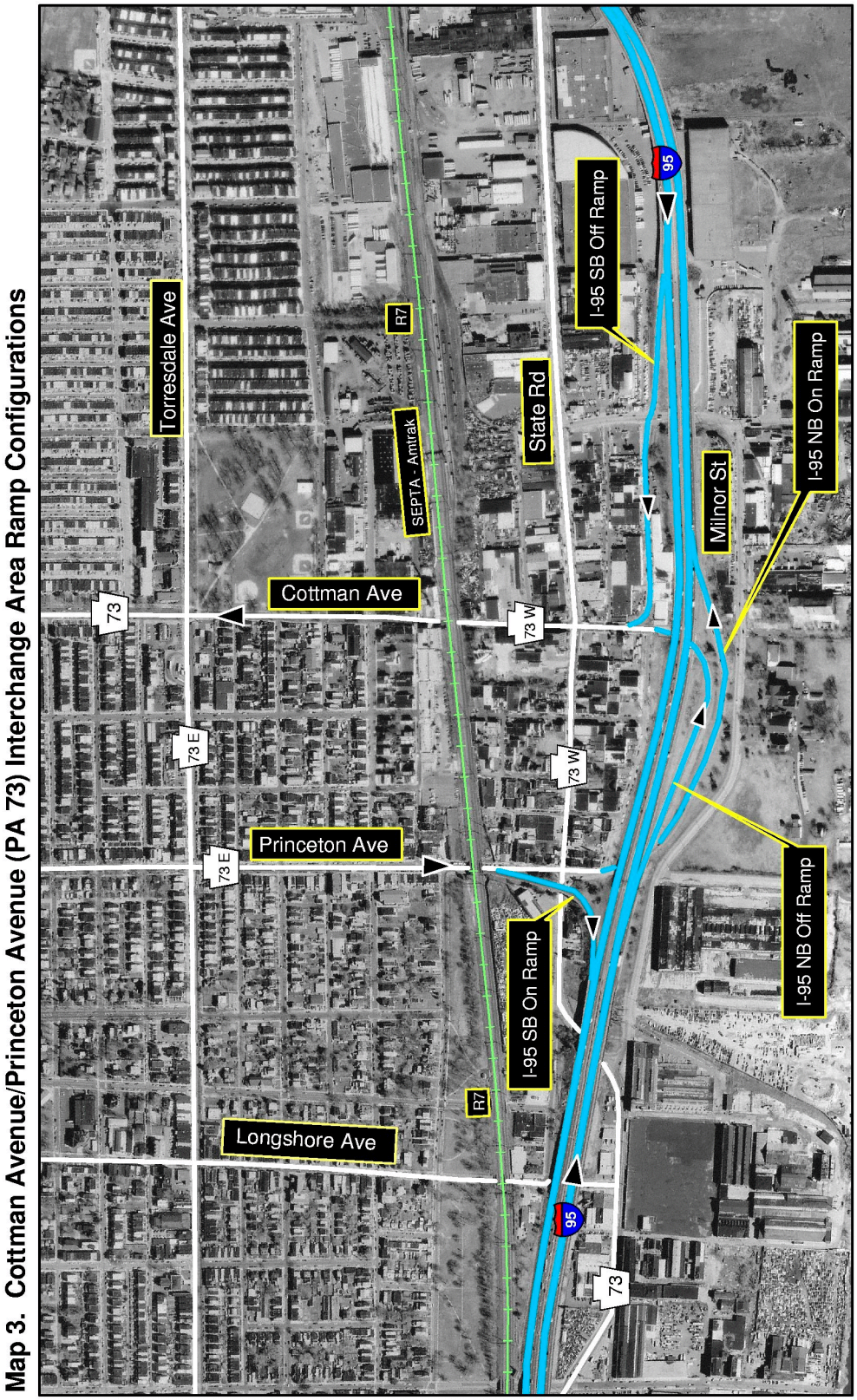
Map 1
I-95 Regional Location Map
Delaware Valley Regional Planning Commission
June 2002

Map 2. Cottman Ave/Princeton Ave (PA 73) Interchange Study Area

This report focuses on the Cottman/Princeton interchange. Approaching or departing from this point from either North or South, I-95 is a four-lane by direction limited access highway. Cottman and Princeton Avenue ramps themselves, the roadway is three lanes by direction, as one lane is "dropped" to become an "Exit Only" lane, and is added again at the point of the entrance ramp (Map 3). At the time of this section's construction, traffic volumes were sufficiently low that this constriction did not impact operational level of service. An examination of today's conditions indicates that current traffic flow is severely impacted by this, albeit temporary, elimination of capacity.

A focused travel simulation was conducted using DVRPC's regional travel forecasting models. The traffic zones in the study area were subdivided into smaller zones to better reflect the highway network and land use characteristics of the study area. The model's highway network within the study area was reviewed and modified as needed to reflect the detailed nature of the traffic improvements to be tested.

Chapter II of this report documents the physical characteristics of the study area. Included are a description of the land uses and surrounding roadway network, along with a discussion of current traffic volumes and levels of service. The four alternatives of the study are described in detail in Chapter III. Chapter IV explains the travel forecasting methodology, with a brief discussion of the focused traffic simulation model used to develop the traffic projections. The regional demographic and employment forecasts and corridor-specific future development proposals which form the basis for the forecasts are also presented in this chapter. Chapter V presents an analysis of the travel forecasts for this interchange complex. The forecasts represent projected 2025 daily traffic volumes for I-95 and the adjacent ramps and surrounding roadways under three build and one no-build alternatives. The Appendices contains existing traffic counts.



Map 3. Cottman Avenue/Princeton Avenue (PA 73) Interchange Area Ramp Configurations

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II. DESCRIPTION OF THE COTTMAN/PRINCETON I-95 INTERCHANGE AREA

The limits of the study area run from Levick Street, near the Tacony Palmyra Bridge, northward to Rhawn Street and from the Delaware River westward to Cottage Street in northeast Philadelphia. In this section, the alignment of I-95 is approximately northeast/southwest, and generally follows the alignment of the Delaware River. In this section the mainline of the highway is elevated, and is located between the AMTRAK Northeast Corridor rail line to the west and the industrial activities which line the Delaware River to the east.

A. Existing Highway Facilities and Land Use

With the original construction of I-95 and the potential for increased traffic volume in the study area, Cottman and Princeton Avenues were turned into a one-way couplet east of Torresdale Avenue, partnering ramp access at these major arterials to create a modified directional interchange giving access to all surrounding land uses while mitigating impacts on local roads. Adjacent interchanges are located about 2.4 miles to the north at Academy Road and 2.1 miles to the south at Bridge Street. The main line of I-95 is limited access, four lanes by direction approaching and departing the interchange, with three lanes by direction within the interchange complex.

Within the interchange area, Princeton Avenue, which is one-way eastbound between Torresdale Avenue and northbound and southbound ramps to I-95, is a 44 foot roadway with two travel lanes and curbside parking on both sides of the road. Cottman Avenue is 26 feet wide between Torresdale Avenue and AMTRAK with no parking. In this section it is signed as one-way westbound. West of two-way Torresdale Avenue, Cottman Avenue is 60 feet wide, with two-way traffic and curbside parking on both sides. It serves as SR0073 East and West.

Because of the physical location of I-95, and the intent of the designers for it to serve as access to the riverfront, primary land use surrounding the ramps themselves is very heavily commercial. It should be noted that there are, at this writing, a considerable number of vacant properties. North of the railroad tracks, however, there is a shift toward residential uses. Both Cottman and Princeton Avenues west of AMTRAK reflect this shift, but since they are signed as a one-way couplet for PA Route 73 (SR0073) between Torresdale Avenue and I-95, there is considerable volume generated by I-95 which impacts levels of service at intersections with local roads within the study area.

Primary north-south roadways adjacent to the ramps include Milnor Street, a primary access road for riverfront industrial/commercial users, State Road, another primarily commercial road which serves as Route 73W between Princeton and Cottman Avenues and as Route 73 south of Princeton Avenue, and Torresdale Avenue, a primary arterial which serves residential and residentially-oriented commercial uses.

Most of the east-west study area roadways terminate at or west of the railroad tracks. Because of this, any traffic destined from one side of the tracks to the other is almost forced to use the SR0073 couplet, putting additional pressure on these roads. Also, traffic destined towards points west of I-95 in Philadelphia and on into Montgomery County, especially truck traffic, is signed to use these roads as their travel route.

B. Existing Traffic Volumes

While there has been little new development in the study area since this section of I-95 opened, intensive development has taken place in the greater Northeast, Bucks County, Montgomery County, and New Jersey which has generated significant additional traffic volumes at this interchange. Also, during the same time, main line volumes on I-95 have increased significantly because of development throughout the region. When these factors are added to the general overall increase in regional traffic volumes, capacity on both the ramps and surrounding street system is not adequate.

Traffic counts were collected on many of the local roads within the study area including: Princeton Avenue, Cottman Avenue, Rhawn Street, Torresdale Avenue, State Road, New State Road, and Milnor Street. Current daily traffic volumes are shown in Figure 1. Detailed traffic counts for all locations, including hourly counts and turning movements, are included in the two Appendices to this report.

On the main line of I-95, between 75,000 and 75,900 vehicles currently approach the interchange during an average day. Currently, over 14,000 northbound and over 14,000 southbound vehicles use this interchange to access I-95 during a typical day, and daily volumes which flow onto the local roadway include over 11,000 from southbound I-95 and over 15,000 from northbound I-95. This puts considerable additional pressure onto both the one way couplet and the connecting section of Torresdale Avenue, which creates significant cut-through movements onto the local, residential streets.

Current study area traffic volumes along the adjacent north-south roadways (parallel to I-95) range from a high of 17,400 on Torresdale Avenue between Cottman and Princeton Avenues to a low of 4,000 on Milnor Street between New State Road and Bleigh Avenue. The most heavily traveled segments of the major north-south roadways in the area, Torresdale Avenue and State Road, carry 17,400 and 17,200, respectively. These roads are major arterials. It should also be noted that significant peak hour volumes have been recorded at Cottman and Princeton intersections.

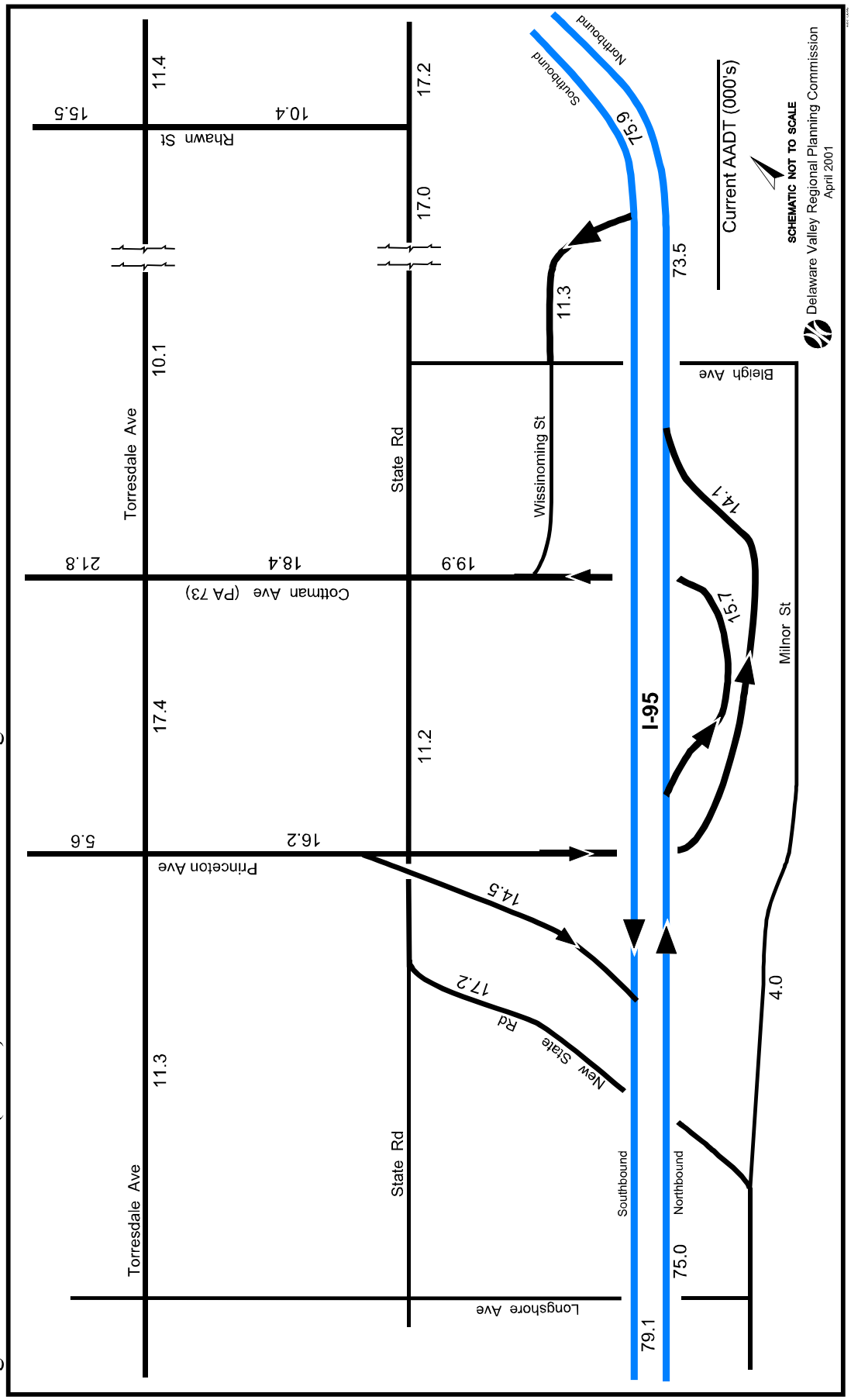


Figure 1. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area Current Traffic Counts

Volumes on east-west roadways (perpendicular to I-95) of the study area range from a high of 21,800 on Cottman Avenue west of Torresdale to a low of 10,400 on Rhawn Street between State Road and Torresdale Avenue. Of all the study area roads which are parallel to Princeton or Cottman, only Longshore Avenue and Disston Street cross the railroad tracks to give access to the riverfront industrial properties east of I-95.

Manual AM and PM peak hour turning movement counts were collected within the study area at the following locations: at the Cottman and Princeton Avenue intersections with Cottage Street, Torresdale Avenue, Vandike Street, Hegerman Street, Edmund Street, Tulip Street, Keystone Street, and State Road; the additional State Road intersections with New State Road, Bleigh Avenue, and Rhawn Street; the intersection of Torresdale Avenue and Rhawn Street; the intersection of Bleigh Avenue and Wissinoming Street; and the Milnor Road intersections with Longshore Avenue and New State Road. Current turning movement volumes are shown in Figures 2 and 2A.

Generally, heaviest AM peak hour volumes are at the intersections with Princeton Avenue, as it provides the main route of access to both southbound and northbound I-95 ramps. The heaviest PM peak hour volumes occur along Cottman Avenue. During both the AM and PM Peak hour the heaviest right turn movement, however, is at the intersection of State Road and Princeton Avenue, where 875 vehicles turn right during the AM Peak hour and 840 vehicles turn right during the PM peak. High left turn volumes occur at the intersection of Princeton and Torresdale Avenues (535 left turns during the AM peak, 495 left turns during the PM peak) and at the intersection of the I-95 southbound off ramp and Bleigh Avenue (575 vehicles during the AM peak).

Throughout the study area, right turns comprise only a small percentage of overall vehicle volumes at most intersections. The highest AM peak right turn volume is at the intersection of State Road and Princeton, where 875 Northbound State Road vehicles turn right onto I-95 Northbound on-ramp, and 840 vehicles turn right at the same intersection during the PM peak hour.

The ramp to I-95 southbound carries 1,100 vehicles during the AM peak hour, and 900 during the PM peak, while the ramp to I-95 northbound carries 1,325 vehicles during the AM peak hour and 1175 vehicles during the PM peak hour. Southbound, 1,030 vehicles exit I-95 during the AM peak and 1261 vehicles exit during the PM peak hour, and northbound exiting volumes are 875 during the AM peak and 1,400 during the PM peak.

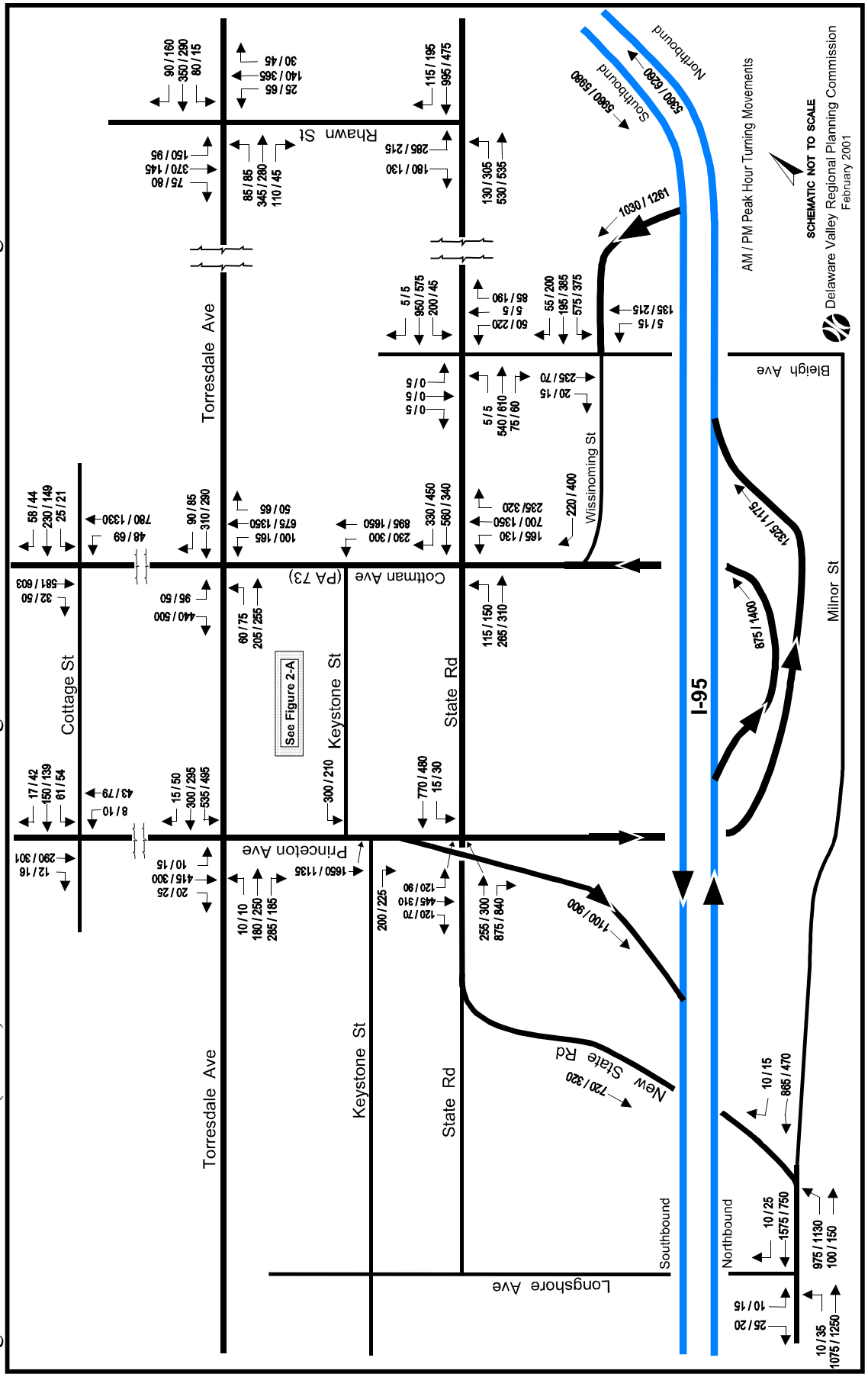
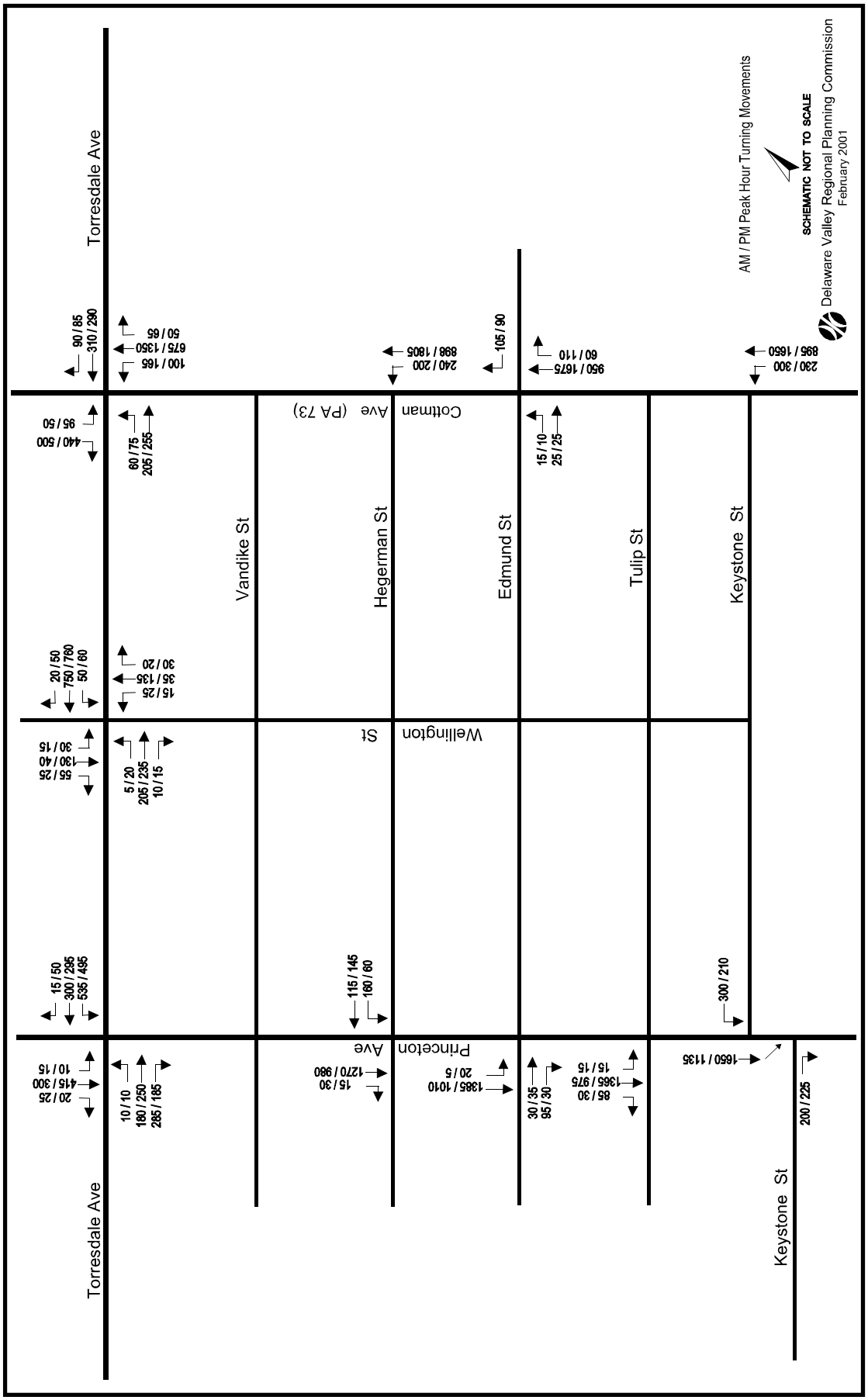


Figure 2. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area Current AM / PM Peak Hour Turning Movements

Figure 2A. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area Current AM / PM Peak Hour Turning Movements



III. IMPROVEMENT ALTERNATIVES

Objectives for improvements, which guided the development of the Design Options, included: making improvements to safety and capacity on I-95; improved access to and from I-95, including better signage; minimizing the traffic and truck impacts to local streets; minimizing the barrier effect of I-95 on the community; and implementing incident management technology.

Four improvement alternatives were identified for this interchange, including three construction, or "build" alternatives (Design Options), and one no action, or "No-build" alternative. The most sweeping improvements to the overall study area would take place under Design Option 1. There are fewer overall improvements under Design Option 2, however ramp configurations change dramatically in this option, where all ramp actions originate or terminate at Cottman Avenue. The fewest overall actions are taken under Design Option 3. A more detailed description of the facility improvements is included in the following sections.

A. No-build Alternative

The No-Build alternative tests traffic flows in the study area assuming that the current I-95 access configuration is retained on the surrounding street and ramp system. A new lane will be constructed, along with the necessary acceleration and deceleration lanes, between the ramps on the main line of I-95 to eliminate the capacity restriction currently created by the lane drop.

Although this improvement does increase the capacity on the main line of I-95, it does not alleviate the congestion that I-95 related traffic causes on the roadways in the study area. The No-build alternative also includes the construction of significant study-area improvements included in the PA Transportation Improvement Program (TIP) and DVRPC's Year 2025 Transportation and Land Use Plan. Additional projects which may impact the study area include the completion of the Aramingo Avenue Connector to Torresdale Avenue and the construction of the Pennsylvania Turnpike/I-95 interchange in Bucks County.

B. Design Option 1

Design Option 1 is the most comprehensive of the design options proposed. In addition to the projects in the No-build Alternative, this option includes:

- Construction of a new southbound ramp from State Road and Longshore Avenue with full acceleration lane,
- Widening State Road to 48 feet between Princeton Avenue and New State Road to accommodate two lanes in each direction,
- Introducing two-way traffic on Princeton Avenue west of AMTRAK,
- Providing double northbound exit lanes from I-95;
- Providing a Princeton Avenue eastbound connection between State Road and Milnor Street which includes pedestrian sidewalk;

- Construction of new north and southbound fourth lanes on I-95 to eliminate current lane drop design;
- Realigning existing I-95 northbound on-ramp and add full acceleration lane;
- Construct new northbound on-ramp to accommodate north and southbound Milnor Street traffic;
- Widening Cottman Avenue to accommodate two way traffic;
- Creation of a new southbound on-ramp from two-way Cottman Avenue.

C. Design Option 2

Design Option 2 was developed with community input and the objective to eliminate I-95 access from Princeton Avenue. This option would instead focus I-95 access onto the Cottman Avenue corridor by consolidating interchange traffic through a single intersection at Cottman Avenue and State Road. The only interchange traffic which would not access this intersection would be vehicles destined for and coming from Milnor Street. As with Design Option 1, this option includes two way traffic operations on Cottman between I-95 and Torresdale, and two-way traffic operations, with curb parking, on Princeton. This option is essentially a Single Point Urban Interchange, although some supplementary ramp access is provided outside the “points”.

Elements of this design option include:

- Closing current Southbound I-95 ramp;
- Widening State Road to two lanes by direction;
- Providing double northbound exit lanes;
- Introducing two-way traffic on Princeton;
- Closing current northbound on-ramp, constructing a realigned new northbound and southbound off-ramp connections to southbound Milnor Street, widening Milnor Street to accommodate new ramp termini;
- Constructing new northbound and southbound on-ramps from two-way Cottman Avenue and Milnor Street;
- Widening Cottman Avenue to accommodate two-way traffic;
- Providing a new signalized intersection where the northbound off-ramp to Cottman Avenue, the southbound off-ramp to Milnor Street, and the northbound on-ramp from Cottman Avenue intersect;
- Expanding Cottman/State Road intersection;
- Construction of a fourth lane both northbound and southbound on I-95 to eliminate lane drop;
- Construction of southbound off-ramp to Cottman Avenue and southbound Milnor Street, closing current southbound off-ramp.

D. Design Option 3

Design Option 3 also accommodates community suggestion of eliminating direct access to I-95 from Princeton Avenue. The improvements are designed as a "split diamond" interchange between Cottman and Bleigh Avenues. Although many of the design elements are the same as the other build options, of the three, this is the most moderate.

Elements of this design option include:

- Introducing two-way traffic on Princeton;
- Closing current northbound and southbound on-ramps, constructing realigned new northbound and southbound off-ramp connections to southbound Milnor Street, widening Milnor Street to accommodate new ramps;
- Widening Cottman Avenue to accommodate two-way traffic;
- Widening State Road to accommodate two southbound lanes and one northbound lane with curb parking;
- Constructing new southbound on-ramp from Cottman Avenue;
- Construction of a fourth lane both northbound and southbound on I-95 to eliminate lane drop; and,
- Providing double northbound exit lanes and expanding capacity of southbound off ramp.

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IV. TRAVEL FORECASTING PROCEDURES

Regional travel simulation models are used to forecast future travel patterns. They utilize a system of traffic zones that follow Census boundaries and rely on demographic and employment data, land use, and transportation network characteristics to simulate trip making patterns throughout the region.

A. Socio-Economic Projections

DVRPC's long-range population and employment forecasts are revised periodically to reflect changing market trends, development patterns, local and national economic conditions, and available data. The completed forecasts reflect all reasonably known current information and the best professional judgement of predicted future conditions. The revised forecasts adopted by the DVRPC Board on February 24, 2000[1] reflect an update to municipal forecasts that were last completed in June 1993.

DVRPC uses a multi-step, multi-source methodology to produce its forecasts at the county-level. County forecasts serve as control totals for municipal forecasts, which are disaggregated from county totals. Municipal forecasts are based on an analysis of historical data trends adjusted to account for infrastructure availability, environmental constraints to development, local zoning policy, and development proposals. Municipal population forecasts are constrained using density ceilings and floors. County, and where necessary, municipal input is used throughout the process to derive the most likely population forecasts for all geographic levels.

1. Population Forecasting

Population forecasting at the regional level involves review and analysis of six major components: births, deaths, domestic in-migration, domestic out-migration, international immigration, and changes in group quarters populations (e.g. dormitories, military barracks, prisons, and nursing homes). DVRPC uses both the cohort survival concept to age individuals from one age group to the next, and a modified Markov transition probability model based on the most recent US Census and the US Census' recent Current Population Survey (CPS) research to determine the flow of individuals between the Delaware Valley and the outside world. For movement within the region, Census and IRS migration data coupled with CPS data are used to determine migration rates between counties. DVRPC relies on county planning offices to provide information on any known, expected, or forecasted changes in group quarters populations. These major population components are then aggregated and the resulting population forecasts are reviewed by member counties for final adjustments based on local knowledge.

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[1]Delaware Valley Regional Planning Commission, *Year 2025 County & Municipal Population & Employment Forecasts*, Philadelphia, PA, April 2000.

In these forecasts, the study area was considered to be in the Near Northeast section of the City of Philadelphia. This section, in 2000, had a population of 225,200, about 14.7 percent of the total City of Philadelphia population. By 2025, that figure is expected to grow by only 0.1 percent, or 300 persons, to 225,500. In 2025, that will be 15.0 percent of the total City of Philadelphia population, which will have shrunk 2.0 percent to 1,500,000 residents as shown below:

Area	2000 Population Forecast	2025 Population Forecast	Change Absolute	Change %Change
Near Northeast	225,200	225,500	300	0.1%
City of Philadelphia	1,530,950	1,500,000	-30,950	-2.0%

2. Employment Forecasting

Employment is influenced by local, national, and global political and socio-economic factors. The Bureau of Economic Analysis provides the most complete and consistent time series data on county employment by sector, and serves as DVRPC's primary data source for employment forecasting. Employment sectors include mining, agriculture, construction, manufacturing, transportation, wholesale, retail, finance/insurance, service, government, and military. Other supplemental sources of data include the U.S. Census, Dun & Bradstreet, Bureau of Labor Statistics, Occupational Privilege tax data, and other public and private sector forecasts. The OBERS shift-share model in combination with the Woods and Poole Economics' sectoral forecasts provides the basis for DVRPC's employment forecasts. As in the population forecasts, county level total employment is used as a control total for sector distribution and municipal level forecasts. Forecasts are then reviewed by member counties for final adjustments based on local knowledge.

The Near Northeast section, in 2000, had employment of 69,350, about 9 percent of the City of Philadelphia total employment. By 2025, that figure is expected to grow by almost 10 percent, to 76,250, which will also be about 9 percent of the City's total. Employment figures are shown below:

Area	2000 Employment Forecast	2025 Employment Forecast	Change Absolute	Change % Change
Near Northeast	69,350	76,250	6,900	9.9%
City of Philadelphia	786,150	840,250	54,100	6.9%

B. DVRPC's Travel Simulation Process

For the I-95 study, a focused simulation process was employed. A focused simulation process allows the use of DVRPC's regional simulation models but includes a more detailed representation of the study area. Local streets not included in the regional network, but of interest in this study, are added to the highway network. Traffic zones inside the study area are subdivided so that traffic from existing and proposed land use developments may be loaded more precisely on the network. The focusing process increases the accuracy of the travel forecasts within the detailed study area. At the same time, all existing and proposed highways throughout the region and their impact on both regional and interregional travel patterns become an integral part of the simulation process.

DVRPC's travel models follow the traditional steps of trip generation, trip distribution, modal split, and traffic assignment. However, an iterative feedback loop is employed from traffic assignment to the trip distribution step. The feedback loop ensures that the congestion levels used by the models when determining trip origins and destinations are equivalent to those that result from the traffic assignment step. Additionally, the iterative model structure allows trip making patterns to change in response to changes in traffic patterns, congestion levels, and improvements to the transportation system.

The DVRPC travel simulation process uses the Evans Algorithm to iterate the model. Evans re-executes the trip distribution and modal split models based on updated highway speeds after each iteration of highway assignment and assigns a weight (λ) to each iteration. This weight is then used to prepare a convex combination of the link volumes and trip tables for the current iteration and a running weighted average of the previous iterations. This algorithm converges rapidly to the equilibrium solution on highway travel speeds and congestion levels. About seven iterations are required for the process to converge to the equilibrium state for I-95 travel patterns. After equilibrium is achieved, the weighted average transit trip tables are assigned to the transit networks to produce link and route passenger volumes.

1. Separate Peak, Midday, and Evening Models

The DVRPC travel simulation models are disaggregated into separate peak period, midday, and evening time periods. This disaggregation begins in trip generation where factors are used to separate daily trips into peak, midday, and evening travel. The enhanced process then utilizes completely separate model chains for peak, midday, and evening travel simulation runs. Time of day sensitive inputs to the models such as highway capacities and transit service levels are disaggregated to be reflective of time-period specific conditions. Capacity factors are used to allocate daily highway capacity to the peak, midday, and evening time periods. Separate transit networks were required to represent the difference in transit service.

The enhanced model is disaggregated into separate model chains for the peak (combined AM and PM), midday (the period between the AM and PM peaks), and evening (the remainder of the day) periods for the trip distribution, modal split, and travel assignment phases of the process. The peak period is defined as 7:00 AM to 9:00 AM and 3:00 PM to 6:00 PM. Peak period and midday travel are based on a series of factors which determine the percentage of daily trips that occur during those periods. Evening travel is then defined as the residual after peak and midday travel are removed from daily travel.

External-local productions at the nine-county cordon stations are disaggregated into peak, midday, and evening components using percentages derived from the temporal distribution of traffic counts taken at each cordon station.

2. The Model Chain

The first step in the process involves generating the number of trips that are produced by and destined for each traffic zone and cordon station throughout the nine-county region.

a. Trip Generation

Both internal trips (those made within the DVRPC region) and external trips (those which cross the boundary of the region) must be considered in the simulation of regional travel. For the simulation of current and future travel demand, internal trip generation is based on zonal forecasts of population and employment, whereas external trips are extrapolated from cordon line traffic counts and other sources. The latter also include trips which pass through the Delaware Valley region. Estimates of internal trip productions and attractions by zone are established on the basis of trip rates applied to the zonal estimates of demographic and employment data. This part of the DVRPC model is not iterated on highway travel speed. Rather, estimates of daily trip making by traffic zone are calculated and then disaggregated into peak and off-peak time periods.

b. Evans Iterations

The iterative portion of the Evans forecasting process involves updating the highway network restrained link travel speeds, rebuilding the minimum time paths through the network, and skimming the interzonal travel time for the minimum paths. Then the trip distribution, modal split, and highway assignment models in sequence for each pass through the model chain. After convergence is reached, the transit trip tables for each iteration are weighted together and the weighted average table assigned to the transit network. The highway trip tables are loaded onto the network during each Evans iteration. For each time period, seven iterations of the Evans process are performed to ensure that convergence on travel times is reached.

c. Trip Distribution

Trip distribution is the process whereby the zonal trip ends established in the trip generation analysis are linked together to form origin-destination patterns in the trip table format. Peak, midday, and evening trip ends are distributed separately. For each Evans iteration, a series of seven gravity-type distribution models are applied at the zonal level. These models follow the trip purpose and vehicle type stratifications established in trip generation.

d. Modal Split

The modal split model is also run separately for the peak, midday, and evening time periods. The modal split model calculates the fraction of each person-trip interchange in the trip table which should be allocated to transit, and then assigns the residual to the highway side. The choice between highway and transit usage is made on the basis of comparative cost, travel time, and frequency of service, with other aspects of modal choice being used to modify this basic relationship. In general, the better the transit service, the higher the fraction assigned to transit, although trip purpose and auto ownership also affect the allocation. The model subdivides highway trips into auto drivers and passengers. Auto driver trips are added to the truck, taxi, and external vehicle trips in preparation for assignment to the highway network.

e. Highway Assignment

For highway trip, the final step in the focused simulation process is the assignment of current or future vehicle trips to the highway network representative of the appropriate scenario. For peak, midday, and evening travel, the assignment model produces the future traffic volumes for individual highway links that are required for the evaluation of the alternatives. The regional nature of the highway network and trip table underlying the focused assignment process allow the diversion of travel into and through the study area to various points of entry and exit in response to the improvements made in the transportation system.

For each Evans iteration, highway trips are assigned to the network representative of a given alternative by determining the best (minimum time) route through the highway network for each zonal interchange and then allocating the interzonal highway travel to the highway facilities along that route. This assignment model is “capacity restrained” in that congestion levels are considered when determining the best route. The Evans equilibrium assignment method is used to implement the capacity constraint. When the assignment and associated trip table reach equilibrium, no path faster than the one actually assigned can be found through the network, given the capacity restrained travel times on each link.

f. Transit Assignment

After equilibrium is achieved, the weighted average transit trip tables (using the ?s calculated from the overall Evans process as weights) are assigned to the transit network to produce link and route passenger volumes. The transit person trips produced by the modal split model are "linked" in that they do not include any transfers that occur either between transit trips or between auto approaches and transit lines. The transit assignment procedure accomplishes two major tasks. First, the transit trips are "unlinked" to include transfers, and second, the unlinked transit trips are associated with specific transit facilities to produce link, line, and station volumes. These tasks are accomplished simultaneously within the transit assignment model, which assigns the transit trip matrix to minimum impedance paths built through the transit network. There is no capacity restraining procedure in the transit assignment model.

C. Traffic Assignment Validation

Before a focused simulation model can be used to predict future trip making patterns, its ability to replicate existing conditions is validated. The simulated highway assignment outputs are compared to current traffic counts taken on roadways serving the study area. The focused simulation model was executed with current conditions and the results compared with recent traffic counts collected by DVRPC. Based on this analysis, the focused model produced accurate traffic volumes. The validated model was then executed for each alternative with socio-economic and land use inputs reflective of future conditions.

V. PROJECTED TRAFFIC VOLUMES

Projected average daily traffic volumes for selected highway links within the study area are presented and analyzed here. Forecasts are for the horizon year, 2025, which is 20 years after the anticipated opening year.

A. No-build Alternative

Figure 3 shows the current and 2025 volumes for the No-build alternative in the interchange area. Current year volumes are shown in black, below or to the right of streets in the diagram, while 2025 volumes are shown in red, above or to the right of the streets in the diagram. Under this scenario the street most heavily impacted will be Milnor Street, south of I-95, where projections show AADT more than doubling, from 4,000 to 9,400 vehicles per day. AADT in the section of Princeton Avenue west of Torresdale is also significantly impacted, almost doubling, from 5,600 to 9,800. AADT on most of the other streets in the area grow between 11 and 30 percent, and the main line of I-95 will grow between 12,000 and 12,800 vehicles per day northbound, and by 10,700 vehicles per day southbound.

When compared to current volumes, Average Daily Traffic on the main line of I-95 in the No-build alternative grows about 14.1 percent southbound north of the interchange, and about 13.5 percent south of the study area. In both cases, volumes increase by 10,700 vehicles. Northbound traffic on the mainline south of the interchange area grows by 17.1 percent, or 12,800 vehicles per day, while north of the interchange volumes increase 16.3 percent, or 12,000 vehicles per day. AADT on the southbound on-ramp grows 12.4 percent (1,800 vehicles per day), on the northbound off-ramp by 18.5 percent (2,900 additional vehicles per day) and volumes on the southbound off-ramp increase by 15.9 percent (1,800 vehicles per day) and on the northbound on-ramp increase by 15.6 percent, or 2,200 vehicles per day over current volumes.

Peak hour turning movement growth is consistent with AADT growth. There is a general increase in volumes throughout the system when comparing the No-build alternative to current volumes, consistent with regional traffic growth expectations for the region. Along Cottman and Torresdale Avenues, there are increases in volumes at all intersection approaches. Increases are, however, generally low, usually less, and sometimes considerably less, than 100 vehicles per movement.

Figures 4 and 4A show the AM/PM peak hour turning movements in the study area for the No-Build alternative. For example, at the intersection of State Road and Rhawn Street, the AM northbound through movement increases by 147 vehicles, and the southbound PM through movement increases by 113 vehicles when compared to current volumes. Volume increase at other State Road intersections is consistent with vehicle growth at intersections throughout the study area, including the residential streets which connect Cottman and Princeton Avenues east of Torresdale Avenue.

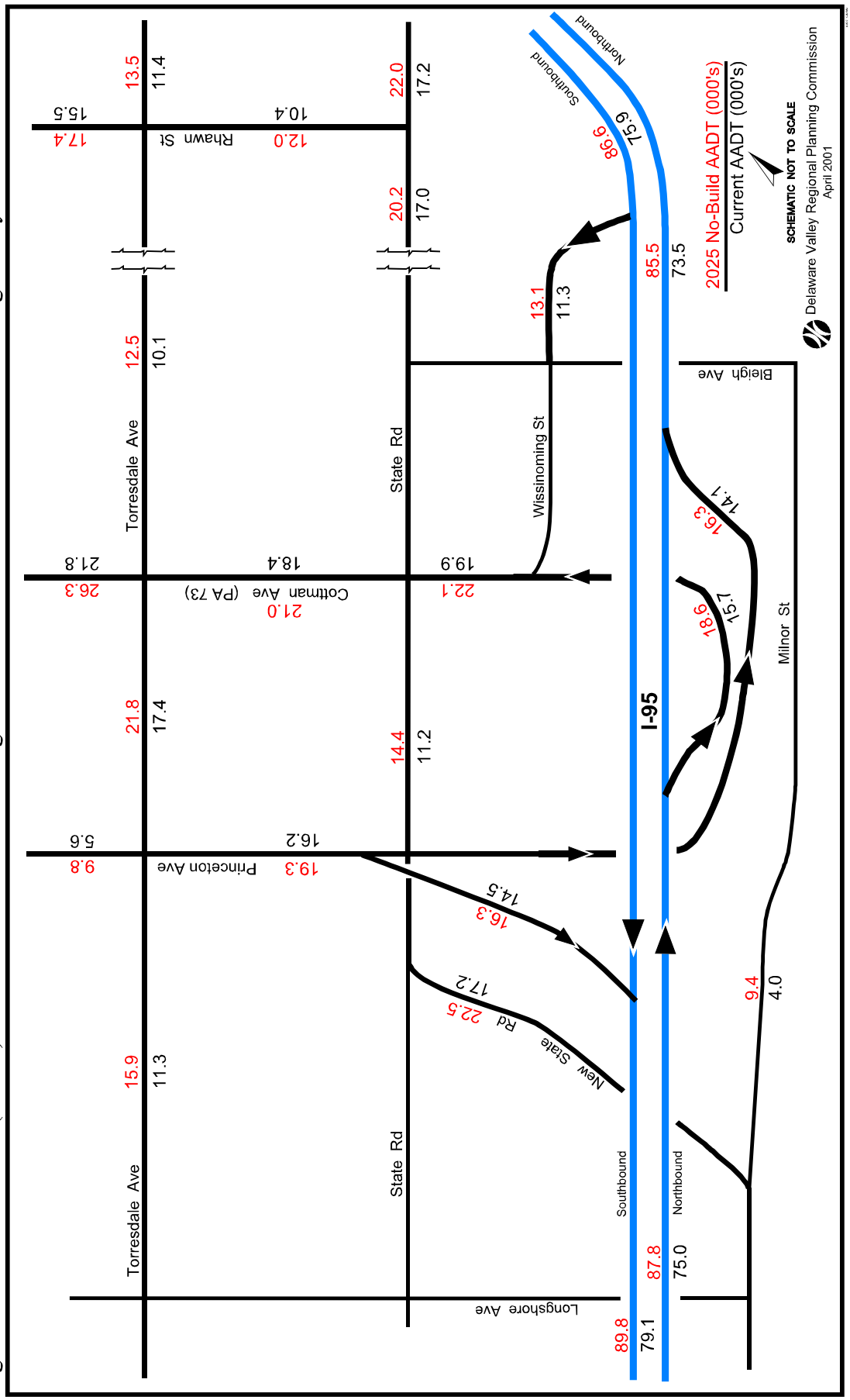


Figure 3. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area Current & 2025 No-Build Average Daily Traffic Volumes

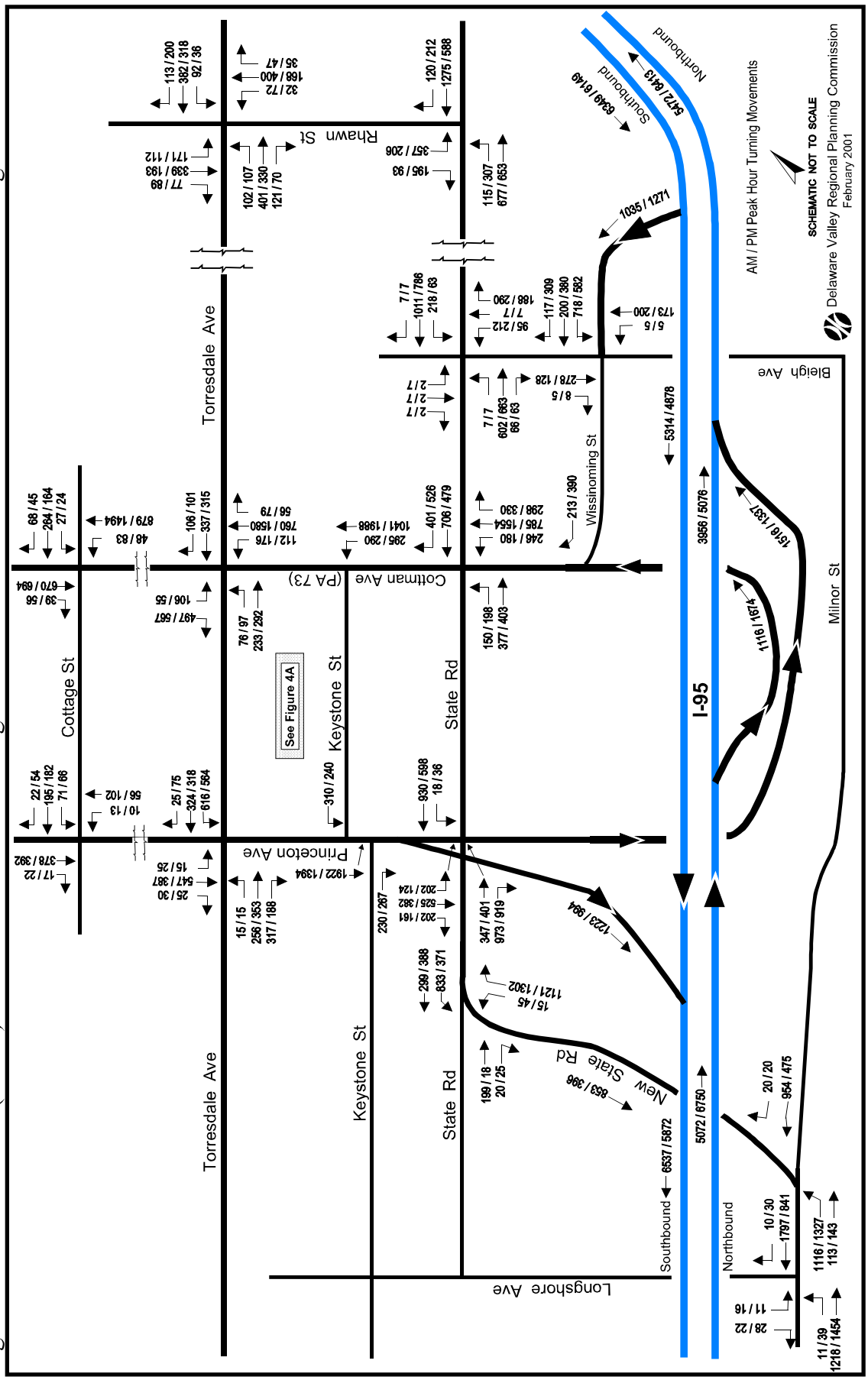
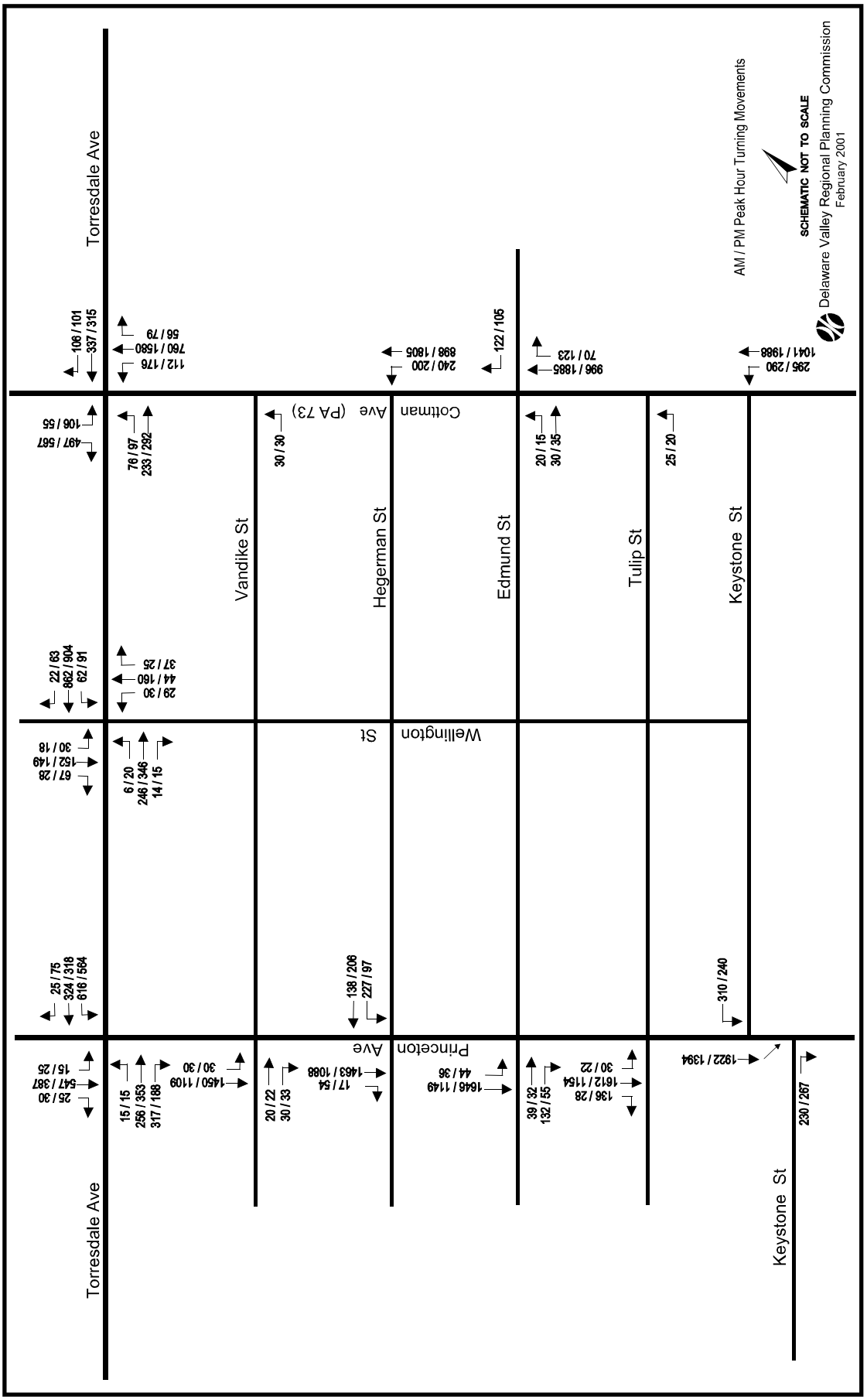


Figure 4. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area 2025 No-Build AM /PM Peak Hour Turning Movements

Figure 4A. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area 2025 No-Build AM / PM Peak Hour Turning Movements



B. Design Option 1

This design option, shown in Figure 5, relocates the southbound I-95 on-ramp from Princeton Avenue west of State Road to the two-way Cottman Avenue, east of State Road at Wissinoming Street. An additional southbound on-ramp would be constructed with access off of State Road, south of Longshore Avenue. Additional access to the northbound on-ramp, which would still originate from Princeton Avenue, is constructed off of Milnor Street. Under this Design Option, AADT volumes for the section of Cottman Avenue east of State Road increase by 44.8 percent, or 9,900 vehicles per day over the No-build alternative volumes. Because of the new connection to the I-95 northbound on-ramp, traffic on Milnor Street shows the highest growth under this option, up 114 percent, or 10,700 vehicles over the No-build option, and 403 percent, or 16,100 vehicles over current volumes. Under this option, volumes on State Road remain fairly close to No-build volumes, and AADT on Torresdale and Princeton Avenues decreases slightly over the No-build scenario.

When compared to the No-build alternative, volumes on the mainline of I-95 grow only very slightly. Southbound AADT approaching the interchange complex increases by just 0.3 percent (300 additional vehicles) and south of the interchange complex southbound volumes increase by only 4.7 percent, or 4,200 vehicles. Northbound, south of the interchange complex, AADT grows by 3.6 percent, or 3,200 additional vehicles per day, and north of the interchange volumes increase by the greatest amount in this Design Option, 6.5 percent, or 5,600 vehicles per day.

Overall southbound on-ramp volumes increase 21.5 percent over the No-build alternative AADT (an additional 3,500 vehicles), however the volumes in this Design Option are split between two ramps. The southern ramp, which originates from State Road south of Longshore Avenue, is forecasted to carry 9,100 vehicles per day, or 46.0 percent of southbound on-ramp volume. This volume is 44.2 percent lower than the No-build alternative AADT for a single ramp. The northern southbound on-ramp, which originates from Cottman Avenue at Wissinoming Street, is forecasted to carry 10,700 vehicles per day, or 54.0 percent of southbound on-ramp volume, which is 34.4 percent lower than the No-build Alternative.

Under this Design Option the northbound on-, off-, and southbound off-ramps remain in the same location as the No-build alternative. Volumes on the northbound on ramp increase by 11.7 percent (1,900 vehicles per day), while AADT on the northbound off-ramp decreases by 2.7 percent (500 fewer vehicles) and on the southbound off-ramp by 3.1 percent, or 400 fewer vehicles

As Cottman and Princeton Avenues are converted to two-way operations, turning movements on to and from cross streets, such as State Road, increase when compared to the No-build alternative. Increases in overall movements throughout the system remain modest (less than 100 vehicles per movement), including some minor decreases when compared to the No-build alternative.

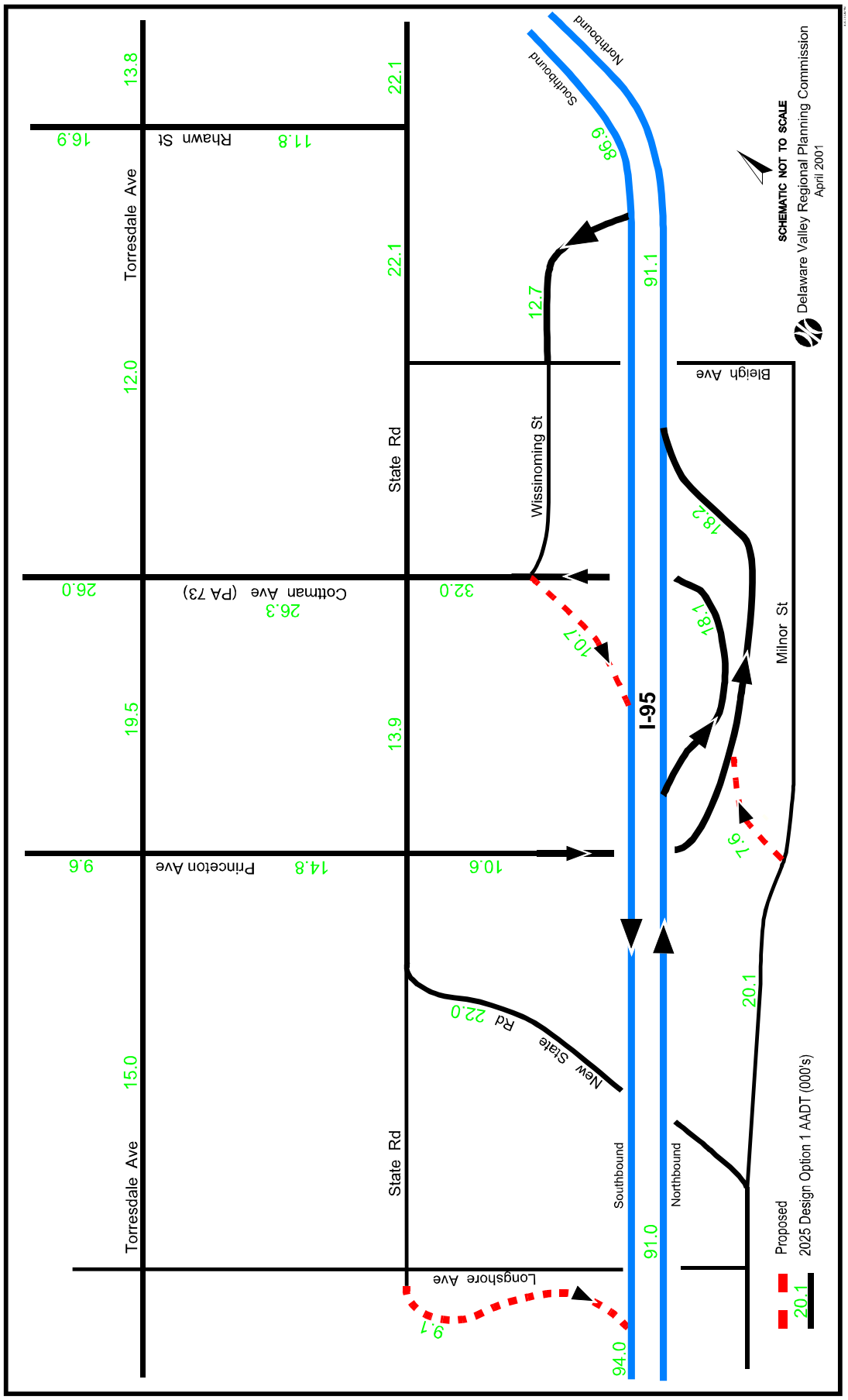


Figure 5. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area 2025 Design Option 1 Average Daily Traffic Volumes

On State Road at Cottman Avenue, overall southbound volumes increase 16.3 percent over the No-build alternative during the AM peak hour, with fewer vehicles turning right, or westbound, but significantly more through vehicles and newly available left turns onto eastbound Cottman. Northbound State Road experiences significant overall growth when compared to the No-build alternative (29.8 percent) during the AM peak hour, with most of the growth originating from right turns onto eastbound Cottman to access the new on-ramp.

Also, turning movements along Torresdale Avenue at the Princeton Road Intersection decline under Option 1 when compared to the No-build alternative. The Princeton Avenue through movement eastbound, west of Torresdale Avenue declines 34.4 percent during the AM peak hour and the southbound Torresdale Avenue left turn onto Princeton eastbound declines 51.6 percent when compared to the No-build alternative.

The greatest overall intersection volume increases under Design Option 1, when compared to the No-build alternative, takes place at the Milnor Road intersection with Longshore Avenue. Overall eastbound volumes on Longshore more than double, as traffic on Milnor Road increases due to ramp configurations. Turning movements for this Design Option are shown in Figures 6 and 6A.

C. Design Option 2

This design option completely reconfigures the interchange complex, moving almost all I-95 northbound and southbound access to Cottman Avenue, re-routing a portion of northbound and southbound exiting traffic to Milnor Street, and creating a new northbound ramp from Milnor Street. AADT on both Cottman Avenue and Milnor Street, therefore, would be severely impacted.

Under this option, AADT on the main line of I-95 will increase only modestly: southbound volumes by 2.4 percent over the No-build alternative north of the interchange complex, and 2.3 percent south of the interchange (an additional 2,100 vehicles in both cases). Northbound I-95 AADT south of the interchange increases by only 2.3 percent, or 2,000 vehicles under this option, and by 5.1 percent, or 4,400 additional vehicles, north of the interchange.The southbound off-ramp configuration under Design Option 2 splits, giving vehicles two options upon exiting: access to Cottman Avenue, or access to Milnor Street. In comparison to the No-build alternative, however, there is a slight volume decrease (0.6 percent or -100 vehicles). The northbound off ramp, which also splits, giving access to either Cottman Avenue or Milnor Street, also shows a decrease in AADT when compared to the No-build alternative: 8.6 percent (1,600) fewer vehicles.

The single southbound on ramp from Cottman Avenue shows a slight decrease (0.6 percent or -100 vehicles) from the ramp AADT in the No-build alternative, and the northbound on-ramp shows only a 4.9 percent (+800 vehicles per day) increase.

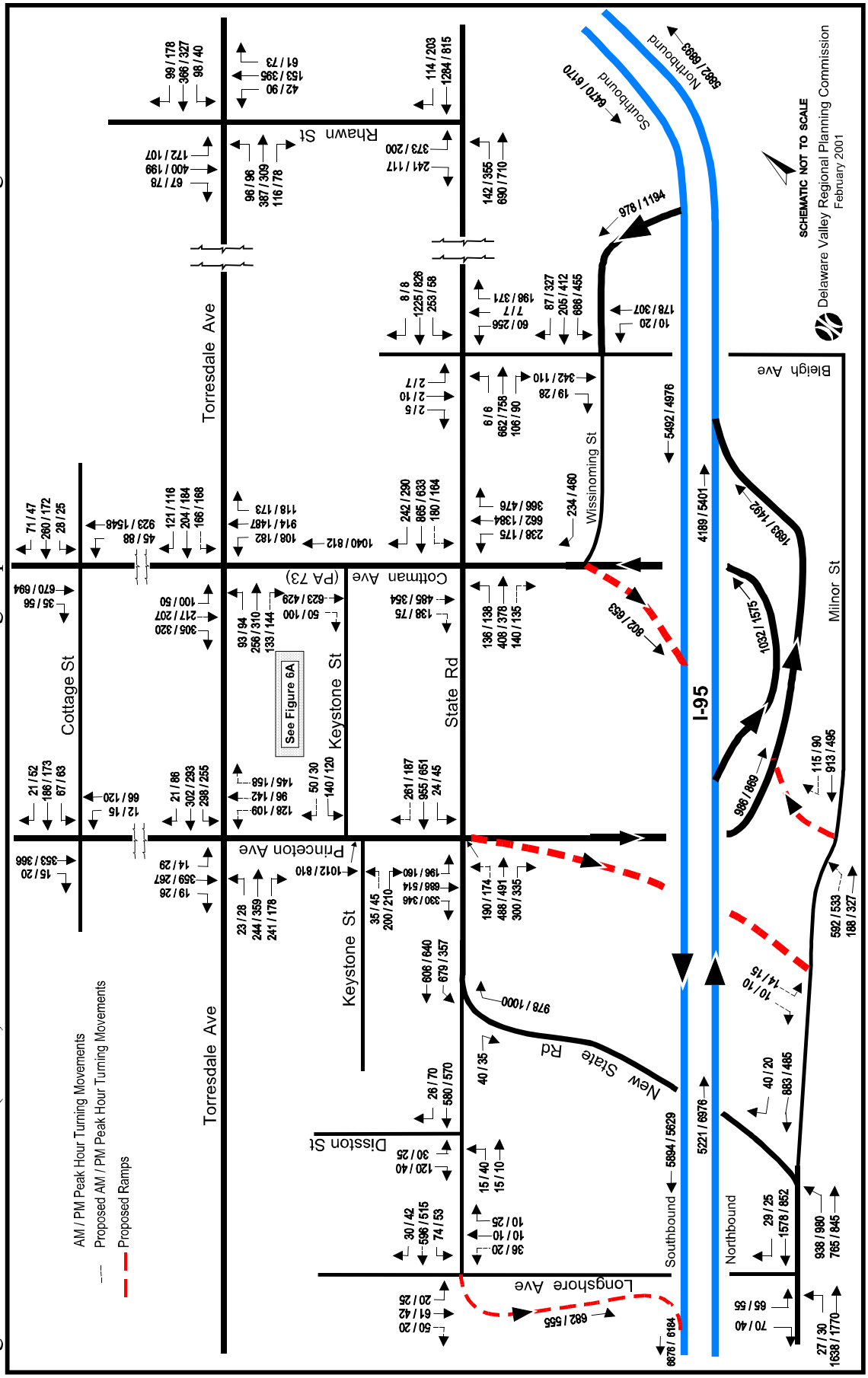


Figure 6. Cottman Ave. (PA 73) / Princeton Ave. Int. Area 2025 Design Option 1 AM / PM Peak Hour Turning Movements

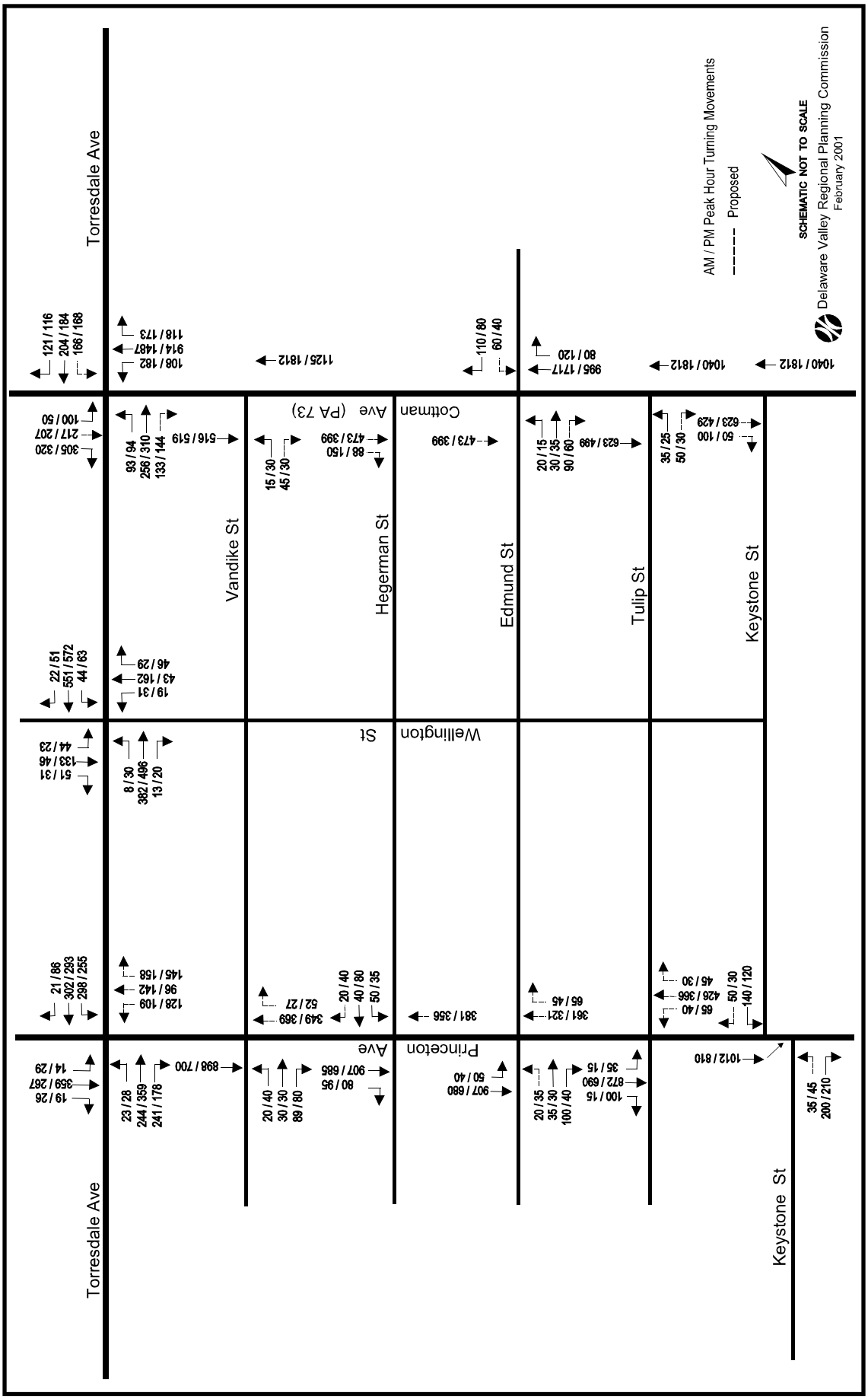


Figure 6A. Cottman Ave. (PA 73) / Princeton Ave. Int. Area 2025 Design Option 1 AM / PM Pk Hour Turning Movements

Also under Option 2, AADT on the portion of Cottman Avenue between Wissinoming Street and State Road would increase to 49,300 vehicles, a 123 percent increase over the No-build alternative (+27,200 vehicles per day) as shown in Figure 7. Additionally, the section of Cottman between State Road and Torresdale Avenue would experience a similar massive increase in volumes under this option, to 35,600 vehicles, an increase of 69.5 percent over the No-build alternative (+ 14,600 vehicles per day) and in increase of 93.5 percent over current volumes (+17,200 vehicles per day). Levels of service at the intersection with State Road would deteriorate significantly under this option.

Interestingly, most of the other roadways within the study area would benefit from this option. Torresdale Avenue, which connects the one-way couplet, shows that AADT grows on only one section, between Cottman and Rhawn, (5.6 percent) from the No-build alternative.

Because of this increase on Cottman Avenue, worsening congestion is assured, thus putting pressure on the smaller residential streets to offer relief. This can be seen in an examination of the side street turning movements at Cottman and at Princeton Avenues, where turning movements into and out of these small streets (Figures 8 and 8A) increase in some cases by more than 100 percent over current or no-build volumes.

Because of the significant role Cottman Avenue assumes under this option, as the primary access and egress point for I-95, its intersections, as well as its straight line volumes increase significantly when compared to the No-build alternative. Overall, volumes also increase along Torresdale Avenue, where during the AM peak hour the intersection with Cottman gains 341 southbound vehicles turning left onto eastbound Cottman, an increase at this approach of 39.7 percent when compared to the No-build volumes. PM Peak hour volumes increase overall at this location by 20.0 percent.

As drivers seek alternatives to Cottman, increases in turning volumes off of State Road at other intersections emerge. Turning volumes, when compared to the No-build alternative, increase at Rhawn Street (37.4 percent increase in northbound left turns onto westbound Rhawn) and 269 right turns are added from southbound State Road at Princeton Avenue during the AM peak hour.

On New State Road at Milnor Street, northbound through traffic decreases significantly, by 37.3 percent during the AM peak and by 46.8 percent during the PM peak when compared to the No-build alternative. Movements to Milnor Street, however, increase even more significantly, by 650 percent (from 113 to 848 vehicles) during the AM peak, and by 710 percent (from 143 to 1158 vehicles) during the PM peak hour. Volumes also increase at the New State Road intersection with Longshore Avenue, however the increases are more in keeping with the overall increases in roads adjacent to I-95 ramps.

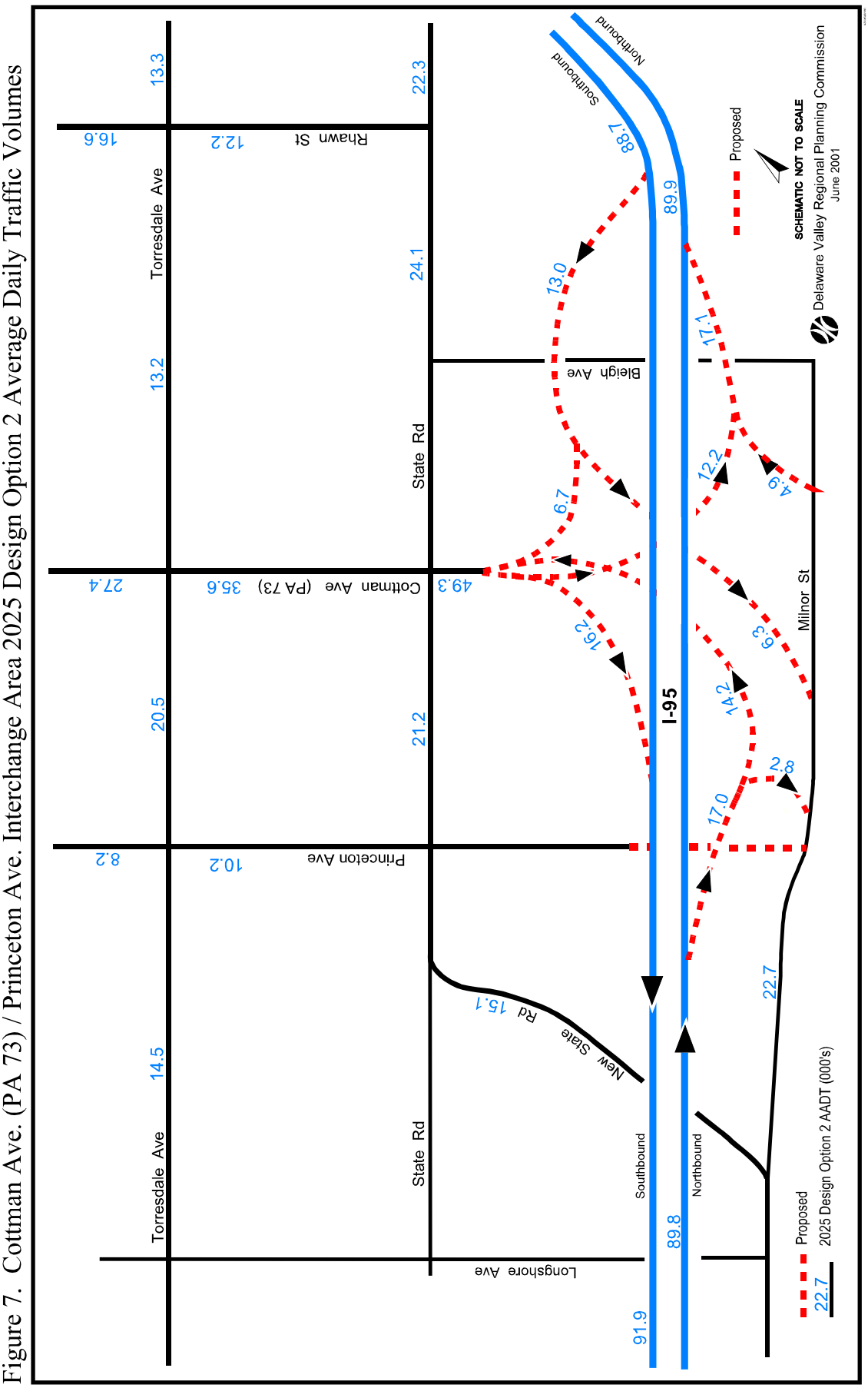


Figure 7. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area 2025 Design Option 2 Average Daily Traffic Volumes

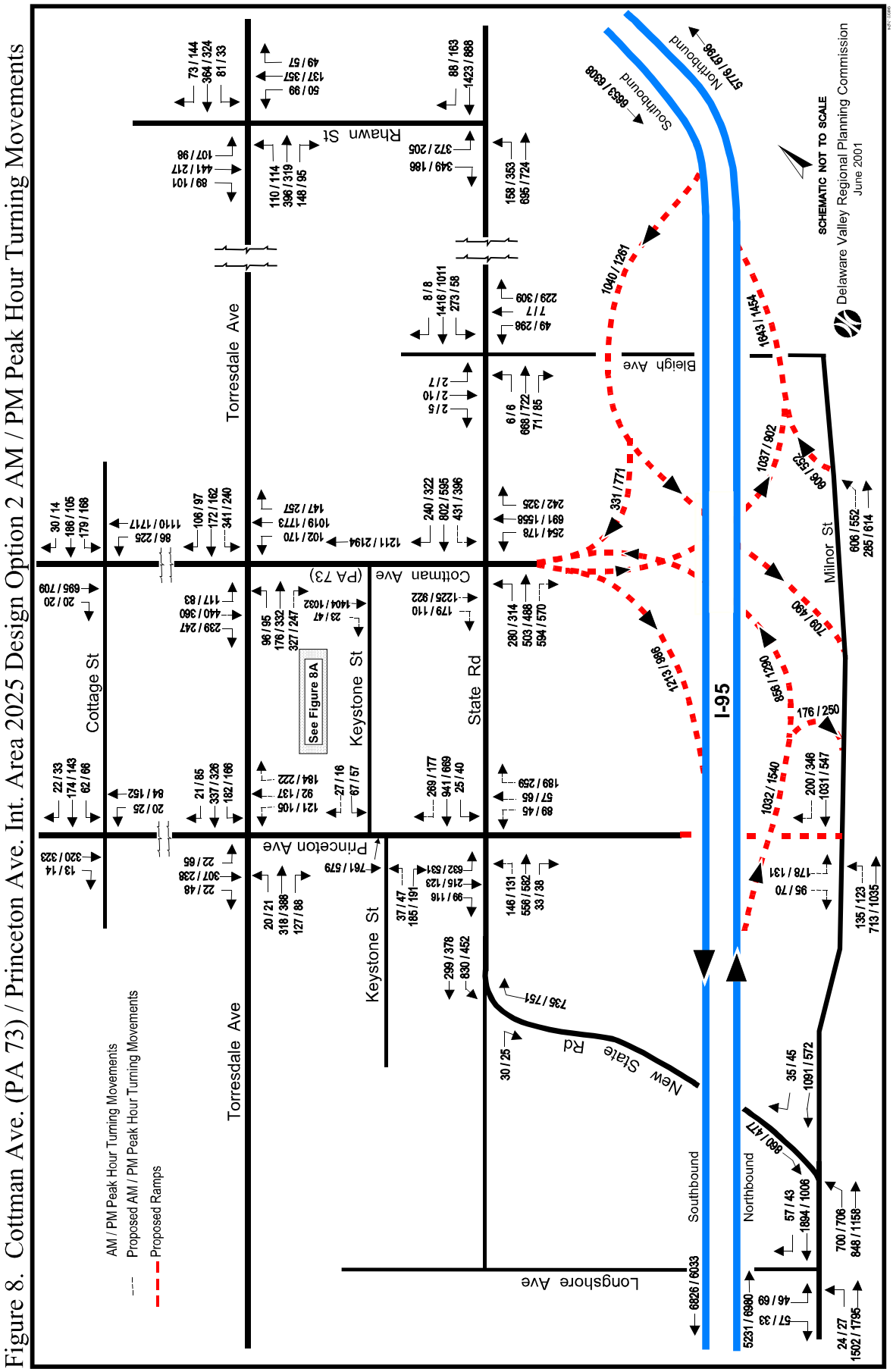
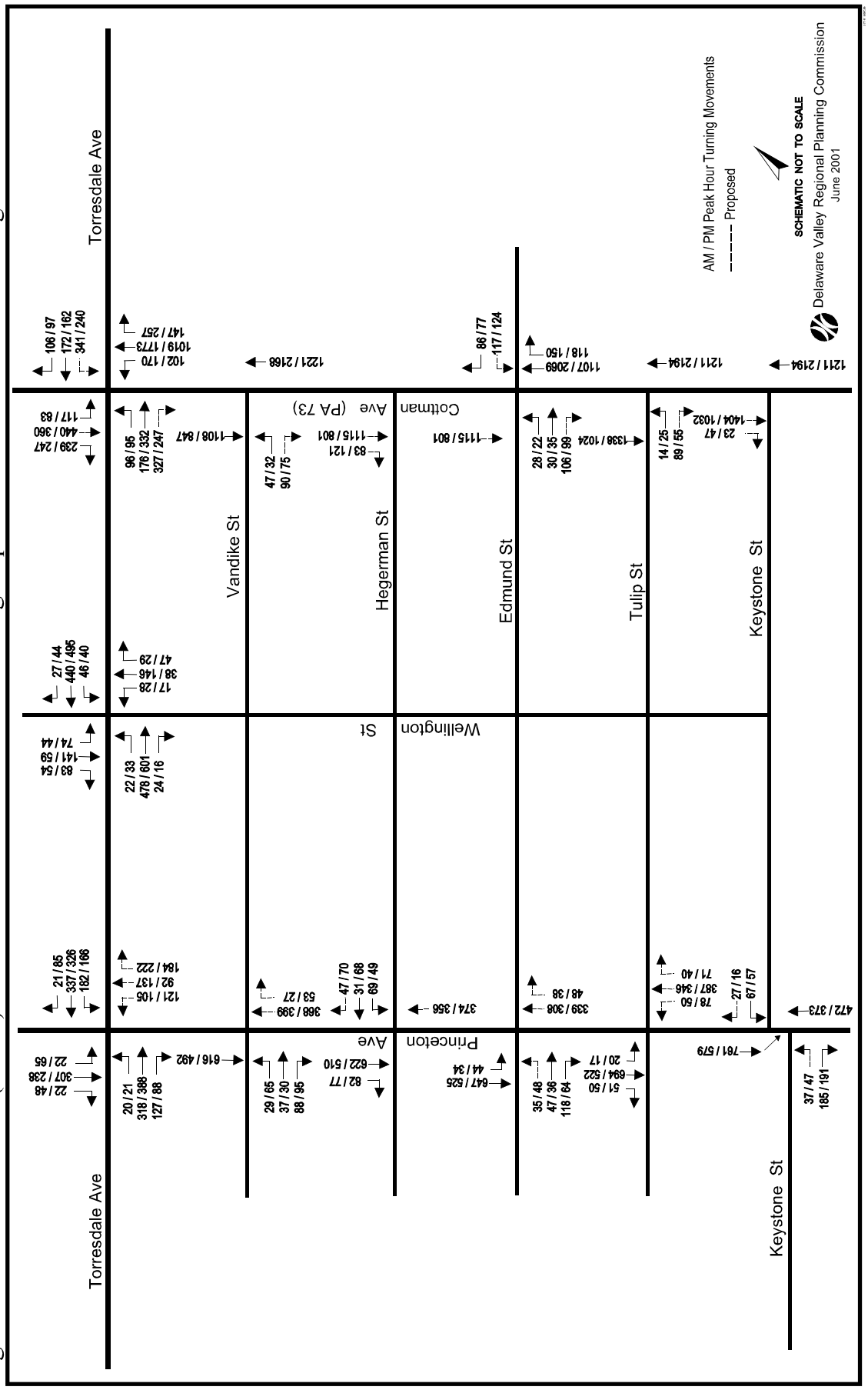


Figure 8. Cottman Ave. (PA 73) / Princeton Ave. Int. Area 2025 Design Option 2 AM / PM Peak Hour Turning Movements
AM / PM Peak Hour Turning Movements
Proposed AM / PM Peak Hour Turning Movements
Proposed Ramps
Cottman Ave (PA 73)
Princeton Ave
Keystone St
State Rd
Torresdale Ave
Cottage St
Rhawn St
Bleigh Ave
Milnor St
New State Rd
Longshore Ave
I-95
Northbound
Southbound
See Figure 8A
SCHEMATIC NOT TO SCALE
Delaware Valley Regional Planning Commission
June 2001

Figure 8A. Cottman Ave. (PA 73) / Princeton Ave. Int. Area 2025 Design Option 2 AM / PM Pk Hr Turning Movements



D. Design Option 3

In this design option, as in Options 1 and 2, access to southbound I-95 is shifted to Cottman Avenue from Princeton Avenue, whereas northbound access is shifted entirely to Milnor Street. Princeton Avenue would be extended to Milnor Street, northbound ramp access from Princeton Avenue would be eliminated, and exiting traffic from northbound I-95 would now split, giving access to either Milnor Street or Cottman Avenue. Southbound off-ramp traffic would still exit onto Wissinoming Street toward Cottman Avenue. Volumes are shown in Figure 9.

AADT volumes on Cottman Avenue east of State Road are considerably higher than the No-build alternative (+ 64.3 percent). On Torresdale Avenue, volumes decline to levels, on average, close to those represented in the No-Build alternative. North of Princeton Avenue, State Road shows increases in AADT from the No-build alternative. Rhawn Street shows only a very slight increase over the No-build alternative between State Road and Torresdale Avenue, while Princeton Avenue, between Torresdale Avenue and State Road is lower than the No-build Alternative (by 45.6 percent).

Under Design Option 3, volumes on the main line of I-95 northbound, approaching the interchange complex, increase by 2.7 percent (+2,400 vehicles) over the No-build alternative, and north of the interchange departing volumes increase by 6.1 percent, or 5,200 additional vehicles. Northbound on-ramp vehicles, which originate in this option only from Milnor Street, increase 5.5 percent over the No-build alternative while northbound off-ramp volumes decrease by 10.2 percent (1,900 vehicles).

Southbound, 88,300 vehicles approach the interchange complex under this Design Option, an increase of 2.0 percent (+1,700 vehicles) over the No-build alternative, and departing the interchange complex AADT will increase by 2.6 percent, or 2,300 vehicles. AADT on the southbound on-ramp will increase by 3.7 percent, or 600 additional vehicles per day when compared to the No-build alternative, and there is no change in volumes on the southbound off-ramp from the No-build AADT of 13,100.

Traffic destined for northbound I-95 must access the ramp via Milnor Street at Bleigh Avenue, accounting for the significant increase in eastbound turns onto Bleigh from northbound State Road (297 percent AM peak and 162 percent PM peak increase) and from southbound State Road (139 percent AM peak and 398 percent PM peak) when compared to the No-build alternative.

On Cottman Avenue, all westbound volumes decline at the intersection with State Road under this option when compared to the No-build alternative, although right turns from westbound Cottman onto northbound Torresdale Avenue increase by 239 percent during the PM peak hour. Because of traffic destined for the northbound I-95 ramp, the New State Road intersections with Longshore Avenue and Milnor Street experience significant changes when compared to the No-build alternative. While turns from New State to Longshore increase very slightly during

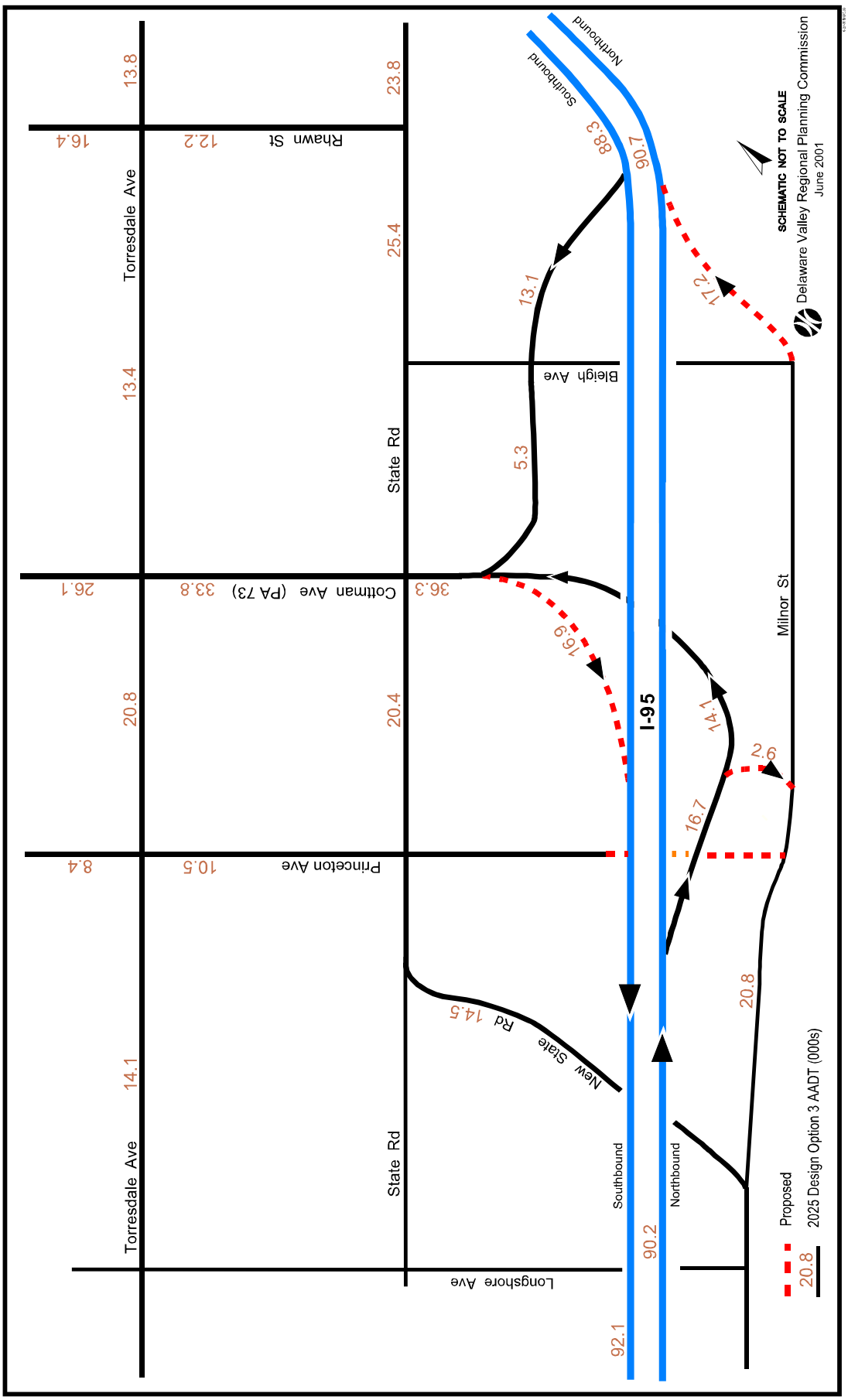


Figure 9. Cottman Ave. (PA 73) / Princeton Ave. Interchange Area 2025 Design Option 3 Average Daily Traffic Volumes

AM and PM peak hours, through traffic on New State decreases significantly (39.9 percent decrease in AM peak hour, 48.4 percent decrease in PM peak hour). There are notable increases in traffic to Milnor Street from New State Road, however, where volumes increase by 784 percent over No-build volumes, from 113 vehicles to 999 vehicles during the AM peak hour, and by 730 percent, from 143 vehicles to 1187 vehicles, in the PM peak hour.

An examination of turning movements onto and off of Princeton Avenue between Keystone Street and Torresdale Avenue shows volumes generally declining, as compared to the No-build alternative, as much as 51.5 percent in the AM peak at Tulip Street. However, at the intersections of the same roads with Cottman Avenue shows that Tulip Street, Edmund Street, and Vandike Street approaches to Cottman experience substantial growth (over 288 percent, 210 percent, and 353 percent AM peak growth, and 300 percent, 216 percent, and 253 percent PM peak, respectively) over the No-build alternative. Turning movement volumes for this option are shown in Figures 10 and 10A.

A comparison of each of the design options to the No-build alternative is shown in Table 1. Under the No-build option, traffic volumes on the main line of I-95 grow between 13.5 percent (southbound, south of the complex) to 17.1 percent (northbound, south of the complex). The greatest growth in ramp volumes, 18.5 percent, takes place on the northbound off ramp. The local roads which will be impacted most greatly are Princeton Avenue west of Torresdale Avenue, where volumes will increase 75.0 percent under this option, and Milnor Street, where volumes will increase 135 percent (AADT increases from 4.0 to 9.4 thousand vehicles per day).

Under Design Option 1, traffic on the main line grows only very little when compared to the No-build option, between less than one percent southbound, north of the complex, to 6.5 percent, northbound, north of the complex. Under this option off-ramps show a slight decrease in volumes, while on-ramp volumes increase by 11.7 percent northbound and 21.5 percent southbound. Under this Option, when compared to No-build volumes, Milnor Street shows the greatest increase, 114 percent. The second largest increase is along Cottman Avenue between Wissinoming Street and State Road, where volumes grow by 44.8 percent. Volumes on Princeton Avenue between State Road and Torresdale Avenue will decline by 23.3 percent under this option.

Under Design Option 2, as in Design Option 1, traffic volumes on the main line grow very little when compared to the No-Build option, between 2.3 percent northbound, south of the complex and also southbound, south of the complex, to 5.1 percent northbound, north of the complex. The southbound on, and the north and southbound off-ramps all experience a decline in volumes (as much as -8.8 percent on the northbound off-ramp). Under this option, Milnor Street volumes increase by 141 percent, volumes on State Road between Princeton and Cottman Avenues increase by 47.2 percent, and volumes on Cottman Avenue between State Road and Torresdale Avenue increase by 69.5 percent and between Wissinoming Street and State Road by 123 percent when compared to the No-build option. Volumes decrease on on Princeton Avenue between State Road and Torresdale Avenue by 47.2 percent, and also west of Torresdale by 16.3 percent. Other links which show decreases in traffic volumes when compared to the No-build

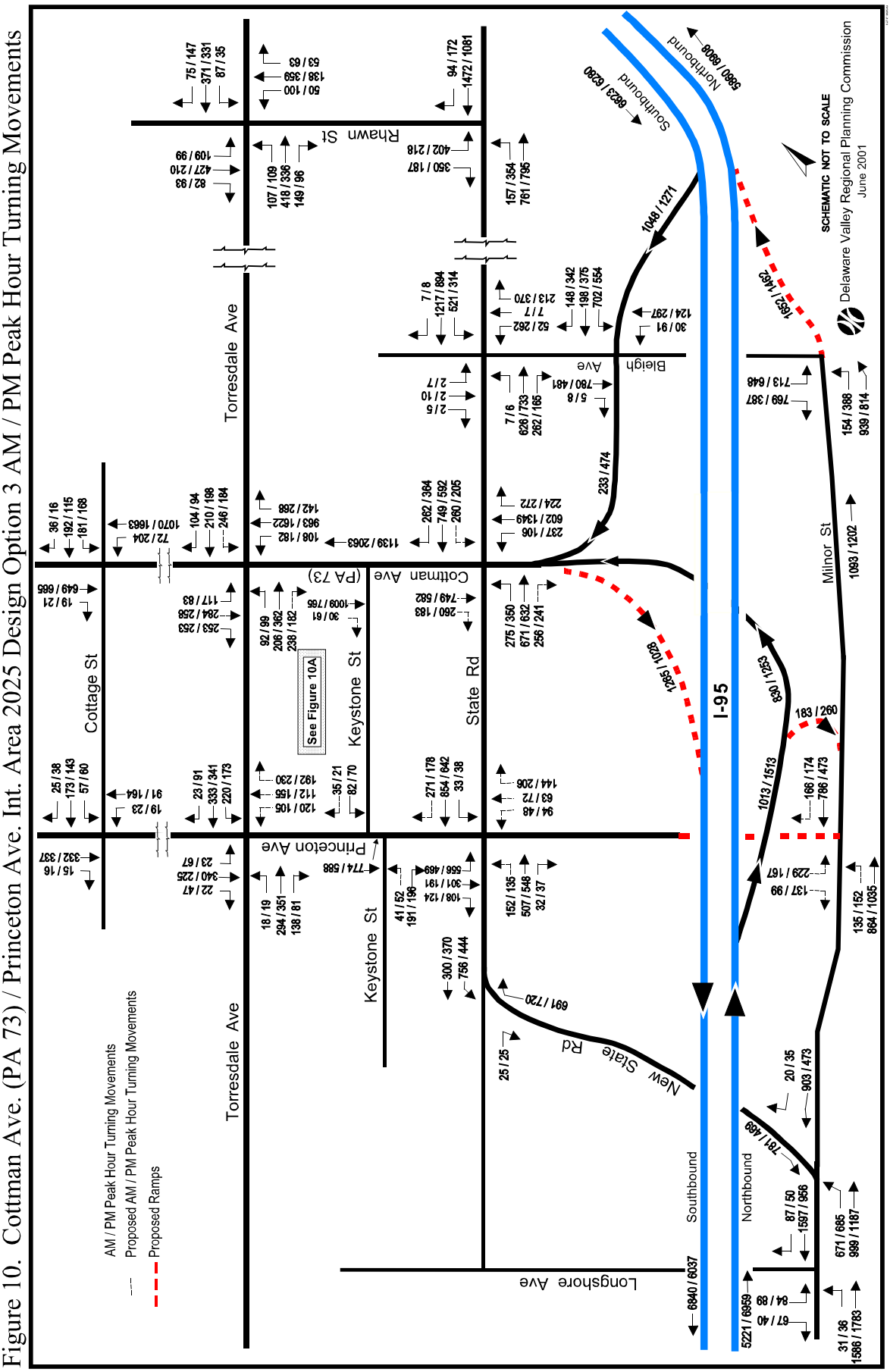


Figure 10. Cottman Ave. (PA 73) / Princeton Ave. Int. Area 2025 Design Option 3 AM / PM Peak Hour Turning Movements

Figure 10A. Cottman Ave. (PA 73) / Princeton Ave. Int. Area 2025 Design Option 3 AM / PM Pk Hour Turning Movements

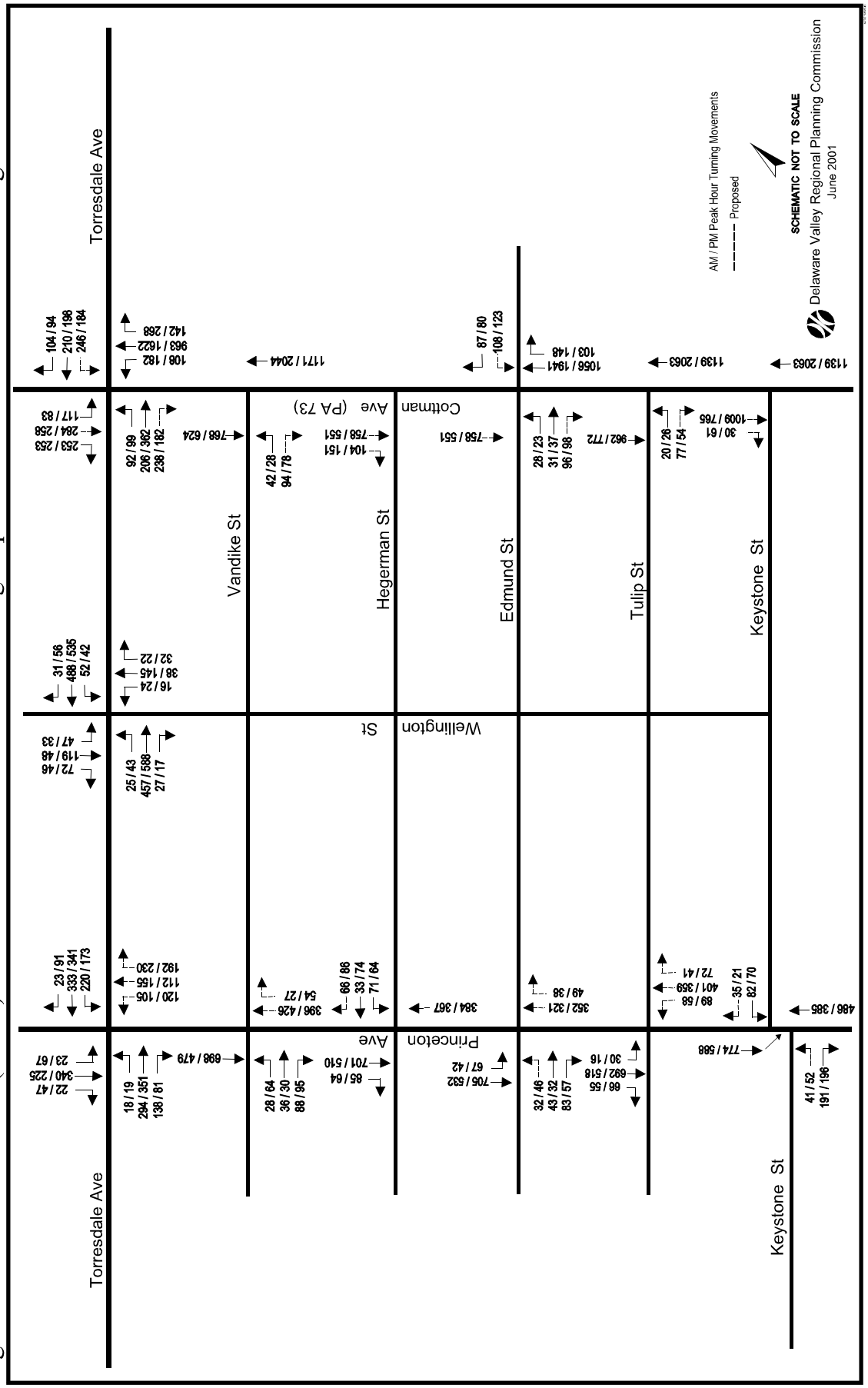


Table 1. Comparison of 2025 Average Daily Traffic Volumes (000s)

Selected Roadway Segments	Current AADT	No-Build Option	Percent Growth	2025 AADT			Build/No-Build Percent Difference		
				Design Option 1	Design Option 2	Design Option 3	Design Option 1	Design Option 2	Design Option 3
I-95 Main Line									
Northbound - South of Complex	75.0	87.8	17.1%	91.0	89.8	90.2	3.6%	2.3%	2.7%
Northbound - North of Complex	73.5	85.5	16.3%	91.1	89.9	90.7	6.6%	5.1%	6.1%
Southbound - North of Complex	75.9	86.6	14.1%	86.9	88.7	88.3	0.3%	2.4%	2.0%
Southbound - South of Complex	79.1	89.8	13.5%	94.0	91.9	92.1	4.7%	2.3%	2.6%
I-95 On Ramps									
Northbound	14.1	16.3	15.6%	18.2	17.1	17.2	11.7%	4.9%	5.5%
Southbound	14.5	16.3	12.4%	19.8*	16.2	16.9	21.5%	-0.6%	3.7%
I-95 Off Ramps									
Northbound	15.7	18.6	18.5%	18.1	17.0	16.7	-2.7%	-8.6%	-10.2%
Southbound	11.3	13.1	15.9%	12.7	13.0	13.1	-3.1%	-0.8%	0.0%
Cottman Avenue (PA 73)									
West of Torresdale Avenue	21.8	26.3	20.6%	26.0	27.4	26.1	-1.1%	4.2%	-0.8%
State Road to Torresdale Avenue	18.4	21.0	14.1%	26.3	35.6	33.8	25.2%	69.5%	61.0%
Wissinoming Street to State Rd	26.2	29.1	11.1%	37.1	36.9	37.0	27.5%	26.8%	27.1%
Princeton Avenue									
West of Torresdale Avenue	5.6	9.8	75.0%	9.6	8.2	8.4	-2.0%	-16.3%	-14.3%
State Road to Torresdale Ave	16.2	19.3	19.1%	14.8	10.2	10.5	-23.3%	-47.2%	-45.6%

* Combined volume of southbound on ramps

Table 1. Comparison of 2025 Average Daily Traffic Volumes (000s) (Continued)

Selected Roadway Segments	Current AADT	No-Build Option	Percent Growth	2025 AADT			Build/No-Build Percent Difference		
				Design Option 1	Design Option 2	Design Option 3	Design Option 1	Design Option 2	Design Option 3
Torresdale Avenue									
Longshore Ave. to Princeton Ave	11.3	15.9	40.7%	15.0	14.5	14.1	-5.7%	-8.8%	-11.3%
Princeton Ave to Cottman Ave	17.4	21.8	25.3%	19.5	20.5	20.8	-10.6%	-6.0%	-4.6%
Cottman Avenue to Rhawn St	10.1	12.5	23.8%	12.0	13.2	13.4	-4.0%	5.6%	7.2%
North of Rhawn Street	11.4	13.5	18.4%	13.8	13.3	13.8	2.2%	-1.5%	2.2%
State Road									
Princeton Ave to Cottman Ave	11.2	14.4	28.6%	13.9	21.2	20.4	-3.5%	47.2%	41.7%
Cottman Avenue to Rhawn St	17.0	20.2	18.8%	22.1	24.1	25.4	9.4%	19.3%	25.7%
North of Rhawn Street	17.2	22.0	27.9%	22.1	22.3	23.8	0.5%	1.4%	8.2%
Milnor Street									
New State Rd to Bleigh Ave	4.0	9.4	135%	20.1	22.7	20.8	113.8%	141.5%	121.3%
New State Road									
Milnor Street to State Road	17.2	22.5	30.8%	22.0	15.1	14.5	-2.2%	-32.9%	-35.6%

option are on Torresdale Avenue, between Longshore and Princeton, and north of Rhawn Street, and New State Road between Milnor and State Road, on which volumes decrease by 32.9 percent.

Under Design Option 3, when compared to the No-build option, traffic volumes on the main line grow between 2.0 percent, southbound, north of the complex, to as much as 6.1 percent, northbound, north of the complex. Volumes on the northbound off-ramp decrease by 10.2 percent, and volumes on the southbound off-ramp remain the same as the No-build option.

Under this option, when compared to No-build volumes, traffic on Cottman Avenue will increase by 61.0 percent between State Road and Torresdale Avenue and by 64.3 percent between Wissinoming Street and State Road. The greatest percentage increase in traffic (121 percent) under this option when compared to No-build volumes is on Milnor Street. The greatest decreases in volumes under this option when compared to No-build volumes is on Princeton Avenue, between State Road and Torresdale Avenue (-45.6 percent) and on New State Road, between Milnor Street and State Road (-35.6 percent).

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APPENDIX A
24-HOUR MACHINE TRAFFIC COUNTS

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DVRPC - Travel Monitoring

DATE: 07/05/2000

ROAD: TR 95 NB DELAWARE EXPY **FROM:** ACADEMY RD **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0095/0310/1000 **FC:** 11

PROJECT: X **COUNT DIR:** NORTH **TRAFFIC DIR:** NORTH **SPEED LIMIT:** 55 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 28016 **COUNTER:** **WEATHER:** F

Hour Ending	Wednesday 07/05/00	Thursday 07/06/00	Friday 07/07/00	Saturday 07/08/00	Sunday 07/09/00
1 AM		910			
2 AM		580			
3 AM		490			
4 AM		500			
5 AM		660			
6 AM		1,480			
7 AM		3,620			
8 AM		5,360			
9 AM		4,920			
10 AM		4,230			
11 AM		4,250			
12 PM		4,350			
1 PM		4,310			
2 PM		4,520			
3 PM		5,440			
4 PM		5,760			
5 PM		6,260			
6 PM		6,230			
7 PM		5,620			
8 PM		3,540			
9 PM		2,960			
10 PM		2,630			
11 PM		1,980			
12 AM		1,480			
		82,080			

SEASONAL FACTOR:	.895	AADT: **73,462**	AM PEAK %:	6.5	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1.00		PM PEAK %:	7.6	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 06/19/2000

ROAD: TR 95 SB DELAWARE EXPY **FROM:** ACADEMY RD **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0095/0311/1000 **FC:** 11

PROJECT: X **COUNT DIR:** SOUTH **TRAFFIC DIR:** SOUTH **SPEED LIMIT:** 55 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 28015 **COUNTER:** **WEATHER:** F

Hour Ending	Monday 06/19/00	Tuesday 06/20/00	Wednesday 06/21/00	Thursday 06/22/00	Friday 06/23/00
1 AM		1,010			
2 AM		750			
3 AM		670			
4 AM		760			
5 AM		1,010			
6 AM		1,930			
7 AM		4,450			
8 AM		5,960			
9 AM		5,330			
10 AM		4,810			
11 AM		4,380			
12 PM		4,340			
1 PM		4,280			
2 PM		4,290			
3 PM		4,860			
4 PM		5,310			
5 PM		5,860			
6 PM		5,980			
7 PM		5,080			
8 PM		3,520			
9 PM		2,940			
10 PM		2,600			
11 PM		2,180			
12 AM		1,680			
		83,980			

SEASONAL FACTOR:	.904	AADT: **75,918**	AM PEAK %:	7.1	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1.00		PM PEAK %:	7.1	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 01/20/1998

ROAD: TR 95 NB OFF RAMP **FROM:** TR 95 NB **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 8023/0010/0500 **FC:** 14

PROJECT: 17-801 **COUNT DIR:** NORTH **TRAFFIC DIR:** NORTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 1896 **COUNTER:** 6348 **WEATHER:** F

Hour Ending	Tuesday 01/20/98	Wednesday 01/21/98	Thursday 01/22/98	Friday 01/23/98	Saturday 01/24/98
1 AM		135	143		
2 AM		102	112		
3 AM		89	78		
4 AM		75	109		
5 AM		180	168		
6 AM		689	671		
7 AM		992	948		
8 AM		931	939		
9 AM		743	692		
10 AM		689	677		
11 AM		699	674		
12 PM		794	792		
1 PM	640	877	891		
2 PM	1,176	1,097			
3 PM	1,200	1,369			
4 PM	1,335	1,471			
5 PM	1,414	1,364			
6 PM	989	1,042			
7 PM	728	781			
8 PM	596	593			
9 PM	514	487			
10 PM	617	464			
11 PM	342	333			
12 AM	257	228			
		16,224			

SEASONAL FACTOR:	1.052	AADT: **16,385**	AM PEAK %:	6.1	HOUR ENDING:	7:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	9.1	HOUR ENDING:	4:00 PM

DVRPC - Travel Monitoring

DATE: 06/13/2000

ROAD: TR 95 SB DELAWARE EXPY OFF RAMP **FROM:** I-95 SB **TO:** TR 73 COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 8023/0500/0500 **FC:** 14

PROJECT: X **COUNT DIR:** SOUTH **TRAFFIC DIR:** SOUTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 27996 **COUNTER:** 9866 **WEATHER:** F

Hour Ending	Tuesday 06/13/00	Wednesday 06/14/00	Thursday 06/15/00	Friday 06/16/00	Saturday 06/17/00
1 AM		142	138		
2 AM		81	90		
3 AM		54	72		
4 AM		39	45		
5 AM		82	72		
6 AM		211	200		
7 AM		600	560		
8 AM		1,030	1,015		
9 AM		896	882		
10 AM	606	584	566		
11 AM	532	564	559		
12 PM	552	574	592		
1 PM	588	574	592		
2 PM	640	594			
3 PM	628	696			
4 PM	811	884			
5 PM	873	881			
6 PM	1,130	1,261			
7 PM	766	826			
8 PM	678	626			
9 PM	559	556			
10 PM	494	442			
11 PM	359	364			
12 AM	230	270			
		12,831			

SEASONAL FACTOR:	.918	AADT: **11,272**	AM PEAK %:	8.	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.957		PM PEAK %:	9.8	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/21/1999

ROAD: TR 73 EB COTTMAN AVE **FROM:** FRANKFORD AVE **TO:** TORRESDALE AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0070/1000 **FC:** 14

PROJECT: 19-87 **COUNT DIR:** EAST **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 30 **LOOP OR CLASS:**

STATION ID: 4895 **DVRPC FILE #:** 5554 **COUNTER:** 9867 **WEATHER:** F

Hour Ending	Wednesday 04/21/99	Thursday 04/22/99	Friday 04/23/99	Saturday 04/24/99	Sunday 04/25/99
1 AM		92	112		
2 AM		52	64		
3 AM		50	52		
4 AM		42	49		
5 AM		64	62		
6 AM		180	167		
7 AM		454	462		
8 AM		651	668		
9 AM		504	519		
10 AM		443	480		
11 AM		423	472		
12 PM		424			
1 PM	290	545			
2 PM	560	557			
3 PM	594	622			
4 PM	641	654			
5 PM	525	586			
6 PM	584	585			
7 PM	582	680			
8 PM	479	516			
9 PM	432	434			
10 PM	370	412			
11 PM	254	346			
12 AM	184	229			
		9,545			

SEASONAL FACTOR:	.949	AADT: **8,678**	AM PEAK %:	6.8	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.958		PM PEAK %:	7.1	HOUR ENDING:	7:00 PM

DVRPC - Travel Monitoring

DATE: 04/21/1999

ROAD: TR 73 WB COTTMAN AVE **FROM:** FRANKFORD AVE **TO:** TORRESDALE AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0071/1000 **FC:** 14

PROJECT: 19-88 **COUNT DIR:** WEST **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 30 **LOOP OR CLASS:**

STATION ID: 4895 **DVRPC FILE #:** 5555 **COUNTER:** 9868 **WEATHER:** F

Hour Ending	Wednesday 04/21/99	Thursday 04/22/99	Friday 04/23/99	Saturday 04/24/99	Sunday 04/25/99
1 AM		234	270		
2 AM		119	157		
3 AM		68	132		
4 AM		50	70		
5 AM		68	68		
6 AM		160	152		
7 AM		436	429		
8 AM		804	810		
9 AM		882	899		
10 AM		676	762		
11 AM		718	802		
12 PM		775			
1 PM	330	824			
2 PM	890	826			
3 PM	954	1,087			
4 PM	1,028	1,137			
5 PM	1,102	1,184			
6 PM	1,198	1,050			
7 PM	1,102	737			
8 PM	878	564			
9 PM	746	442			
10 PM	622	574			
11 PM	490	556			
12 AM	394	427			
		14,398			

SEASONAL FACTOR:	.949	AADT: **13,090**	AM PEAK %:	6.1	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.958		PM PEAK %:	8.2	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 03/19/1997

ROAD: COTTMAN AVE WB **FROM:** STATE RD **TO:** WISSINOMING ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** LOC **FC:** 14

PROJECT: 15-81 **COUNT DIR:** WEST **TRAFFIC DIR:** WEST **SPEED LIMIT:** 35 **LOOP OR CLASS: Y**

STATION ID: **DVRPC FILE #:** 43 **COUNTER:** 1330 **WEATHER:** F

Hour Ending	Wednesday 03/19/97	Thursday 03/20/97	Friday 03/21/97	Saturday 03/22/97	Sunday 03/23/97
1 AM		334	331		
2 AM		197	187		
3 AM		121	166		
4 AM		102	95		
5 AM		104	123		
6 AM		237	268		
7 AM		793	851		
8 AM		1,234			
9 AM		1,269			
10 AM		927			
11 AM		915			
12 PM		955			
1 PM	1,091	1,042			
2 PM	1,074	1,067			
3 PM	1,325	1,349			
4 PM	1,625	1,589			
5 PM	1,810	1,773			
6 PM	1,874	1,814			
7 PM	1,393	1,378			
8 PM	1,101	1,118			
9 PM	892	917			
10 PM	828	820			
11 PM	684	695			
12 AM	466	489			
		21,239			

SEASONAL FACTOR:	.976	AADT: **20,729**	AM PEAK %:	6.	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	1.00		PM PEAK %:	8.5	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 07/07/1999

ROAD: TR 73 WB COTTMAN AVE **FROM:** TORRESDALE AVE **TO:** STATE RD

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 6073/0020/1000 **FC:** 14

PROJECT: 19-89 **COUNT DIR:** WEST **TRAFFIC DIR:** WEST **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: 23823 **DVRPC FILE #:** 8074 **COUNTER:** 9485 **WEATHER:** F

Hour Ending	Wednesday 07/07/99	Thursday 07/08/99	Friday 07/09/99	Saturday 07/10/99	Sunday 07/11/99
1 AM		417	430		
2 AM		221	258		
3 AM		160	220		
4 AM		120	142		
5 AM		92	119		
6 AM		245	246		
7 AM		576			
8 AM	926	892			
9 AM	1,042	1,019			
10 AM	982	938			
11 AM	924	1,044			
12 PM	952	1,079			
1 PM	1,093	1,100			
2 PM	1,058	1,077			
3 PM	1,189	1,201			
4 PM	1,516	1,573			
5 PM	1,743	1,745			
6 PM	1,632	1,711			
7 PM	1,375	1,370			
8 PM	1,242	1,223			
9 PM	1,011	1,074			
10 PM	1,001	953			
11 PM	781	777			
12 AM	858	833			
		21,440			

SEASONAL FACTOR:	.896	AADT: **18,403**	AM PEAK %:	5.	HOUR ENDING:	12:00 PM
AXLE CORR. FACTOR:	.958		PM PEAK %:	8.1	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 12/14/1998

ROAD: TR 73 EB PRINCETON AVE **FROM:** TORRESDALE AVE **TO:** STATE RD

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0090/1000 **FC:** 14

PROJECT: PAP98P **COUNT DIR:** EAST **TRAFFIC DIR:** EAST **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: 12275 **DVRPC FILE #:** 4552 **COUNTER:** 9488 **WEATHER:** F

Hour Ending	Monday 12/14/98	Tuesday 12/15/98	Wednesday 12/16/98	Thursday 12/17/98	Friday 12/18/98
1 AM		137	164		
2 AM		91	95		
3 AM		95	97		
4 AM		98	100		
5 AM		182	186		
6 AM		660	664		
7 AM		1,377			
8 AM		1,501			
9 AM		1,186			
10 AM		898			
11 AM	889	862			
12 PM	832	799			
1 PM	849	872			
2 PM	1,112	889			
3 PM	1,191	1,048			
4 PM	1,175	1,106			
5 PM	1,133	1,121			
6 PM	1,237	1,190			
7 PM	1,240	1,147			
8 PM	903	868			
9 PM	602	595			
10 PM	589	547			
11 PM	516	503			
12 AM	304	289			
		18,061			

SEASONAL FACTOR:	.937	AADT: **16,246**	AM PEAK %:	8.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	6.6	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/28/1997

ROAD: TORRESDALE AVE NB **FROM:** ASHBURNER ST **TO:** RHAWN ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1004/0190/1000 **FC:** 17

PROJECT: 16A-76 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 25207 **DVRPC FILE #:** 511 **COUNTER:** 7291 **WEATHER:** F

Hour Ending	Monday 04/28/97	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97
1 AM		51	54		
2 AM		16	19		
3 AM		6	9		
4 AM		14	18		
5 AM		26	29		
6 AM		58	62		
7 AM		250	253		
8 AM		432	437		
9 AM	367	381			
10 AM	291	310			
11 AM	320	323			
12 PM	309	305			
1 PM	407	404			
2 PM	361	358			
3 PM	408	404			
4 PM	363	360			
5 PM	391	388			
6 PM	475	472			
7 PM	362	366			
8 PM	309	311			
9 PM	230	220			
10 PM	149	145			
11 PM	128	126			
12 AM	81	78			
		5,804			

SEASONAL FACTOR:	.949	AADT: **5,431**	AM PEAK %:	7.4	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	8.1	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/28/1997

ROAD: TORRESDALE AVE SB **FROM:** ASHBURNER ST **TO:** RHAWN ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1004/0190/1000 **FC:** 17

PROJECT: 16A-77 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 25207 **DVRPC FILE #:** 512 **COUNTER:** 6348 **WEATHER:** F

Hour Ending	Monday 04/28/97	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97
1 AM		40	38		
2 AM		34	30		
3 AM		41	42		
4 AM		17	19		
5 AM		70	67		
6 AM		167	164		
7 AM		427	421		
8 AM		365	366		
9 AM		348	340		
10 AM	311	295			
11 AM	326	364			
12 PM	412	373			
1 PM	391	331			
2 PM	399	454			
3 PM	508	458			
4 PM	488	526			
5 PM	534	438			
6 PM	461	386			
7 PM	357	252			
8 PM	311	315			
9 PM	297	301			
10 PM	215	219			
11 PM	133	139			
12 AM	90	101			
		6,461			

SEASONAL FACTOR:	.949	AADT: **6,046**	AM PEAK %:	6.6	HOUR ENDING:	7:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	8.1	HOUR ENDING:	4:00 PM

DVRPC - Travel Monitoring

DATE: 04/28/1997

ROAD: TORRESDALE AVE NB **FROM:** RHAWN ST **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1004/0180/1500 **FC:** 17

PROJECT: 16A-78 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 25206 **DVRPC FILE #:** 514 **COUNTER:** 5407 **WEATHER:** F

Hour Ending	Monday 04/28/97	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97
1 AM		43	37		
2 AM		16	21		
3 AM		10	16		
4 AM		9	14		
5 AM		22	28		
6 AM		62	76		
7 AM		325	312		
8 AM	413	443	440		
9 AM	320	337			
10 AM	249	261			
11 AM	282	274			
12 PM	281	278			
1 PM	346	324			
2 PM	341	304			
3 PM	391	389			
4 PM	340	345			
5 PM	324	399			
6 PM	362	381			
7 PM	300	333			
8 PM	243	271			
9 PM	187	203			
10 PM	120	150			
11 PM	142	151			
12 AM	67	78			
		5,408			

SEASONAL FACTOR:	.949	AADT: **5,060**	AM PEAK %:	8.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	7.4	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 04/28/1997

ROAD: TORRESDALE AVE SB **FROM:** RHAWN ST **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1004/0180/1500 **FC:** 17

PROJECT: 16A-79 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 25206 **DVRPC FILE #:** 513 **COUNTER:** 7303 **WEATHER:** F

Hour Ending	Monday 04/28/97	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97
1 AM		57	61		
2 AM		31	35		
3 AM		16	19		
4 AM		16	21		
5 AM		24	28		
6 AM		51	57		
7 AM		165	169		
8 AM		369	371		
9 AM	303	274			
10 AM	279	301			
11 AM	263	267			
12 PM	320	317			
1 PM	320	323			
2 PM	356	332			
3 PM	386	368			
4 PM	420	307			
5 PM	473	470			
6 PM	437	434			
7 PM	327	323			
8 PM	248	244			
9 PM	266	269			
10 PM	176	180			
11 PM	108	112			
12 AM	94	102			
		5,352			

SEASONAL FACTOR:	.949	AADT: **5,008**	AM PEAK %:	6.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	8.8	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 04/30/1997

ROAD: TORRESDALE AVE **FROM:** PRINCETON AVE **TO:** LEVICK ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1004/0150/1000 **FC:** 16

PROJECT: 16A-82 **COUNT DIR:** BOTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 25205 **DVRPC FILE #:** 515 **COUNTER:** 11980 **WEATHER:** F

Hour Ending	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97	Saturday 05/03/97	Sunday 05/04/97
1 AM		143	147		
2 AM		88	92		
3 AM		63	76		
4 AM		63	50		
5 AM		95	93		
6 AM		255	245		
7 AM		573	590		
8 AM		818	841		
9 AM		697			
10 AM		720			
11 AM		640			
12 PM	668	708			
1 PM	662	696			
2 PM	759	688			
3 PM	749	811			
4 PM	797	783			
5 PM	810	809			
6 PM	849	881			
7 PM	799	757			
8 PM	675	657			
9 PM	600	531			
10 PM	422	442			
11 PM	370	366			
12 AM	256	264			
		12,548			

SEASONAL FACTOR:	.928	AADT: **11,330**	AM PEAK %:	6.5	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.973		PM PEAK %:	7.	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 06/30/1997

ROAD: TR 73 NB TORRESDALE AVE **FROM:** COTTMAN AVE **TO:** PRINCETON AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0010/1000 **FC:** 14

PROJECT: 16A-80 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 539 **COUNTER:** 9452 **WEATHER:** F

Hour Ending	Monday 06/30/97	Tuesday 07/01/97	Wednesday 07/02/97	Thursday 07/03/97	Friday 07/04/97
1 AM		105	56		
2 AM		49	45		
3 AM		28	36		
4 AM		22	32		
5 AM		53	41		
6 AM		104	98		
7 AM		238			
8 AM	273	271			
9 AM	293	318			
10 AM	290	297			
11 AM	310	308			
12 PM	306	299			
1 PM	326	292			
2 PM	274	302			
3 PM	344	310			
4 PM	333	278			
5 PM	377	331			
6 PM	396	350			
7 PM	316	319			
8 PM	291	273			
9 PM	235	223			
10 PM	197	188			
11 PM	172	178			
12 AM	115	124			
		5,260			

SEASONAL FACTOR:	.906	AADT: **4,580**	AM PEAK %:	6.	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	6.7	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 06/30/1997

ROAD: TR 73 SB TORRESDALE AVE **FROM:** COTTMAN AVE **TO:** PRINCETON AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0010/1000 **FC:** 14

PROJECT: 16A-81 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 540 **COUNTER:** 9451 **WEATHER:** F

Hour Ending	Monday 06/30/97	Tuesday 07/01/97	Wednesday 07/02/97	Thursday 07/03/97	Friday 07/04/97
1 AM		206	163		
2 AM		135	111		
3 AM		97	93		
4 AM		89	90		
5 AM		131	133		
6 AM		377	327		
7 AM	771	810			
8 AM	869	878			
9 AM	733	796			
10 AM	786	793			
11 AM	802	846			
12 PM	838	791			
1 PM	912	794			
2 PM	787	881			
3 PM	963	789			
4 PM	891	860			
5 PM	924	904			
6 PM	993	954			
7 PM	843	853			
8 PM	793	802			
9 PM	657	632			
10 PM	607	541			
11 PM	491	428			
12 AM	354	304			
		14,691			

SEASONAL FACTOR:	.906	AADT: **12,791**	AM PEAK %:	6.	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	6.5	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/21/1999

ROAD: STATE RD NB **FROM:** RHAWN ST **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1007/0080/1000 **FC:** 16

PROJECT: 19-239 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: 15200 **DVRPC FILE #:** 5692 **COUNTER:** 9624 **WEATHER:** F

Hour Ending	Wednesday 04/21/99	Thursday 04/22/99	Friday 04/23/99	Saturday 04/24/99	Sunday 04/25/99
1 AM		88	90		
2 AM		38	41		
3 AM		24	27		
4 AM		34	38		
5 AM		62	67		
6 AM		106	110		
7 AM		511	506		
8 AM		681	679		
9 AM		487	476		
10 AM		392	389		
11 AM		442	438		
12 PM		430	425		
1 PM	474	448			
2 PM	472	468			
3 PM	596	594			
4 PM	690	741			
5 PM	758	752			
6 PM	840	863			
7 PM	499	481			
8 PM	328	335			
9 PM	280	278			
10 PM	240	248			
11 PM	245	251			
12 AM	136	129			
		8,883			

SEASONAL FACTOR:	.957	AADT: **8,195**	AM PEAK %:	7.7	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.7	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/21/1999

ROAD: STATE RD SB **FROM:** RHAWN ST **TO:** COTTMAN AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1007/0081/1000 **FC:** 16

PROJECT: 19-240 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: 15200 **DVRPC FILE #:** 5693 **COUNTER:** 9785 **WEATHER:** F

Hour Ending	Wednesday 04/21/99	Thursday 04/22/99	Friday 04/23/99	Saturday 04/24/99	Sunday 04/25/99
1 AM		66	106		
2 AM		25	37		
3 AM		22	20		
4 AM		24	32		
5 AM		36	28		
6 AM		85	84		
7 AM		402	366		
8 AM		1,076	873		
9 AM		967			
10 AM		442			
11 AM		430			
12 PM	38	446			
1 PM	477	485			
2 PM	416	455			
3 PM	498	556			
4 PM	814	859			
5 PM	741	775			
6 PM	636	624			
7 PM	374	544			
8 PM	289	313			
9 PM	218	240			
10 PM	186	200			
11 PM	186	166			
12 AM	285	281			
		9,519			

SEASONAL FACTOR:	.957	AADT: **8,782**	AM PEAK %:	11.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	9.	HOUR ENDING:	4:00 PM

DVRPC - Travel Monitoring

DATE: 08/04/1997

ROAD: TR 73 NB STATE RD **FROM:** COTTMAN AVE **TO:** PRINCETON AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0100/0500 **FC:** 14

PROJECT: 16A-54 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 12276 **DVRPC FILE #:** 492 **COUNTER:** 9192 **WEATHER:** R

Hour Ending	Monday 08/04/97	Tuesday 08/05/97	Wednesday 08/06/97	Thursday 08/07/97	Friday 08/08/97
1 AM		67	64		
2 AM		30	32		
3 AM		29	33		
4 AM		20	34		
5 AM		49	48		
6 AM		88	89		
7 AM		328	261		
8 AM		379	397		
9 AM		350	339		
10 AM		310			
11 AM	260	295			
12 PM	293	299			
1 PM	299	332			
2 PM	343	321			
3 PM	337	362			
4 PM	363	354			
5 PM	329	396			
6 PM	445	435			
7 PM	290	312			
8 PM	182	210			
9 PM	168	152			
10 PM	148	166			
11 PM	128	144			
12 AM	66	78			
		5,506			

SEASONAL FACTOR:	.901	AADT: **4,767**	AM PEAK %:	6.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	7.9	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 08/04/1997

ROAD: TR 73 SB STATE RD **FROM:** COTTMAN AVE **TO:** PRINCETON AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0101/0500 **FC:** 14

PROJECT: 16A-55 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: **DVRPC FILE #:** 554 **COUNTER:** 5060 **WEATHER:** F

Hour Ending	Monday 08/04/97	Tuesday 08/05/97	Wednesday 08/06/97	Thursday 08/07/97	Friday 08/08/97
1 AM		62	270		
2 AM		38	258		
3 AM		25	138		
4 AM		28	26		
5 AM		35	39		
6 AM		75	75		
7 AM		279	270		
8 AM		567	594		
9 AM		584			
10 AM	283	369			
11 AM	376	363			
12 PM	402	372			
1 PM	433	416			
2 PM	405	410			
3 PM	500	432			
4 PM	510	544			
5 PM	573	582			
6 PM	573	512			
7 PM	329	383			
8 PM	253	246			
9 PM	214	231			
10 PM	212	213			
11 PM	142	182			
12 AM	140	240			
		7,188			

SEASONAL FACTOR:	.901	AADT: **6,224**	AM PEAK %:	8.1	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	8.1	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 04/29/1997

ROAD: STATE RD NB **FROM:** ASHBURNER ST **TO:** RHAWN ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1007/0100/1000 **FC:** 16

PROJECT: 16A-50 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 15201 **DVRPC FILE #:** 488 **COUNTER:** 15824 **WEATHER:** F

Hour Ending	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97	Saturday 05/03/97
1 AM		59	94		
2 AM		39	43		
3 AM		34	35		
4 AM		34	33		
5 AM		57	100		
6 AM		109	127		
7 AM		708	629		
8 AM		848	834		
9 AM		659	650		
10 AM		460			
11 AM	369	473			
12 PM	454	489			
1 PM	529	498			
2 PM	534	593			
3 PM	746	726			
4 PM	502	524			
5 PM	595	605			
6 PM	755	749			
7 PM	412	484			
8 PM	250	344			
9 PM	271	288			
10 PM	183	202			
11 PM	298	256			
12 AM	119	116			
		9,354			

SEASONAL FACTOR:	.947	AADT: **8,858**	AM PEAK %:	9.1	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	1.0		PM PEAK %:	8.	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/29/1997

ROAD: STATE RD SB **FROM:** ASHBURNER ST **TO:** RHAWN ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1007/0101/1000 **FC:** 16

PROJECT: 16A-51 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 15201 **DVRPC FILE #:** 489 **COUNTER:** 7302 **WEATHER:** F

Hour Ending	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97	Saturday 05/03/97
1 AM		78	72		
2 AM		31	55		
3 AM		20	17		
4 AM		20	29		
5 AM		27	30		
6 AM		79	95		
7 AM		351	320		
8 AM		922	927		
9 AM		665	644		
10 AM		401	468		
11 AM	290	368			
12 PM	456	473			
1 PM	518	563			
2 PM	482	503			
3 PM	562	589			
4 PM	867	920			
5 PM	875	954			
6 PM	674	673			
7 PM	369	372			
8 PM	259	306			
9 PM	265	283			
10 PM	169	189			
11 PM	157	184			
12 AM	334	349			
		9,320			

SEASONAL FACTOR:	.947	AADT: **8,588**	AM PEAK %:	9.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.973		PM PEAK %:	10.2	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 04/28/1997

ROAD: TR 73 NB NEW STATE RD **FROM:** PRINCETON AVE **TO:** MILNOR ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0110/0500 **FC:** 14

PROJECT: 16A-56 **COUNT DIR:** NORTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 12276 **DVRPC FILE #:** 493 **COUNTER:** 9168 **WEATHER:** F

Hour Ending	Monday 04/28/97	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97
1 AM		94	117		
2 AM		49	70		
3 AM		54	56		
4 AM		50	57		
5 AM		70	80		
6 AM		210	195		
7 AM		594	517		
8 AM		652	646		
9 AM		619	538		
10 AM	521	501	531		
11 AM	488	536			
12 PM	522	479			
1 PM	496	532			
2 PM	545	510			
3 PM	604	627			
4 PM	698	701			
5 PM	635	725			
6 PM	740	789			
7 PM	577	660			
8 PM	400	412			
9 PM	304	331			
10 PM	345	311			
11 PM	239	257			
12 AM	174	188			
		9,951			

SEASONAL FACTOR:	.938	AADT: **8,970**	AM PEAK %:	6.6	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	7.9	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 04/28/1997

ROAD: TR 73 SB NEW STATE RD **FROM:** PRINCETON AVE **TO:** MILNOR ST

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 0073/0111/0500 **FC:** 14

PROJECT: 16A-57 **COUNT DIR:** SOUTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 12276 **DVRPC FILE #:** 494 **COUNTER:** 9163 **WEATHER:** F

Hour Ending	Monday 04/28/97	Tuesday 04/29/97	Wednesday 04/30/97	Thursday 05/01/97	Friday 05/02/97
1 AM		85	68		
2 AM		34	46		
3 AM		24	42		
4 AM		37	35		
5 AM		65	70		
6 AM		104	123		
7 AM		366	352		
8 AM		758	813		
9 AM		715	768		
10 AM	264	449			
11 AM	373	447			
12 PM	431	419			
1 PM	449	491			
2 PM	488	508			
3 PM	590	645			
4 PM	816	821			
5 PM	818	823			
6 PM	558	624			
7 PM	383	433			
8 PM	311	356			
9 PM	255	290			
10 PM	207	249			
11 PM	168	199			
12 AM	140	174			
		9,116			

SEASONAL FACTOR:	.938	AADT: **8,217**	AM PEAK %:	8.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.961		PM PEAK %:	9.	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 08/30/1999

ROAD: RHAWN ST **FROM:** TULIP ST **TO:** STATE RD

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1014/0090/1000 **FC:** 16

PROJECT: PAP99 **COUNT DIR:** BOTH **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: 25239 **DVRPC FILE #:** 9021 **COUNTER:** 9486 **WEATHER:** F

Hour Ending	Monday 08/30/99	Tuesday 08/31/99	Wednesday 09/01/99	Thursday 09/02/99	Friday 09/03/99
1 AM		94	124		
2 AM		31	81		
3 AM		41	35		
4 AM		33	34		
5 AM		72	65		
6 AM		176	180		
7 AM		603			
8 AM		797			
9 AM	596	607			
10 AM	451	479			
11 AM	535	560			
12 PM	670	721			
1 PM	745	702			
2 PM	736	810			
3 PM	936	945			
4 PM	977	1,001			
5 PM	1,063	1,011			
6 PM	894	914			
7 PM	597	591			
8 PM	468	460			
9 PM	330	328			
10 PM	285	274			
11 PM	339	362			
12 AM	203	228			
		11,840			

SEASONAL FACTOR:	.916	AADT: **10,455**	AM PEAK %:	6.7	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	8.5	HOUR ENDING:	5:00 PM

DVRPC - Travel Monitoring

DATE: 06/30/1997

ROAD: RHAWN ST EB **FROM:** FRANKFORD AVE **TO:** TORRESDALE AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1014/0080/1000 **FC:** 16

PROJECT: 15-204 **COUNT DIR:** EAST **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 25 **LOOP OR CLASS:**

STATION ID: 25238 **DVRPC FILE #:** 536 **COUNTER:** 9488 **WEATHER:** F

Hour Ending	Monday 06/30/97	Tuesday 07/01/97	Wednesday 07/02/97	Thursday 07/03/97	Friday 07/04/97
1 AM		65	63		
2 AM		29	22		
3 AM		27	18		
4 AM		21	36		
5 AM		38	89		
6 AM		86	293		
7 AM		284	279		
8 AM	452	443			
9 AM	337	374			
10 AM	291	305			
11 AM	312	245			
12 PM	279	293			
1 PM	329	346			
2 PM	333	294			
3 PM	396	346			
4 PM	314	341			
5 PM	313	349			
6 PM	348	365			
7 PM	285	297			
8 PM	248	221			
9 PM	218	217			
10 PM	179	178			
11 PM	163	162			
12 AM	95	103			
		5,429			

SEASONAL FACTOR:	.912	AADT: **4,818**	AM PEAK %:	8.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.973		PM PEAK %:	6.7	HOUR ENDING:	6:00 PM

DVRPC - Travel Monitoring

DATE: 06/30/1997

ROAD: RHAWN ST WB **FROM:** FRANKFORD AVE **TO:** TORRESDALE AVE

COUNTY: PHILADELPHIA **MCD:** 239 - PHILADELPHIA **SR/SEG/OFF:** 1014/0080/1000 **FC:** 16

PROJECT: 15-205 **COUNT DIR:** WEST **TRAFFIC DIR:** BOTH **SPEED LIMIT:** 35 **LOOP OR CLASS:**

STATION ID: 25238 **DVRPC FILE #:** 3853 **COUNTER:** 9621 **WEATHER:** F

Hour Ending	Monday 06/30/97	Tuesday 07/01/97	Wednesday 07/02/97	Thursday 07/03/97	Friday 07/04/97
1 AM		143	180		
2 AM		98	96		
3 AM		58	74		
4 AM		55	64		
5 AM		56	52		
6 AM		132	146		
7 AM		444	829		
8 AM		784			
9 AM		656			
10 AM		608			
11 AM		584			
12 PM	613	604			
1 PM	660	641			
2 PM	643	674			
3 PM	697	732			
4 PM	767	795			
5 PM	926	930			
6 PM	904	954			
7 PM	720	804			
8 PM	628	649			
9 PM	482	484			
10 PM	438	501			
11 PM	365	382			
12 AM	297	302			
		12,070			

SEASONAL FACTOR:	.912	AADT: **10,711**	AM PEAK %:	6.5	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.973		PM PEAK %:	7.9	HOUR ENDING:	6:00 PM

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APPENDIX B
INTERSECTION TURNING MOVEMENT COUNTS

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TABLE OF CONTENTS

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Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Cottman Ave/State Rd
Date: Wednesday, January 19, 2000
Counter: TA/JS

File Name : bs0119g
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	State Road Southbound					Cottman Avenue Westbound					State Road Northbound					Cottman Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00	50	98	1	1	150	26	69	5	0	100	0	25	9	0	34	0	0	0	0	0	284
06:15	50	65	1	3	119	69	100	15	0	184	0	54	13	5	72	0	0	0	1	1	376
06:30	42	86	0	0	128	108	90	12	2	212	0	83	22	4	109	0	0	0	0	0	449
06:45	47	76	0	3	126	75	126	17	0	218	0	75	17	0	92	0	0	0	0	0	436
Total	189	325	2	7	523	278	385	49	2	714	0	237	61	9	307	0	0	0	1	1	1545
07:00	59	108	0	0	167	67	115	12	1	195	0	45	26	6	77	0	0	0	0	0	439
07:15	98	154	0	1	253	50	175	36	0	261	0	40	26	2	68	0	0	0	0	0	582
07:30	66	127	0	3	196	68	162	36	0	266	0	73	22	0	95	0	0	0	0	0	557
07:45	75	152	0	1	228	66	184	46	0	296	0	60	21	0	81	0	0	0	0	0	605
Total	298	541	0	5	844	251	636	130	1	1018	0	218	95	8	321	0	0	0	0	0	2183
08:00	87	127	0	1	215	51	175	44	1	271	0	47	25	0	72	0	0	0	0	0	558
08:15	51	119	0	0	170	62	152	27	1	242	0	36	27	0	63	0	0	0	0	0	475
08:30	68	114	0	1	183	43	154	22	1	220	0	52	31	0	83	0	0	0	0	0	486
08:45	63	78	0	2	143	57	149	28	0	234	0	35	28	0	63	0	0	0	0	0	440
Total	269	438	0	4	711	213	630	121	3	967	0	170	111	0	281	0	0	0	0	0	1959
09:00	50	69	0	1	120	44	153	33	0	230	0	33	19	0	52	0	0	0	0	0	402
09:15	39	65	0	0	104	39	133	15	0	187	1	45	16	0	62	0	0	0	0	0	353
09:30	33	56	0	0	89	60	139	23	0	222	0	37	14	0	51	0	1	2	0	3	365
09:45	39	58	0	0	97	48	105	22	0	175	0	17	11	0	28	0	0	0	0	0	300
Total	161	248	0	1	410	191	530	93	0	814	1	132	60	0	193	0	1	2	0	3	1420
10:00	45	52	1	0	98	35	155	29	1	220	0	29	16	0	45	0	0	0	0	0	363
10:15	41	56	0	0	97	47	148	10	0	205	0	41	25	0	66	1	0	0	1	2	370
10:30	33	48	0	0	81	46	161	17	0	224	0	38	20	0	58	0	0	0	0	0	363
10:45	27	48	0	0	75	47	134	31	0	212	0	47	15	0	62	0	0	0	0	0	349
Total	146	204	1	0	351	175	598	87	1	861	0	155	76	0	231	1	0	0	1	2	1445
11:00	42	72	0	0	114	47	142	24	0	213	0	25	21	0	46	0	0	0	0	0	373
11:15	38	49	0	0	87	35	147	12	0	194	0	45	12	0	57	0	0	0	0	0	338
11:30	54	57	0	0	111	31	134	27	0	192	0	39	20	0	59	0	0	0	0	0	362
11:45	79	67	0	0	146	48	134	27	1	210	0	43	25	0	68	0	0	0	0	0	424
Total	213	245	0	0	458	161	557	90	1	809	0	152	78	0	230	0	0	0	0	0	1497
12:00	57	68	0	0	125	42	130	33	0	205	2	30	21	0	53	0	0	1	0	1	384
12:15	63	46	0	0	109	44	148	41	0	233	0	56	23	0	79	0	0	0	0	0	421
12:30	61	46	0	0	107	59	179	25	0	263	0	48	35	0	83	0	0	0	0	0	453
12:45	44	63	0	0	107	48	131	23	1	203	0	42	24	0	66	0	0	0	0	0	376
Total	225	223	0	0	448	193	588	122	1	904	2	176	103	0	281	0	0	1	0	1	1634
13:00	64	61	0	0	125	45	176	21	1	243	0	37	24	0	61	0	0	0	0	0	429
13:15	68	74	0	0	142	49	156	18	0	223	0	47	27	0	74	0	0	0	0	0	439
13:30	63	56	0	0	119	139	207	30	0	376	0	63	26	0	89	0	0	0	0	0	584
13:45	64	51	0	0	115	90	151	23	8	272	0	43	24	0	67	0	0	0	0	0	454
Total	259	242	0	0	501	323	690	92	9	1114	0	190	101	0	291	0	0	0	0	0	1906
14:00	53	53	1	0	107	60	143	17	0	220	0	38	26	0	64	0	0	0	0	0	391
14:15	73	78	0	6	157	77	185	27	2	291	0	64	30	0	94	0	0	0	0	0	542
14:30	56	72	0	0	128	93	219	27	0	339	0	90	22	0	112	0	0	0	0	0	579
14:45	63	100	2	0	165	84	231	25	1	341	0	66	22	0	88	0	0	0	0	0	594
Total	245	303	3	6	557	314	778	96	3	1191	0	258	100	0	358	0	0	0	0	0	2106

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Cottman Ave/State Rd
Date: Wednesday, January 19, 2000
Counter: TA/JS

File Name : bs0119g
Site Code : 00000000
Start Date : 01/19/2000
Page No : 2

Groups Printed- Cars - Heavy Vehicles - Buses

	State Road Southbound					Cottman Avenue Westbound					State Road Northbound					Cottman Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
15:00	82	90	0	0	172	45	199	21	3	268	0	67	12	0	79	0	3	1	0	4	523
15:15	134	128	0	0	262	70	263	56	0	389	0	58	27	0	85	0	0	0	0	0	736
15:30	119	94	0	0	213	59	233	40	1	333	0	56	19	0	75	0	0	0	0	0	621
15:45	101	102	0	0	203	114	245	25	8	392	0	63	31	0	94	0	0	0	0	0	689
Total	436	414	0	0	850	288	940	142	12	1382	0	244	89	0	333	0	3	1	0	4	2569
16:00	127	97	0	0	224	77	282	25	11	395	0	77	24	0	101	0	0	0	0	0	720
16:15	79	77	0	0	156	91	276	30	3	400	0	76	23	0	99	0	0	0	0	0	655
16:30	96	88	0	0	184	83	274	35	3	395	0	67	27	0	94	0	0	0	0	0	673
16:45	117	100	0	0	217	76	364	33	3	476	0	83	43	0	126	0	0	0	0	0	819
Total	419	362	0	0	781	327	1196	123	20	1666	0	303	117	0	420	0	0	0	0	0	2867
17:00	134	92	0	0	226	60	268	33	1	362	1	73	25	0	99	0	0	0	0	0	687
17:15	130	80	0	7	217	51	314	34	0	399	0	80	51	0	131	0	0	0	0	0	747
17:30	108	65	1	0	174	88	335	29	2	454	0	73	33	0	106	0	0	0	0	0	734
17:45	102	85	0	0	187	65	297	36	7	405	0	67	20	0	87	0	0	0	0	0	679
Total	474	322	1	7	804	264	1214	132	10	1620	1	293	129	0	423	0	0	0	0	0	2847
Grand Total	3334	3867	7	30	7238	2978	8742	1277	63	13060	4	2528	1120	17	3669	1	4	4	2	11	23978
Apprch %	46.1	53.4	0.1	0.4		22.8	66.9	9.8	0.5		0.1	68.9	30.5	0.5		9.1	36.4	36.4	18.2		
Total %	13.9	16.1	0.0	0.1	30.2	12.4	36.5	5.3	0.3	54.5	0.0	10.5	4.7	0.1	15.3	0.0	0.0	0.0	0.0	0.0	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Cottman Ave/Torresdale Ave
Date: Wednesday, January, 19, 2000
Counter: Walt/Lynn

File Name : BS0119F
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Torresdale Avenue Southbound				Cottman Avenue Westbound					Torresdale Avenue Northbound				Cottman Avenue Eastbound				
Start Time	Right	Thru	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
06:00	5	75	1	81	9	43	8	6	66	14	3	1	18	100	7	11	118	283
06:15	9	59	3	71	9	78	19	8	114	18	8	4	30	113	29	4	146	361
06:30	11	69	1	81	12	75	11	7	105	35	5	4	44	124	47	6	177	407
06:45	15	51	1	67	23	103	10	10	146	24	8	3	35	90	22	5	117	365
Total	40	254	6	300	53	299	48	31	431	91	24	12	127	427	105	26	558	1416
07:00	8	69	0	77	10	111	15	7	143	30	9	5	44	116	19	47	182	446
07:15	18	80	0	98	14	151	25	15	205	31	10	3	44	115	21	105	241	588
07:30	38	101	10	149	21	152	15	17	205	41	10	8	59	103	29	94	226	639
07:45	16	66	3	85	8	165	31	6	210	40	18	6	64	118	24	15	157	516
Total	80	316	13	409	53	579	86	45	763	142	47	22	211	452	93	261	806	2189
08:00	16	63	1	80	7	199	26	4	236	41	8	1	50	103	19	7	129	495
08:15	14	64	0	78	15	188	30	5	238	34	7	2	43	104	13	11	128	487
08:30	9	55	1	65	10	206	35	6	257	34	10	3	47	108	6	3	117	486
08:45	5	49	0	54	9	177	25	4	215	25	10	0	35	107	14	3	124	428
Total	44	231	2	277	41	770	116	19	946	134	35	6	175	422	52	24	498	1896
09:00	11	49	0	60	15	137	27	2	181	26	10	1	37	82	6	2	90	368
09:15	8	58	0	66	11	133	19	1	164	45	7	0	52	129	10	0	139	421
09:30	9	44	0	53	5	126	17	6	154	39	8	2	49	79	10	4	93	349
09:45	11	43	1	55	5	134	26	2	167	30	13	1	44	92	2	3	97	363
Total	39	194	1	234	36	530	89	11	666	140	38	4	182	382	28	9	419	1501
10:00	8	42	5	55	6	125	31	4	166	33	8	1	42	70	12	1	83	346
10:15	13	40	1	54	10	156	21	1	188	32	10	0	42	56	10	11	77	361
10:30	17	48	2	67	11	160	28	3	202	34	15	1	50	77	11	6	94	413
10:45	7	36	2	45	14	139	26	6	185	35	16	1	52	95	15	0	110	392
Total	45	166	10	221	41	580	106	14	741	134	49	3	186	298	48	18	364	1512
11:00	12	46	1	59	10	150	26	3	189	34	16	1	51	85	9	6	100	399
11:15	14	64	1	79	9	139	24	2	174	35	13	0	48	112	9	3	124	425
11:30	12	57	2	71	12	170	18	2	202	36	9	0	45	99	14	1	114	432
11:45	7	43	0	50	17	177	23	2	219	38	8	0	46	83	10	2	95	410
Total	45	210	4	259	48	636	91	9	784	143	46	1	190	379	42	12	433	1666
12:00	14	47	0	61	9	160	22	5	196	49	14	2	65	102	16	0	118	440
12:15	10	58	1	69	20	156	32	0	208	46	9	0	55	104	16	12	132	464
12:30	14	52	0	66	12	170	35	2	219	44	10	1	55	117	14	0	131	471
12:45	22	48	1	71	20	140	31	4	195	41	27	2	70	115	16	4	135	471
Total	60	205	2	267	61	626	120	11	818	180	60	5	245	438	62	16	516	1846
13:00	19	51	2	72	12	189	36	6	243	30	18	0	48	104	13	9	126	489
13:15	18	45	2	65	16	170	21	6	213	38	13	1	52	102	9	6	117	447
13:30	20	36	1	57	21	205	25	1	252	41	17	0	58	104	9	36	149	516
13:45	32	51	4	87	15	194	31	1	241	48	17	3	68	81	8	70	159	555
Total	89	183	9	281	64	758	113	14	949	157	65	4	226	391	39	121	551	2007
14:00	20	51	4	75	10	176	28	4	218	44	15	2	61	121	24	10	155	509
14:15	18	64	4	86	12	209	43	3	267	44	12	0	56	84	13	5	102	511
14:30	12	67	3	82	17	209	30	5	261	45	10	0	55	93	15	7	115	513
14:45	18	51	4	73	13	218	31	9	271	49	15	2	66	127	10	14	151	561
Total	68	233	15	316	52	812	132	21	1017	182	52	4	238	425	62	36	523	2094

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Cottman Ave/Torresdale Ave
Date: Wednesday, January, 19, 2000
Counter: Walt/Lynn

File Name : BS0119F
Site Code : 00000000
Start Date : 01/19/2000
Page No : 2

Groups Printed- Cars - Heavy Vehicles - Buses

	Torresdale Avenue Southbound				Cottman Avenue Westbound					Torresdale Avenue Northbound				Cottman Avenue Eastbound				
Start Time	Right	Thru	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
15:00	30	53	1	84	13	258	32	12	315	53	19	3	75	118	11	15	144	618
15:15	21	59	1	81	12	293	28	7	340	33	18	1	52	151	19	3	173	646
15:30	19	63	2	84	10	270	26	13	319	50	6	5	61	141	10	9	160	624
15:45	22	59	5	86	14	328	31	8	381	57	17	2	76	133	9	9	151	694
Total	92	234	9	335	49	1149	117	40	1355	193	60	11	264	543	49	36	628	2582
16:00	26	55	2	83	19	285	30	3	337	51	8	0	59	125	12	3	140	619
16:15	13	59	1	73	22	292	26	9	349	44	17	2	63	148	10	2	160	645
16:30	25	78	1	104	12	271	31	16	330	53	12	2	67	118	9	2	129	630
16:45	25	66	1	92	14	346	45	4	409	45	13	3	61	141	11	4	156	718
Total	89	258	5	352	67	1194	132	32	1425	193	50	7	250	532	42	11	585	2612
17:00	21	65	3	89	19	308	38	4	369	66	29	3	98	136	19	6	161	717
17:15	18	64	3	85	15	353	38	5	411	39	19	0	58	139	4	5	148	702
17:30	11	61	1	73	10	330	42	6	388	62	15	2	79	110	6	11	127	667
17:45	25	61	1	87	11	285	48	6	350	46	27	4	77	95	14	11	120	634
Total	75	251	8	334	55	1276	166	21	1518	213	90	9	312	480	43	33	556	2720
Grand Total	766	2735	84	3585	620	9209	1316	268	11413	1902	616	88	2606	5169	665	603	6437	24041
Apprch %	21.4	76.3	2.3		5.4	80.7	11.5	2.3		73.0	23.6	3.4		80.3	10.3	9.4		
Total %	3.2	11.4	0.3	14.9	2.6	38.3	5.5	1.1	47.5	7.9	2.6	0.4	10.8	21.5	2.8	2.5	26.8	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Cottman Ave/Keystone St
Date: Wednesday, January 19, 2000
Counter: JV

File Name : bs0119j
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Alley Southbound					Cottman Avenue Westbound					Keystone Street Northbound					Cottman Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30	1	0	0	6	7	0	107	32	0	139	0	0	0	0	0	0	0	0	0	0	146
06:45	0	0	0	2	2	0	149	40	0	189	0	0	0	0	0	0	0	0	0	0	191
Total	1	0	0	8	9	0	256	72	0	328	0	0	0	0	0	0	0	0	0	0	337
07:00	0	0	0	3	3	0	150	40	0	190	0	0	0	0	0	0	0	0	0	0	193
07:15	0	0	0	3	3	0	200	63	0	263	0	0	0	0	0	0	0	0	0	0	266
07:30	1	0	0	0	1	0	227	47	0	274	0	0	0	0	0	0	0	0	0	0	275
07:45	0	0	0	1	1	0	228	68	0	296	0	0	0	0	0	0	0	0	0	0	297
Total	1	0	0	7	8	0	805	218	0	1023	0	0	0	0	0	0	0	0	0	0	1031
08:00	0	0	0	1	1	0	238	53	0	291	0	0	0	0	0	0	0	0	0	0	292
08:15	0	0	0	0	0	0	243	41	0	284	0	0	0	0	0	0	0	0	0	0	284
08:30	0	0	0	2	2	0	231	27	0	258	0	0	0	0	0	0	0	0	0	0	260
08:45	0	0	0	2	2	0	222	33	0	255	0	0	0	0	0	0	0	0	0	0	257
Total	0	0	0	5	5	0	934	154	0	1088	0	0	0	0	0	0	0	0	0	0	1093
*** BREAK ***																					
16:00	0	0	0	0	0	1	364	109	0	474	0	0	0	0	0	0	0	0	0	0	474
16:15	0	0	0	4	4	0	353	59	0	412	0	0	0	0	0	0	0	0	0	0	416
16:30	0	0	0	3	3	1	315	77	0	393	0	0	0	0	0	0	0	0	0	0	396
16:45	0	0	0	2	2	2	350	72	0	424	0	0	0	0	0	0	0	0	0	0	426
Total	0	0	0	9	9	4	1382	317	0	1703	0	0	0	0	0	0	0	0	0	0	1712
17:00	0	0	0	1	1	0	385	90	0	475	0	0	0	0	0	0	0	0	0	0	476
17:15	1	0	0	4	5	1	423	84	0	508	0	0	0	0	0	0	0	0	0	0	513
17:30	0	0	0	2	2	1	374	52	0	427	0	0	0	0	0	0	0	0	0	0	429
17:45	1	0	0	0	1	0	318	55	0	373	0	0	0	0	0	0	0	0	0	0	374
Total	2	0	0	7	9	2	1500	281	0	1783	0	0	0	0	0	0	0	0	0	0	1792
Grand Total	4	0	0	36	40	6	4877	1042	0	5925	0	0	0	0	0	0	0	0	0	0	5965
Apprch %	10.0	0.0	0.0	90.0		0.1	82.3	17.6	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.1	0.0	0.0	0.6	0.7	0.1	81.8	17.5	0.0	99.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Cottman Ave/Edmund St
Date: Wednesday, January 19, 2000
Counter: PF

File Name : BS0119p
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Edmund St Southbound					Cottman Ave Westbound					Edmund St Northbound					Cottman Ave Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30	11	0	0	11	22	13	102	1	0	116	0	3	4	0	7	0	0	0	1	1	146
06:45	10	0	0	5	15	4	135	0	0	139	0	6	2	2	10	0	0	0	0	0	164
Total	21	0	0	16	37	17	237	1	0	255	0	9	6	2	17	0	0	0	1	1	310
07:00	10	0	0	3	13	7	145	0	0	152	0	4	4	1	9	0	0	0	0	0	174
07:15	28	0	0	4	32	13	191	0	0	204	0	3	3	1	7	0	0	0	1	1	244
07:30	35	0	0	1	36	20	209	0	0	229	0	21	2	0	23	0	0	0	0	0	288
07:45	26	0	0	1	27	16	211	0	0	227	0	8	6	0	14	0	0	0	0	0	268
Total	99	0	0	9	108	56	756	0	0	812	0	36	15	2	53	0	0	0	1	1	974
08:00	32	0	0	0	32	9	235	0	0	244	0	3	5	1	9	0	0	0	1	1	286
08:15	20	0	0	1	21	16	236	0	1	253	0	8	1	1	10	0	0	0	1	1	285
08:30	27	0	0	0	27	11	247	0	0	258	0	4	3	3	10	0	0	0	3	3	298
08:45	13	0	0	0	13	11	223	0	0	234	0	4	4	2	10	0	0	0	0	0	257
Total	92	0	0	1	93	47	941	0	1	989	0	19	13	7	39	0	0	0	5	5	1126
*** BREAK ***																					
16:00	32	0	0	1	33	22	333	0	0	355	0	4	5	0	9	0	0	0	0	0	397
16:15	26	0	0	7	33	21	374	0	1	396	0	8	4	3	15	0	0	0	0	0	444
16:30	21	0	0	0	21	28	349	0	2	379	0	7	1	1	9	0	0	0	0	0	409
16:45	27	0	0	1	28	28	412	0	1	441	0	5	2	0	7	0	0	0	0	0	476
Total	106	0	0	9	115	99	1468	0	4	1571	0	24	12	4	40	0	0	0	0	0	1726
17:00	24	0	0	5	29	26	405	0	0	431	0	4	2	1	7	0	0	0	0	0	467
17:15	25	0	0	0	25	27	445	0	1	473	0	7	6	1	14	0	0	0	0	0	512
17:30	14	0	0	0	14	25	417	0	0	442	0	10	2	2	14	0	0	0	0	0	470
17:45	18	0	0	1	19	14	387	0	0	401	0	13	3	0	16	0	0	0	0	0	436
Total	81	0	0	6	87	92	1654	0	1	1747	0	34	13	4	51	0	0	0	0	0	1885
Grand Total	399	0	0	41	440	311	5056	1	6	5374	0	122	59	19	200	0	0	0	7	7	6021
Apprch %	90.7	0.0	0.0	9.3		5.8	94.1	0.0	0.1		0.0	61.0	29.5	9.5		0.0	0.0	0.0	100.0		
Total %	6.6	0.0	0.0	0.7	7.3	5.2	84.0	0.0	0.1	89.3	0.0	2.0	1.0	0.3	3.3	0.0	0.0	0.0	0.1	0.1	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Princeton @ State
Date: Thursday, February 17, 2000
Counter: TA/DO

File Name : bs0217b
Site Code : 0000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	State Road Southbound					Princeton Avenue Westbound					State Road Northbound					Princeton Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 AM	0	34	0	0	34	0	0	0	0	0	92	22	0	0	114	12	67	10	0	89	237
06:15 AM	0	54	0	0	54	0	0	0	0	0	141	41	0	0	182	15	81	26	0	122	358
06:30 AM	0	91	3	0	94	0	0	0	0	0	201	51	0	0	252	20	131	36	0	187	533
06:45 AM	0	93	4	0	97	0	0	0	0	0	187	69	0	0	256	23	93	32	0	148	501
Total	0	272	7	0	279	0	0	0	0	0	621	183	0	0	804	70	372	104	0	546	1629
07:00 AM	0	105	0	0	105	0	0	0	0	0	168	47	0	0	215	18	79	29	0	126	446
07:15 AM	0	164	1	0	165	0	0	0	0	0	193	49	0	0	242	36	115	23	0	174	581
07:30 AM	0	190	5	0	195	0	0	0	0	0	227	75	0	0	302	24	111	26	0	161	658
07:45 AM	0	201	5	0	206	0	0	0	0	0	251	81	0	0	332	21	106	32	0	159	697
Total	0	660	11	0	671	0	0	0	0	0	839	252	0	0	1091	99	411	110	0	620	2382
08:00 AM	0	215	4	0	219	0	0	0	0	0	203	47	0	0	250	35	110	20	0	165	634
08:15 AM	0	183	1	0	184	0	0	0	0	0	186	48	0	0	234	24	92	23	0	139	557
08:30 AM	0	171	2	0	173	0	0	0	0	0	138	40	0	0	178	28	99	24	0	151	502
08:45 AM	0	137	7	0	144	0	0	0	0	0	38	18	0	0	56	16	75	27	0	118	318
Total	0	706	14	0	720	0	0	0	0	0	565	153	0	0	718	103	376	94	0	573	2011
09:00 AM	0	81	4	0	85	0	0	0	0	0	173	63	0	0	236	26	56	27	0	109	430
09:15 AM	0	85	7	0	92	0	0	0	0	0	116	51	0	0	167	13	69	23	0	105	364
09:30 AM	0	72	7	0	79	0	0	0	0	0	102	34	0	0	136	22	61	30	0	113	328
09:45 AM	0	57	6	0	63	0	0	0	0	0	60	35	0	0	95	19	64	30	0	113	271
Total	0	295	24	0	319	0	0	0	0	0	451	183	0	0	634	80	250	110	0	440	1393
10:00 AM	0	80	2	0	82	0	0	0	0	0	35	21	0	0	56	15	52	23	0	90	228
10:15 AM	0	90	12	0	102	1	0	0	0	1	58	26	0	0	84	15	37	15	0	67	254
10:30 AM	0	82	0	0	82	0	0	0	0	0	92	34	0	0	126	18	61	26	0	105	313
10:45 AM	0	71	2	0	73	0	0	0	0	0	83	42	0	0	125	15	53	19	0	87	285
Total	0	323	16	0	339	1	0	0	0	1	268	123	0	0	391	63	203	83	0	349	1080
11:00 AM	0	78	6	0	84	0	0	0	0	0	80	46	0	0	126	16	39	20	0	75	285
11:15 AM	0	86	3	0	89	0	0	0	0	0	79	28	0	0	107	25	49	20	0	94	290
11:30 AM	0	85	7	0	92	0	0	0	0	0	83	48	0	0	131	15	53	23	0	91	314
11:45 AM	0	69	4	0	73	0	0	0	0	0	84	45	0	1	130	22	41	37	0	100	303
Total	0	318	20	0	338	0	0	0	0	0	326	167	0	1	494	78	182	100	0	360	1192
12:00 PM	0	95	7	0	102	0	0	0	0	0	72	41	0	0	113	20	57	34	0	111	326
12:15 PM	0	81	10	0	91	0	0	0	0	0	76	61	0	0	137	15	57	31	0	103	331
12:30 PM	0	95	5	0	100	0	0	0	0	0	96	44	0	0	140	23	63	35	0	121	361
12:45 PM	0	90	3	0	93	0	0	0	0	0	84	44	0	0	128	28	60	16	0	104	325
Total	0	361	25	0	386	0	0	0	0	0	328	190	0	0	518	86	237	116	0	439	1343
01:00 PM	0	113	9	0	122	0	0	0	0	0	77	38	0	0	115	21	35	21	0	77	314
01:15 PM	0	72	2	0	74	0	0	0	0	0	74	39	0	0	113	24	55	26	0	105	292
01:30 PM	0	74	7	0	81	0	0	0	0	0	88	30	0	0	118	24	70	28	0	122	321
01:45 PM	0	101	3	0	104	0	0	0	0	0	80	42	0	0	122	29	41	21	0	91	317
Total	0	360	21	0	381	0	0	0	0	0	319	149	0	0	468	98	201	96	0	395	1244
02:00 PM	0	73	6	0	79	0	0	0	0	0	112	38	1	0	151	21	64	19	0	104	334
02:15 PM	0	93	7	0	100	0	0	0	0	0	90	59	0	0	149	13	61	29	0	103	352
02:30 PM	0	91	6	0	97	0	0	0	0	0	113	54	0	0	167	17	46	21	0	84	348
02:45 PM	0	97	10	0	107	0	0	0	0	0	122	53	0	0	175	25	81	33	0	139	421
Total	0	354	29	0	383	0	0	0	0	0	437	204	1	0	642	76	252	102	0	430	1455

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Princeton @ State
Date: Thursday, February 17, 2000
Counter: TA/DO

File Name : bs0217b
Site Code : 00000000
Start Date : 02/17/2000
Page No : 2

Groups Printed- Cars - Heavy Vehicles - Buses

	State Road Southbound					Princeton Avenue Westbound					State Road Northbound					Princeton Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:00 PM	0	123	8	0	131	0	0	0	0	0	102	58	0	0	160	21	77	27	0	125	416
03:15 PM	0	127	9	0	136	0	0	0	0	0	138	56	0	0	194	18	74	29	0	121	451
03:30 PM	0	109	12	0	121	0	0	0	0	0	172	71	0	0	243	17	89	36	0	142	506
03:45 PM	0	142	7	0	149	0	0	0	0	0	157	64	0	0	221	22	77	33	0	132	502
Total	0	501	36	0	537	0	0	0	0	0	569	249	0	0	818	78	317	125	0	520	1875
04:00 PM	0	145	7	0	152	0	0	0	0	0	182	66	0	0	248	20	71	32	0	123	523
04:15 PM	0	119	5	0	124	1	0	0	0	1	172	71	0	0	243	29	74	24	1	128	496
04:30 PM	0	121	5	0	126	0	0	0	0	0	179	81	0	0	260	20	64	30	0	114	500
04:45 PM	0	127	8	0	135	0	0	0	0	0	184	76	0	0	260	19	72	27	0	118	513
Total	0	512	25	0	537	1	0	0	0	1	717	294	0	0	1011	88	281	113	1	483	2032
05:00 PM	0	122	6	0	128	0	0	0	0	0	229	94	0	0	323	14	65	17	0	96	547
05:15 PM	0	121	4	1	126	0	0	0	0	0	236	82	0	0	318	21	36	20	0	77	521
05:30 PM	0	108	6	0	114	0	0	0	0	0	179	48	0	0	227	17	72	14	0	103	444
05:45 PM	0	70	5	0	75	0	0	0	0	0	191	77	0	0	268	17	70	16	0	103	446
Total	0	421	21	1	443	0	0	0	0	0	835	301	0	0	1136	69	243	67	0	379	1958
Grand Total	0	5083	249	1	5333	2	0	0	0	2	6275	2448	1	1	8725	988	3325	1220	1	5534	19594
Apprch %	0.0	95.3	4.7	0.0		100.0	0.0	0.0	0.0		71.9	28.1	0.0	0.0		17.9	60.1	22.0	0.0		
Total %	0.0	25.9	1.3	0.0	27.2	0.0	0.0	0.0	0.0	0.0	32.0	12.5	0.0	0.0	44.5	5.0	17.0	6.2	0.0	28.2	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Princeton @ Keystone
Date: Thursday, February 17, 2000
Counter: JV

File Name : bs0217k
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Keystone Street Southbound					Princeton Avenue Westbound					Princeton Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	0	0	57	0	57	0	0	0	0	0	0	358	0	1	359	416
06:45 AM	0	0	46	0	46	0	0	0	0	0	0	273	0	0	273	319
Total	0	0	103	0	103	0	0	0	0	0	0	631	0	1	632	735
07:00 AM	0	0	54	0	54	0	0	0	0	0	0	311	0	0	311	365
07:15 AM	0	0	86	0	86	0	0	0	0	0	0	393	0	0	393	479
07:30 AM	0	0	76	0	76	0	0	0	0	0	0	383	0	0	383	459
07:45 AM	0	0	80	0	80	0	0	0	0	0	0	283	0	0	283	363
Total	0	0	296	0	296	0	0	0	0	0	0	1370	0	0	1370	1666
08:00 AM	0	0	61	0	61	0	0	0	0	0	0	323	0	0	323	384
08:15 AM	0	0	56	0	56	0	0	0	0	0	0	247	0	0	247	303
08:30 AM	0	0	41	0	41	0	0	0	0	0	0	240	0	0	240	281
08:45 AM	0	0	40	0	40	0	0	0	0	0	0	220	0	0	220	260
Total	0	0	198	0	198	0	0	0	0	0	0	1030	0	0	1030	1228
*** BREAK ***																
04:00 PM	0	0	58	0	58	0	0	0	0	0	0	222	0	0	222	280
04:15 PM	0	0	88	0	88	0	0	0	0	0	0	235	0	0	235	323
04:30 PM	0	0	62	0	62	0	0	0	0	0	0	245	0	0	245	307
04:45 PM	0	0	47	0	47	0	0	0	0	0	0	204	0	0	204	251
Total	0	0	255	0	255	0	0	0	0	0	0	906	0	0	906	1161
05:00 PM	0	0	54	0	54	0	0	0	0	0	0	210	0	0	210	264
05:15 PM	0	0	49	0	49	0	0	0	0	0	0	231	0	0	231	280
05:30 PM	0	0	61	0	61	0	0	0	0	0	0	253	0	0	253	314
05:45 PM	0	0	48	0	48	0	0	0	0	0	0	245	0	0	245	293
Total	0	0	212	0	212	0	0	0	0	0	0	939	0	0	939	1151
Grand Total	0	0	1064	0	1064	0	0	0	0	0	0	4876	0	1	4877	5941
Apprch %	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	17.9	0.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0	82.1	0.0	0.0	82.1	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: North East, Philadelphia, Pa.
Intersection: Princeton Ave @ Tulip St.
Date: Wednesday, January 19, 2000
Counter: RZ

File Name : BS0119C
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	TULIP ST Southbound					PRINCETON AVE Westbound					TULIP ST Northbound					PRINCETON AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00	0	0	0	2	2	0	0	1	1	2	0	0	0	0	0	1	266	0	2	269	273
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	375	2	0	380	382
06:30	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	369	2	0	372	373
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	311	1	0	314	315
Total	0	0	0	3	3	0	0	1	1	2	0	0	0	3	3	7	1321	5	2	1335	1343
07:00	0	0	0	2	2	0	0	0	2	2	0	0	0	0	0	2	318	0	3	323	327
07:15	0	0	0	2	2	0	0	0	2	2	0	0	0	2	2	14	356	3	1	374	380
07:30	0	0	0	2	2	0	0	0	2	2	0	0	0	3	3	13	361	1	2	377	384
07:45	0	0	0	8	8	0	0	0	10	10	0	0	0	5	5	39	308	6	4	357	380
Total	0	0	0	14	14	0	0	0	16	16	0	0	0	10	10	68	1343	10	10	1431	1471
08:00	0	0	0	0	0	0	0	0	3	3	0	0	0	1	1	18	337	5	0	360	364
08:15	0	0	0	1	1	0	0	0	4	4	0	0	0	2	2	6	257	4	2	269	276
08:30	0	0	0	0	0	0	0	0	1	1	0	0	0	5	5	5	264	2	0	271	277
08:45	0	0	0	1	1	0	0	0	2	2	0	0	0	4	4	4	254	3	0	261	268
Total	0	0	0	2	2	0	0	0	10	10	0	0	0	12	12	33	1112	14	2	1161	1185
09:00	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2	207	0	3	212	214
09:15	0	0	0	0	0	0	0	0	3	3	0	0	0	1	1	6	220	0	1	227	231
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	216	1	3	222	222
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	190	0	0	191	191
Total	0	0	0	0	0	0	0	0	4	4	0	0	0	2	2	11	833	1	7	852	858
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	160	0	0	163	163
10:15	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5	185	3	0	193	195
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	176	0	2	179	180
10:45	0	0	0	2	2	0	0	0	1	1	0	0	0	1	1	6	168	1	1	176	180
Total	0	0	0	4	4	0	0	0	1	1	0	0	0	2	2	15	689	4	3	711	718
11:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4	162	1	1	168	170
11:15	0	0	0	0	0	0	0	0	4	4	0	0	0	2	2	8	198	2	3	211	217
11:30	0	0	0	0	0	0	0	0	3	3	0	0	0	2	2	19	210	4	1	234	239
11:45	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	6	197	0	1	204	206
Total	0	0	0	2	2	0	0	0	8	8	0	0	0	5	5	37	767	7	6	817	832
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	175	5	0	182	182
12:15	0	0	0	1	1	0	0	0	5	5	0	0	0	1	1	2	238	6	0	246	253
12:30	0	0	0	0	0	0	0	0	4	4	0	0	0	2	2	5	210	6	5	226	232
12:45	0	0	0	4	4	0	0	0	0	0	0	0	0	2	2	7	199	2	4	212	218
Total	0	0	0	5	5	0	0	0	9	9	0	0	0	5	5	16	822	19	9	866	885
13:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	207	1	0	208	209
13:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	268	0	25	296	297
13:30	0	3	0	0	3	0	0	0	1	1	0	0	0	0	0	4	195	3	2	204	208
13:45	0	0	1	0	1	0	0	0	29	29	0	0	0	2	2	3	207	2	5	217	249
Total	0	3	1	1	5	0	0	0	31	31	0	0	0	2	2	10	877	6	32	925	963
14:00	0	1	0	0	1	0	0	0	3	3	0	0	0	1	1	3	241	6	0	250	255
14:15	0	0	0	0	0	0	0	0	3	3	0	0	0	4	4	7	237	4	3	251	258
14:30	0	0	0	4	4	0	0	0	5	5	0	0	0	5	5	19	239	4	27	289	303
14:45	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	6	257	6	4	273	277
Total	0	1	0	4	5	0	0	0	15	15	0	0	0	10	10	35	974	20	34	1063	1093

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: North East, Philadelphia, Pa.
Intersection: Princeton Ave @ Tulip St.
Date: Wednesday, January 19, 2000
Counter: RZ

File Name : BS0119C
Site Code : 00000000
Start Date : 01/19/2000
Page No : 2

Groups Printed- Cars - Heavy Vehicles - Buses

	TULIP ST Southbound					PRINCETON AVE Westbound					TULIP ST Northbound					PRINCETON AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
15:00	0	0	0	1	1	0	0	0	4	4	0	0	0	3	3	4	226	6	5	241	249
15:15	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	7	256	2	3	268	270
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	323	2	0	329	329
15:45	0	0	0	3	3	0	0	0	4	4	1	0	0	2	3	3	264	7	2	276	286
Total	0	0	0	5	5	0	0	0	9	9	1	0	0	5	6	18	1069	17	10	1114	1134
16:00	0	0	0	3	3	0	0	0	4	4	0	0	0	2	2	3	256	0	4	263	272
16:15	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	5	224	1	0	230	232
16:30	0	0	1	2	3	0	0	0	1	1	0	0	0	2	2	8	231	1	1	241	247
16:45	0	0	0	1	1	0	0	0	3	3	0	0	0	5	5	6	249	4	0	259	268
Total	0	0	1	7	8	0	0	0	9	9	0	0	0	9	9	22	960	6	5	993	1019
17:00	0	0	0	0	0	0	0	0	1	1	0	1	0	2	3	5	248	6	1	260	264
17:15	0	0	0	2	2	0	0	0	2	2	0	0	0	1	1	6	263	0	3	272	277
17:30	0	12	0	0	12	1	0	0	3	4	0	0	0	0	0	10	205	5	4	224	240
17:45	0	0	0	0	0	0	0	0	3	3	0	0	0	2	2	5	210	7	4	226	231
Total	0	12	0	2	14	1	0	0	9	10	0	1	0	5	6	26	926	18	12	982	1012
Grand Total	0	16	2	49	67	1	0	1	122	124	1	1	0	70	72	298	11693	127	132	12250	12513
Apprch %	0.0	23.9	3.0	73.1		0.8	0.0	0.8	98.4		1.4	1.4	0.0	97.2		2.4	95.5	1.0	1.1		
Total %	0.0	0.1	0.0	0.4	0.5	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.6	0.6	2.4	93.4	1.0	1.1	97.9	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Princeton/Edmund
Date: Wednesday, January 19, 2000
Counter: JI

File Name : BS0119D
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Edmund St Southbound					Princeton Westbound					Edmund St Northbound					Princeton Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	309	0	0	309	312
06:15	0	0	0	0	0	0	0	0	0	0	10	1	0	0	11	1	364	0	0	365	376
06:30	0	0	0	0	0	0	0	0	0	0	8	2	0	0	10	3	364	1	0	368	378
06:45	0	0	0	0	0	0	0	0	0	0	3	3	0	0	6	1	315	0	0	316	322
Total	0	0	0	0	0	0	0	0	0	0	24	6	0	0	30	5	1352	1	0	1358	1388
07:00	0	0	0	0	0	0	0	0	0	0	8	4	0	0	12	0	321	0	0	321	333
07:15	0	0	0	0	0	0	0	0	0	0	20	4	0	0	24	2	352	1	0	355	379
07:30	0	0	0	0	0	0	0	0	0	0	14	14	0	0	28	4	368	2	0	374	402
07:45	0	0	0	0	0	0	0	0	0	0	37	8	0	0	45	4	330	6	0	340	385
Total	0	0	0	0	0	0	0	0	0	0	79	30	0	0	109	10	1371	9	0	1390	1499
08:00	0	0	0	0	0	0	0	0	0	0	23	3	0	0	26	7	334	5	0	346	372
08:15	0	0	0	0	0	0	0	0	0	0	14	4	0	0	18	4	266	6	0	276	294
08:30	0	0	0	0	0	0	0	0	0	0	8	7	0	0	15	2	257	3	0	262	277
08:45	0	0	0	0	0	0	0	0	0	0	9	5	0	0	14	5	244	5	0	254	268
Total	0	0	0	0	0	0	0	0	0	0	54	19	0	0	73	18	1101	19	0	1138	1211
09:00	0	0	0	0	0	0	0	0	0	0	6	2	0	0	8	2	209	3	0	214	222
09:15	0	0	0	0	0	0	0	0	0	0	7	2	0	0	9	1	216	4	0	221	230
09:30	0	0	0	0	0	0	0	0	0	0	2	5	0	0	7	2	217	5	0	224	231
09:45	0	0	0	0	0	0	0	0	0	0	7	3	0	0	10	2	204	2	1	209	219
Total	0	0	0	0	0	0	0	0	0	0	22	12	0	0	34	7	846	14	1	868	902
10:00	0	0	0	0	0	0	0	0	0	0	7	3	0	0	10	2	171	2	1	176	186
10:15	0	0	0	0	0	0	0	0	0	0	6	3	0	0	9	3	183	0	0	186	195
10:30	0	0	0	0	0	0	0	0	0	0	3	7	0	0	10	1	173	3	0	177	187
10:45	0	0	0	0	0	0	0	0	0	0	10	6	0	0	16	1	175	4	0	180	196
Total	0	0	0	0	0	0	0	0	0	0	26	19	0	0	45	7	702	9	1	719	764
11:00	0	0	0	0	0	0	0	0	0	0	4	7	0	0	11	2	162	6	0	170	181
11:15	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	1	216	3	0	220	225
11:30	0	0	0	0	0	0	0	0	0	0	18	7	0	0	25	2	214	7	0	223	248
11:45	0	0	0	0	0	0	0	0	0	0	4	4	0	0	8	1	214	1	0	216	224
Total	0	0	0	0	0	0	0	0	0	0	27	22	0	0	49	6	806	17	0	829	878
12:00	0	0	0	0	0	0	0	0	0	0	6	3	0	0	9	0	172	2	0	174	183
12:15	0	0	0	0	0	0	0	0	0	0	5	3	0	0	8	1	237	1	0	239	247
12:30	0	0	0	0	0	0	0	0	0	0	11	6	0	0	17	2	218	2	0	222	239
12:45	0	0	0	0	0	0	0	0	0	0	6	1	0	0	7	0	227	0	0	227	234
Total	0	0	0	0	0	0	0	0	0	0	28	13	0	0	41	3	854	5	0	862	903
13:00	0	0	0	0	0	0	0	0	2	2	1	4	0	0	5	3	208	7	0	218	225
13:15	0	0	0	0	0	0	0	0	0	0	8	1	0	0	9	1	284	5	0	290	299
13:30	0	0	0	0	0	0	0	0	0	0	2	4	0	0	6	10	268	1	0	279	285
13:45	0	0	0	0	0	0	0	0	0	0	5	5	0	0	10	2	211	0	1	214	224
Total	0	0	0	0	0	0	0	0	2	2	16	14	0	0	30	16	971	13	1	1001	1033
14:00	0	0	0	0	0	0	0	0	0	0	8	3	0	0	11	1	248	4	0	253	264
14:15	0	0	0	0	0	0	0	0	0	0	13	9	0	0	22	1	242	1	0	244	266
14:30	0	0	0	0	0	0	0	0	0	0	23	12	0	0	35	3	252	4	1	260	295
14:45	0	0	0	0	0	0	0	0	0	0	10	10	0	0	20	4	252	3	0	259	279
Total	0	0	0	0	0	0	0	0	0	0	54	34	0	0	88	9	994	12	1	1016	1104

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Princeton/Edmund
Date: Wednesday, January 19, 2000
Counter: JI

File Name : BS0119D
Site Code : 00000000
Start Date : 01/19/2000
Page No : 2

Groups Printed- Cars - Heavy Vehicles - Buses

	Edmund St Southbound					Princeton Westbound					Edmund St Northbound					Princeton Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
15:00	0	0	0	0	0	0	0	0	0	0	3	25	1	0	29	3	214	5	0	222	251
15:15	0	0	0	0	0	0	0	0	0	0	9	5	0	0	14	0	276	8	0	284	298
15:30	0	0	0	0	0	0	0	0	0	0	15	5	0	0	20	1	340	2	0	343	363
15:45	0	0	0	0	0	0	0	0	0	0	5	7	0	0	12	2	269	4	0	275	287
Total	0	0	0	0	0	0	0	0	0	0	32	42	1	0	75	6	1099	19	0	1124	1199
16:00	0	0	0	0	0	0	0	0	0	0	4	7	0	0	11	3	259	3	0	265	276
16:15	0	0	0	0	0	0	0	0	0	0	7	9	0	0	16	1	256	3	0	260	276
16:30	0	0	0	0	0	0	0	0	0	0	5	8	0	0	13	2	233	4	0	239	252
16:45	0	0	0	0	0	0	0	0	0	0	9	9	0	0	18	0	262	2	0	264	282
Total	0	0	0	0	0	0	0	0	0	0	25	33	0	0	58	6	1010	12	0	1028	1086
17:00	0	0	0	0	0	0	0	0	0	0	8	6	0	0	14	0	253	4	0	257	271
17:15	0	0	0	0	0	0	0	0	0	0	7	11	0	0	18	2	272	1	0	275	293
17:30	0	0	0	0	0	0	0	0	0	0	12	11	0	0	23	1	224	1	0	226	249
17:45	0	0	0	0	0	0	0	0	0	0	14	9	0	0	23	1	207	5	0	213	236
Total	0	0	0	0	0	0	0	0	0	0	41	37	0	0	78	4	956	11	0	971	1049
Grand Total	0	0	0	0	0	0	0	0	2	2	428	281	1	0	710	97	12062	141	4	12304	13016
Apprch %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0		60.3	39.6	0.1	0.0		0.8	98.0	1.1	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	2.2	0.0	0.0	5.5	0.7	92.7	1.1	0.0	94.5	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Princeton Ave/Hegerman
Date: Wednesday, February 23, 2000
Counter: Lynn

File Name : BS0223Q
Site Code : 00000000
Start Date : 02/23/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Hegerman Avenue Southbound					Princeton Avenue Westbound					Hegerman Avenue Northbound					Princeton Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30	0	7	20	1	28	0	0	0	0	0	0	0	0	0	0	1	318	0	1	320	348
06:45	0	10	25	2	37	0	0	0	0	0	0	0	0	3	3	1	279	0	1	281	321
Total	0	17	45	3	65	0	0	0	0	0	0	0	0	3	3	2	597	0	2	601	669
07:00	0	13	32	0	45	0	0	0	0	0	0	0	0	2	2	0	333	0	1	334	381
07:15	0	21	40	1	62	0	0	0	3	3	0	0	0	0	0	2	324	0	0	326	391
07:30	0	26	39	1	66	0	0	0	1	1	0	0	0	15	15	4	345	0	3	352	434
07:45	0	37	41	5	83	0	0	0	1	1	0	0	0	40	40	4	300	0	4	308	432
Total	0	97	152	7	256	0	0	0	5	5	0	0	0	57	57	10	1302	0	8	1320	1638
08:00	0	30	38	0	68	0	0	0	0	0	0	0	0	6	6	5	281	0	2	288	362
08:15	0	15	21	3	39	0	0	0	0	0	0	0	0	1	1	4	303	0	1	308	348
08:30	0	18	16	4	38	0	0	0	0	0	0	0	0	4	4	4	254	0	3	261	303
08:45	0	13	10	2	25	0	0	0	0	0	0	0	0	0	0	1	194	0	3	198	223
Total	0	76	85	9	170	0	0	0	0	0	0	0	0	11	11	14	1032	0	9	1055	1236
*** BREAK ***																					
16:00	0	35	28	1	64	0	0	0	2	2	0	0	0	2	2	4	228	0	3	235	303
16:15	0	34	14	0	48	0	0	0	3	3	0	0	0	5	5	6	218	0	3	227	283
16:30	0	36	18	3	57	0	0	0	0	0	0	0	0	1	1	5	249	0	1	255	313
16:45	0	40	17	1	58	0	0	0	1	1	0	0	0	1	1	7	248	0	0	255	315
Total	0	145	77	5	227	0	0	0	6	6	0	0	0	9	9	22	943	0	7	972	1214
17:00	0	25	17	9	51	0	0	0	1	1	0	0	0	2	2	7	230	0	2	239	293
17:15	0	34	11	8	53	0	0	0	1	1	0	0	0	1	1	11	271	0	0	282	337
17:30	1	45	16	6	68	0	0	0	0	0	0	0	0	3	3	6	257	0	3	266	337
17:45	0	28	20	3	51	0	0	0	1	1	0	0	0	2	2	13	226	1	1	241	295
Total	1	132	64	26	223	0	0	0	3	3	0	0	0	8	8	37	984	1	6	1028	1262
Grand Total	1	467	423	50	941	0	0	0	14	14	0	0	0	88	88	85	4858	1	32	4976	6019
Apprch %	0.1	49.6	45.0	5.3		0.0	0.0	0.0	100.0		0.0	0.0	0.0	100.0		1.7	97.6	0.0	0.6		
Total %	0.0	7.8	7.0	0.8	15.6	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	1.5	1.5	1.4	80.7	0.0	0.5	82.7	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Torresdale / Princeton
Date: Wednesday, January 19, 2000
Counter: ET / JT

File Name : BS0119E
Site Code : 00000000
Start Date : 01/19/2000
Page No : 1

Groups Printed- Cars - Heavy Trucks - Buses

	Torresdale Ave. Southbound					Princeton Ave. (One Way Eastboun Westbound					Torresdale Ave. Northbound					Princeton Ave. Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00	0	41	143	0	184	0	0	0	0	0	61	27	0	0	88	1	119	0	3	123	395
06:15	2	33	160	1	196	0	0	0	1	1	84	22	0	2	108	0	111	2	4	117	422
06:30	3	40	156	1	200	0	0	0	0	0	77	40	1	0	118	4	103	1	2	110	428
06:45	4	40	120	0	164	0	0	0	0	0	65	34	0	0	99	1	84	2	1	88	351
Total	9	154	579	2	744	0	0	0	1	1	287	123	1	2	413	6	417	5	10	438	1596
07:00	1	54	131	2	188	0	0	0	1	1	64	37	2	0	103	3	109	0	2	114	406
07:15	5	67	135	2	209	0	0	0	1	1	83	32	0	1	116	4	112	4	1	121	447
07:30	2	83	140	2	227	0	0	0	8	8	72	59	3	10	144	2	113	0	3	118	497
07:45	2	79	130	0	211	0	0	0	0	0	67	49	3	16	135	6	96	2	18	122	468
Total	10	283	536	6	835	0	0	0	10	10	286	177	8	27	498	15	430	6	24	475	1818
08:00	5	70	132	0	207	0	0	0	0	0	60	39	0	2	101	8	92	2	1	103	411
08:15	4	56	110	1	171	0	0	0	0	0	46	31	1	2	80	4	78	2	2	86	337
08:30	3	77	109	3	192	0	0	0	1	1	46	27	1	1	75	6	74	0	2	82	350
08:45	4	51	118	0	173	0	0	0	4	4	33	28	0	4	65	5	64	5	2	76	318
Total	16	254	469	4	743	0	0	0	5	5	185	125	2	9	321	23	308	9	7	347	1416
09:00	6	43	95	1	145	0	0	0	0	0	27	21	2	1	51	1	32	0	0	33	229
09:15	4	54	111	1	170	0	0	0	2	2	52	45	2	1	100	3	54	3	4	64	336
09:30	6	47	99	1	153	0	0	0	0	0	37	40	2	2	81	6	55	3	3	67	301
09:45	4	54	108	3	169	0	0	0	0	0	23	36	0	6	65	7	62	3	2	74	308
Total	20	198	413	6	637	0	0	0	2	2	139	142	6	10	297	17	203	9	9	238	1174
10:00	8	56	86	3	153	0	0	0	0	0	28	38	2	3	71	6	48	2	6	62	286
10:15	1	53	80	1	135	0	0	0	0	0	38	41	1	4	84	2	46	1	4	53	272
10:30	0	64	74	2	140	0	0	0	2	2	35	47	1	1	84	7	61	1	3	72	298
10:45	4	48	92	2	146	0	0	0	4	4	30	40	1	0	71	7	42	3	0	52	273
Total	13	221	332	8	574	0	0	0	6	6	131	166	5	8	310	22	197	7	13	239	1129
11:00	8	69	84	2	163	0	0	0	0	0	31	42	3	0	76	2	47	2	0	51	290
11:15	6	50	107	2	165	0	0	0	5	5	35	39	4	2	80	5	60	4	1	70	320
11:30	4	56	111	2	173	0	0	0	0	0	42	39	2	7	90	8	60	7	3	78	341
11:45	2	48	109	0	159	0	0	0	3	3	35	43	3	4	85	4	55	2	3	64	311
Total	20	223	411	6	660	0	0	0	8	8	143	163	12	13	331	19	222	15	7	263	1262
12:00	10	52	97	1	160	0	0	0	2	2	28	46	3	5	82	3	53	3	6	65	309
12:15	7	50	104	1	162	0	0	0	0	0	33	50	0	0	83	9	60	4	5	78	323
12:30	5	66	121	3	195	0	0	0	0	0	42	47	1	1	91	5	45	6	4	60	346
12:45	6	51	82	1	140	1	0	0	3	4	41	51	0	1	93	5	63	5	5	78	315
Total	28	219	404	6	657	1	0	0	5	6	144	194	4	7	349	22	221	18	20	281	1293
13:00	12	62	102	0	176	0	0	0	2	2	39	37	2	0	78	4	49	4	5	62	318
13:15	8	60	136	0	204	0	0	0	1	1	51	50	4	0	105	6	60	5	5	76	386
13:30	8	44	101	1	154	0	0	0	0	0	45	47	1	0	93	7	50	7	3	67	314
13:45	11	65	101	6	183	0	0	0	0	0	52	53	2	3	110	5	55	6	21	87	380
Total	39	231	440	7	717	0	0	0	3	3	187	187	9	3	386	22	214	22	34	292	1398
14:00	8	68	123	4	203	0	0	0	2	2	46	50	3	2	101	4	54	4	8	70	376
14:15	11	67	115	5	198	0	0	0	0	0	44	51	2	5	102	3	77	5	0	85	385
14:30	6	84	103	1	194	0	0	0	1	1	62	41	3	49	155	4	66	2	17	89	439
14:45	6	57	129	6	198	0	0	0	0	0	47	53	3	6	109	7	70	3	1	81	388
Total	31	276	470	16	793	0	0	0	3	3	199	195	11	62	467	18	267	14	26	325	1588

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, PA
Intersection: Torresdale / Princeton
Date: Wednesday, January 19, 2000
Counter: ET / JT

File Name : BS0119E
Site Code : 00000000
Start Date : 01/19/2000
Page No : 2

Groups Printed- Cars - Heavy Trucks - Buses

	Torresdale Ave. Southbound					Princeton Ave. (One Way Eastboun Westbound					Torresdale Ave. Northbound					Princeton Ave. Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
15:00	10	63	114	2	189	0	0	0	0	0	52	59	1	0	112	4	63	3	5	75	376
15:15	3	63	143	2	211	0	0	0	0	0	51	50	3	12	116	11	71	4	1	87	414
15:30	10	72	149	6	237	0	0	0	3	3	75	51	5	3	134	3	66	4	4	77	451
15:45	7	56	147	4	214	0	0	0	3	3	53	58	0	6	117	7	67	0	1	75	409
Total	30	254	553	14	851	0	0	0	6	6	231	218	9	21	479	25	267	11	11	314	1650
16:00	8	66	121	3	198	0	0	0	4	4	53	50	3	8	114	2	73	0	1	76	392
16:15	7	65	121	4	197	0	0	0	0	0	48	55	3	1	107	5	68	9	1	83	387
16:30	7	80	113	8	208	0	0	0	1	1	31	65	5	2	103	9	78	1	3	91	403
16:45	13	69	130	4	216	0	0	0	1	1	34	70	0	1	105	7	70	1	1	79	401
Total	35	280	485	19	819	0	0	0	6	6	166	240	11	12	429	23	289	11	6	329	1583
17:00	13	76	117	0	206	0	0	0	0	0	66	65	4	3	138	4	82	9	6	101	445
17:15	16	72	138	5	231	0	0	0	0	0	32	62	2	2	98	10	79	1	5	95	424
17:30	10	75	108	3	196	0	0	0	0	0	50	53	3	2	108	5	51	6	1	63	367
17:45	8	73	117	2	200	0	0	0	1	1	42	58	0	2	102	9	61	3	0	73	376
Total	47	296	480	10	833	0	0	0	1	1	190	238	9	9	446	28	273	19	12	332	1612
Grand Total	298	2889	5572	104	8863	1	0	0	56	57	2288	2168	87	183	4726	240	3308	146	179	3873	17519
Apprch %	3.4	32.6	62.9	1.2		1.8	0.0	0.0	98.2		48.4	45.9	1.8	3.9		6.2	85.4	3.8	4.6		
Total %	1.7	16.5	31.8	0.6	50.6	0.0	0.0	0.0	0.3	0.3	13.1	12.4	0.5	1.0	27.0	1.4	18.9	0.8	1.0	22.1	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Torresdale Rd @ Wellington
Date: Thursday, February 17, 2000
Counter: PF

File Name : bs0217O
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Torresdale Rd Southbound					Wellington Westbound					Torresdale Rd Northbound					Wellington Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	3	166	19	1	189	2	6	0	0	8	0	30	0	0	30	7	21	5	2	35	262
06:45 AM	2	151	9	3	165	4	4	2	1	11	0	21	0	0	21	4	24	5	4	37	234
Total	5	317	28	4	354	6	10	2	1	19	0	51	0	0	51	11	45	10	6	72	496
07:00 AM	4	171	8	2	185	4	5	2	4	15	1	35	0	0	36	7	22	3	4	36	272
07:15 AM	2	187	12	3	204	3	7	5	2	17	1	48	1	3	53	12	39	6	1	58	332
07:30 AM	7	185	11	7	210	5	7	2	1	15	0	51	0	1	52	15	30	7	8	60	337
07:45 AM	3	185	15	0	203	4	9	4	1	18	5	36	2	0	43	15	37	11	2	65	329
Total	16	728	46	12	802	16	28	13	8	65	7	170	3	4	184	49	128	27	15	219	1270
08:00 AM	5	197	9	3	214	2	13	3	0	18	3	48	2	0	53	12	23	4	4	43	328
08:15 AM	2	177	16	10	205	4	6	6	0	16	4	34	2	0	40	15	16	7	5	43	304
08:30 AM	5	174	9	1	189	2	7	4	2	15	1	48	2	0	51	6	10	4	0	20	275
08:45 AM	1	162	5	1	169	1	8	0	0	9	4	25	0	0	29	7	14	5	0	26	233
Total	13	710	39	15	777	9	34	13	2	58	12	155	6	0	173	40	63	20	9	132	1140
04:00 PM	9	176	9	2	196	6	32	8	5	51	6	50	3	0	59	5	7	5	2	19	325
04:15 PM	7	176	13	4	200	0	12	16	10	38	2	50	8	1	61	11	12	8	3	34	333
04:30 PM	11	158	6	10	185	3	25	11	14	53	9	56	4	2	71	4	10	8	4	26	335
04:45 PM	10	158	12	7	187	1	30	2	3	36	4	58	0	8	70	10	7	3	3	23	316
Total	37	668	40	23	768	10	99	37	32	178	21	214	15	11	261	30	36	24	12	102	1309
05:00 PM	11	161	8	1	181	3	39	8	0	50	3	58	12	1	74	4	13	5	2	24	329
05:15 PM	3	197	20	12	232	5	27	8	3	43	3	56	3	1	63	6	10	4	1	21	359
05:30 PM	11	190	14	3	218	8	40	7	1	56	5	61	3	2	71	5	11	3	0	19	364
05:45 PM	10	168	9	1	188	6	24	3	1	34	8	53	3	4	68	9	9	6	1	25	315
Total	35	716	51	17	819	22	130	26	5	183	19	228	21	8	276	24	43	18	4	89	1367
Grand Total	106	3139	204	71	3520	63	301	91	48	503	59	818	45	23	945	154	315	99	46	614	5582
Apprch %	3.0	89.2	5.8	2.0		12.5	59.8	18.1	9.5		6.2	86.6	4.8	2.4		25.1	51.3	16.1	7.5		
Total %	1.9	56.2	3.7	1.3	63.1	1.1	5.4	1.6	0.9	9.0	1.1	14.7	0.8	0.4	16.9	2.8	5.6	1.8	0.8	11.0	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Torresdale Ave/Rhawn St
Date: Thursday, February 17, 2000
Counter: WC/LD

File Name : bs02171
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- 1 - Cars - 2 - Heavy Vehicles - 3- Buses

	Torresdale Avenue Southbound					Rhawn Street Westbound					Torresdale Avenue Northbound					Rhawn Street Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	10	32	10	0	52	8	13	5	5	31	46	48	8	2	104	19	90	29	2	140	327
06:45 AM	11	38	13	1	63	2	16	5	0	23	34	41	6	3	84	15	74	36	1	126	296
Total	21	70	23	1	115	10	29	10	5	54	80	89	14	5	188	34	164	65	3	266	623
07:00 AM	12	40	8	0	60	2	23	6	0	31	25	30	14	4	73	19	63	39	4	125	289
07:15 AM	16	61	16	4	97	4	35	8	3	50	25	67	11	7	110	19	95	41	7	162	419
07:30 AM	26	92	23	0	141	9	34	6	2	51	30	97	29	2	158	17	95	35	4	151	501
07:45 AM	25	93	23	1	142	6	34	5	2	47	31	108	21	2	162	18	108	46	2	174	525
Total	79	286	70	5	440	21	126	25	7	179	111	302	75	15	503	73	361	161	17	612	1734
08:00 AM	22	104	17	0	143	7	34	8	1	50	20	70	20	1	111	18	69	29	2	118	422
08:15 AM	31	87	22	0	140	7	28	5	0	40	25	57	14	3	99	19	89	34	4	146	425
08:30 AM	22	56	5	0	83	5	31	4	0	40	7	64	25	4	100	13	60	24	6	103	326
08:45 AM	19	44	8	0	71	6	42	9	0	57	19	43	15	0	77	21	62	24	5	112	317
Total	94	291	52	0	437	25	135	26	1	187	71	234	74	8	387	71	280	111	17	479	1490
*** BREAK ***																					
04:00 PM	35	67	8	0	110	7	110	9	2	128	12	60	23	3	98	22	37	22	1	82	418
04:15 PM	32	72	7	1	112	6	107	19	0	132	11	68	17	1	97	14	33	21	0	68	409
04:30 PM	36	67	6	0	109	9	111	6	0	126	12	70	23	4	109	9	34	29	0	72	416
04:45 PM	45	84	6	1	136	12	98	11	0	121	12	60	20	6	98	18	39	20	1	78	433
Total	148	290	27	2	467	34	426	45	2	507	47	258	83	14	402	63	143	92	2	300	1676
05:00 PM	34	70	5	0	109	12	98	18	1	129	8	77	17	0	102	20	34	25	0	79	419
05:15 PM	43	70	2	0	115	10	85	21	1	117	10	72	36	6	124	22	31	23	2	78	434
05:30 PM	35	64	1	0	100	8	84	12	2	106	12	67	12	5	96	21	41	25	0	87	389
05:45 PM	30	52	5	0	87	10	98	10	1	119	8	63	21	4	96	11	26	28	1	66	368
Total	142	256	13	0	411	40	365	61	5	471	38	279	86	15	418	74	132	101	3	310	1610
Grand Total	484	1193	185	8	1870	130	1081	167	20	1398	347	1162	332	57	1898	315	1080	530	42	1967	7133
Apprch %	25.9	63.8	9.9	0.4		9.3	77.3	11.9	1.4		18.3	61.2	17.5	3.0		16.0	54.9	26.9	2.1		
Total %	6.8	16.7	2.6	0.1	26.2	1.8	15.2	2.3	0.3	19.6	4.9	16.3	4.7	0.8	26.6	4.4	15.1	7.4	0.6	27.6	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: New State Road/Milnor St.
Date: Thursday, February 17, 2000
Counter: ET / JT

File Name : BS0217A
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Milnor Street Southbound					New State Road Northbound					New State Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 AM	2	46	0	0	48	0	11	96	0	107	34	0	0	0	34	189
06:15 AM	3	74	0	0	77	0	10	167	0	177	58	0	0	0	58	312
06:30 AM	0	116	0	0	116	0	12	213	0	225	96	0	0	0	96	437
06:45 AM	1	129	0	0	130	0	24	225	0	249	101	0	0	0	101	480
Total	6	365	0	0	371	0	57	701	0	758	289	0	0	0	289	1418
07:00 AM	0	129	0	0	129	0	27	183	0	210	88	9	0	1	98	437
07:15 AM	5	178	0	0	183	0	17	207	0	224	159	0	0	0	159	566
07:30 AM	2	171	0	0	173	0	28	274	0	302	180	0	0	0	180	655
07:45 AM	0	142	0	0	142	0	29	270	0	299	187	0	0	0	187	628
Total	7	620	0	0	627	0	101	934	0	1035	614	9	0	1	624	2286
08:00 AM	6	190	0	0	196	0	24	223	0	247	193	0	0	0	193	636
08:15 AM	5	164	1	0	170	0	23	210	0	233	166	0	0	0	166	569
08:30 AM	4	127	0	0	131	0	34	179	0	213	130	24	0	0	154	498
08:45 AM	2	152	1	0	155	0	23	64	0	87	115	10	0	0	125	367
Total	17	633	2	0	652	0	104	676	0	780	604	34	0	0	638	2070
09:00 AM	6	115	0	0	121	0	31	224	0	255	72	1	0	0	73	449
09:15 AM	5	60	0	0	65	0	14	149	0	163	65	0	0	0	65	293
09:30 AM	9	80	0	0	89	0	22	121	0	143	62	0	0	0	62	294
09:45 AM	6	62	0	0	68	1	19	102	0	122	48	0	0	0	48	238
Total	26	317	0	0	343	1	86	596	0	683	247	1	0	0	248	1274
10:00 AM	4	66	0	0	70	0	17	101	0	118	54	6	0	0	60	248
10:15 AM	9	61	0	0	70	0	25	140	0	165	51	0	0	0	51	286
10:30 AM	3	57	0	0	60	0	15	121	0	136	57	0	0	0	57	253
10:45 AM	4	80	0	0	84	0	18	122	0	140	56	0	0	0	56	280
Total	20	264	0	0	284	0	75	484	0	559	218	6	0	0	224	1067
11:00 AM	8	57	0	0	65	0	21	109	0	130	39	2	0	0	41	236
11:15 AM	7	48	0	0	55	0	20	115	0	135	61	0	0	0	61	251
11:30 AM	6	56	0	0	62	0	19	119	0	138	43	0	0	0	43	243
11:45 AM	5	58	0	0	63	0	32	127	0	159	51	1	0	0	52	274
Total	26	219	0	0	245	0	92	470	0	562	194	3	0	0	197	1004
12:00 PM	8	57	0	0	65	0	27	102	0	129	48	0	0	0	48	242
12:15 PM	7	58	0	0	65	0	17	127	0	144	45	0	0	0	45	254
12:30 PM	13	55	0	0	68	0	28	132	0	160	69	0	0	0	69	297
12:45 PM	10	71	0	0	81	0	26	122	0	148	67	0	0	0	67	296
Total	38	241	0	0	279	0	98	483	0	581	229	0	0	0	229	1089
01:00 PM	12	62	0	0	74	0	20	101	0	121	70	0	0	0	70	265
01:15 PM	9	63	0	0	72	0	21	108	0	129	46	0	0	0	46	247
01:30 PM	7	56	0	0	63	0	20	97	0	117	66	0	0	0	66	246
01:45 PM	3	61	0	0	64	0	31	133	0	164	69	0	0	0	69	297
Total	31	242	0	0	273	0	92	439	0	531	251	0	0	0	251	1055
02:00 PM	6	73	0	0	79	0	33	174	0	207	64	0	0	0	64	350
02:15 PM	5	68	0	0	73	0	25	148	0	173	61	1	0	0	62	308
02:30 PM	9	90	0	0	99	0	25	160	0	185	59	0	0	0	59	343
02:45 PM	11	104	0	0	115	0	23	171	0	194	82	0	0	0	82	391
Total	31	335	0	0	366	0	106	653	0	759	266	1	0	0	267	1392
03:00 PM	3	78	4	0	85	0	40	157	0	197	81	0	0	0	81	363
03:15 PM	8	85	3	0	96	0	28	187	0	215	76	0	0	0	76	387
03:30 PM	6	97	1	0	104	0	24	215	0	239	71	6	0	0	77	420
03:45 PM	7	83	0	0	90	0	35	192	0	227	83	0	0	0	83	400
Total	24	343	8	0	375	0	127	751	0	878	311	6	0	0	317	1570

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: New State Road/Milnor St.
Date: Thursday, February 17, 2000
Counter: ET / JT

File Name : BS0217A
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Milnor Street Southbound					New State Road Northbound					New State Road Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	10	95	0	0	105	0	27	235	0	262	85	3	0	0	88	455
04:15 PM	1	92	0	1	94	0	46	258	0	304	83	0	0	0	83	481
04:30 PM	4	111	0	1	116	0	38	236	1	275	81	0	0	0	81	472
04:45 PM	6	101	0	0	107	0	51	243	0	294	79	0	0	0	79	480
Total	21	399	0	2	422	0	162	972	1	1135	328	3	0	0	331	1888
05:00 PM	3	102	0	0	105	0	47	314	0	361	86	1	0	0	87	553
05:15 PM	3	142	0	0	145	0	34	296	0	330	94	3	0	0	97	572
05:30 PM	3	124	0	0	127	0	28	276	0	304	59	0	0	0	59	490
05:45 PM	4	92	0	0	96	0	36	258	0	294	55	0	0	0	55	445
Total	13	460	0	0	473	0	145	1144	0	1289	294	4	0	0	298	2060
Grand Total	260	4438	10	2	4710	1	1245	8303	1	9550	3845	67	0	1	3913	18173
Apprch %	5.5	94.2	0.2	0.0		0.0	13.0	86.9	0.0		98.3	1.7	0.0	0.0		
Total %	1.4	24.4	0.1	0.0	25.9	0.0	6.9	45.7	0.0	52.6	21.2	0.4	0.0	0.0	21.5	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, Pa.
Intersection: State Road @ Bleigh Ave
Date: Thursday, February 17, 2000
Counter: RZ

File Name : BS0217h
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	State Road Southbound					Bleigh Avenue Westbound					State Road Northbound					Bleigh Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 AM	0	44	5	0	49	10	0	6	0	16	6	43	0	0	49	0	0	0	0	0	114
06:15 AM	0	72	8	0	80	9	0	9	0	18	8	96	0	2	106	0	0	0	0	0	204
06:30 AM	0	108	11	0	119	11	0	13	1	25	15	200	0	0	215	0	0	0	7	7	366
06:45 AM	0	123	15	0	138	19	1	16	1	37	24	147	1	1	173	0	0	1	3	4	352
Total	0	347	39	0	386	49	1	44	2	96	53	486	1	3	543	0	0	1	10	11	1036
07:00 AM	1	146	33	0	180	23	0	13	0	36	23	104	0	5	132	0	0	0	3	3	351
07:15 AM	0	233	45	1	279	16	0	11	0	27	20	109	0	4	133	0	0	0	1	1	440
07:30 AM	1	237	37	0	275	19	0	20	0	39	15	158	1	1	175	0	0	0	2	2	491
07:45 AM	3	268	66	0	337	25	0	9	0	34	19	162	0	1	182	0	0	0	0	0	553
Total	5	884	181	1	1071	83	0	53	0	136	77	533	1	11	622	0	0	0	6	6	1835
08:00 AM	1	245	63	1	310	16	1	13	0	30	20	109	1	0	130	0	0	0	1	1	471
08:15 AM	5	205	42	0	252	19	0	17	0	36	16	96	1	1	114	0	1	0	0	1	403
08:30 AM	1	163	24	3	191	19	3	17	0	39	23	89	2	1	115	0	0	0	3	3	348
08:45 AM	1	121	35	0	157	16	1	30	0	47	15	79	2	0	96	0	0	0	0	0	300
Total	8	734	164	4	910	70	5	77	0	152	74	373	6	2	455	0	1	0	4	5	1522
09:00 AM	0	71	26	0	97	20	0	44	0	64	18	84	1	0	103	2	0	0	0	2	266
09:15 AM	0	86	22	0	108	11	1	12	2	26	26	86	0	2	114	0	0	1	0	1	249
09:30 AM	1	68	15	0	84	18	0	24	0	42	21	77	0	0	98	1	1	0	0	2	226
09:45 AM	2	49	9	0	60	17	1	17	0	35	15	76	3	0	94	1	1	1	0	3	192
Total	3	274	72	0	349	66	2	97	2	167	80	323	4	2	409	4	2	2	0	8	933
10:00 AM	1	72	18	0	91	21	0	26	1	48	16	67	2	2	87	0	4	1	1	6	232
10:15 AM	1	82	18	0	101	18	0	26	0	44	26	87	0	0	113	2	0	0	0	2	260
10:30 AM	4	83	14	1	102	18	0	32	1	51	11	73	1	1	86	1	0	0	0	1	240
10:45 AM	0	68	15	1	84	20	0	30	0	50	21	84	2	0	107	0	0	3	0	3	244
Total	6	305	65	2	378	77	0	114	2	193	74	311	5	3	393	3	4	4	1	12	976
11:00 AM	0	90	15	0	105	27	2	32	0	61	29	106	4	1	140	0	0	2	0	2	308
11:15 AM	1	91	10	0	102	27	2	30	0	59	22	75	1	0	98	1	1	0	1	3	262
11:30 AM	2	100	17	0	119	24	0	22	1	47	19	67	1	1	88	2	0	1	2	5	259
11:45 AM	2	90	24	0	116	27	0	18	0	45	26	91	1	0	118	2	1	1	1	5	284
Total	5	371	66	0	442	105	4	102	1	212	96	339	7	2	444	5	2	4	4	15	1113
12:00 PM	0	88	23	0	111	25	2	35	0	62	34	77	1	0	112	1	0	0	0	1	286
12:15 PM	0	43	14	0	57	16	22	35	0	73	27	60	5	0	92	11	18	2	0	31	253
12:30 PM	1	89	21	3	114	31	1	20	0	52	23	96	2	0	121	3	1	2	0	6	293
12:45 PM	1	83	25	0	109	45	1	35	0	81	21	95	1	1	118	1	0	1	0	2	310
Total	2	303	83	3	391	117	26	125	0	268	105	328	9	1	443	16	19	5	0	40	1142
01:00 PM	3	109	14	0	126	29	1	22	0	52	22	89	3	0	114	1	0	0	2	3	295
01:15 PM	0	86	18	0	104	21	3	23	0	47	14	79	0	0	93	0	3	0	0	3	247
01:30 PM	0	98	22	0	120	26	0	24	0	50	24	104	0	0	128	0	1	0	0	1	299
01:45 PM	0	101	28	0	129	34	1	29	0	64	33	101	1	1	136	0	0	0	0	0	329
Total	3	394	82	0	479	110	5	98	0	213	93	373	4	1	471	1	4	0	2	7	1170
02:00 PM	1	82	16	0	99	40	0	32	1	73	22	96	0	0	118	0	0	3	0	3	293
02:15 PM	0	58	7	0	65	36	2	20	0	58	24	159	0	0	183	1	0	2	0	3	309
02:30 PM	1	68	14	0	83	24	1	24	1	50	19	127	0	0	146	0	0	2	0	2	281
02:45 PM	7	119	22	2	150	29	0	26	0	55	20	120	2	1	143	2	0	0	0	2	350
Total	9	327	59	2	397	129	3	102	2	236	85	502	2	1	590	3	0	7	0	10	1233
03:00 PM	1	207	14	1	223	38	1	37	0	76	30	101	1	0	132	5	1	2	0	8	439
03:15 PM	1	194	17	1	213	36	1	30	0	67	22	110	1	0	133	0	1	1	1	3	416
03:30 PM	2	143	21	1	167	35	0	33	3	71	17	144	2	0	163	2	1	2	0	5	406
03:45 PM	0	195	15	1	211	37	2	42	0	81	17	135	1	1	154	1	2	1	1	5	451
Total	4	739	67	4	814	146	4	142	3	295	86	490	5	1	582	8	5	6	2	21	1712

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, Pa.
Intersection: State Road @ Bleigh Ave
Date: Thursday, February 17, 2000
Counter: RZ

File Name : BS0217h
Site Code : 00000000
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	State Road Southbound					Bleigh Avenue Westbound					State Road Northbound					Bleigh Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	193	19	4	216	42	0	49	2	93	12	123	1	1	137	0	1	0	0	1	447
04:15 PM	0	153	9	0	162	54	0	38	1	93	7	129	1	1	138	0	2	1	0	3	396
04:30 PM	1	159	11	1	172	48	1	51	0	100	10	127	0	0	137	1	0	1	0	2	411
04:45 PM	2	153	15	0	170	58	2	54	3	117	18	141	3	4	166	1	1	2	1	5	458
Total	3	658	54	5	720	202	3	192	6	403	47	520	5	6	578	2	4	4	1	11	1712
05:00 PM	3	167	15	1	186	57	0	63	3	123	12	122	2	0	136	2	0	1	0	3	448
05:15 PM	0	136	9	0	145	30	0	41	3	74	13	113	0	1	127	0	1	1	0	2	348
05:30 PM	0	120	3	2	125	33	1	63	3	100	8	113	0	0	121	1	0	0	0	1	347
05:45 PM	0	97	5	0	102	40	0	45	0	85	9	121	0	0	130	1	0	0	0	1	318
Total	3	520	32	3	558	160	1	212	9	382	42	469	2	1	514	4	1	2	0	7	1461
Grand Total	51	5856	964	24	6895	1314	54	1358	27	2753	912	5047	51	34	6044	46	42	35	30	153	15845
Apprch %	0.7	84.9	14.0	0.3		47.7	2.0	49.3	1.0		15.1	83.5	0.8	0.6		30.1	27.5	22.9	19.6		
Total %	0.3	37.0	6.1	0.2	43.5	8.3	0.3	8.6	0.2	17.4	5.8	31.9	0.3	0.2	38.1	0.3	0.3	0.2	0.2	1.0	

Tri-State Traffic Data, Inc.
(610) 444-8030
TSTData@aol.com

Location: Philadelphia, Pa
Intersection: State Road @ Rhawn St.
Date: Wednesday, February 23, 2000
Counter: RZ

File Name : BS0223M
Site Code : 00000000
Start Date : 02/23/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	STATE RD Southbound				STATE RD Northbound				RHAWN ST Eastbound				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
06:30	14	118	0	132	170	16	0	186	33	110	0	143	461
06:45	17	133	0	150	136	28	0	164	44	62	0	106	420
Total	31	251	0	282	306	44	0	350	77	172	0	249	881
07:00	16	172	0	188	117	22	0	139	48	38	5	91	418
07:15	34	249	0	283	92	25	1	118	49	71	2	122	523
07:30	26	253	2	281	126	29	1	156	44	72	5	121	558
07:45	30	274	0	304	181	43	0	224	47	86	2	135	663
Total	106	948	2	1056	516	119	2	637	188	267	14	469	2162
08:00	26	218	1	245	131	33	0	164	37	53	1	91	500
08:15	15	172	0	187	150	32	5	187	44	58	8	110	484
08:30	26	136	2	164	88	36	0	124	32	38	1	71	359
08:45	30	128	0	158	110	27	1	138	33	52	1	86	382
Total	97	654	3	754	479	128	6	613	146	201	11	358	1725
16:00	68	159	2	229	98	68	4	170	26	27	0	53	452
16:15	33	150	2	185	129	51	0	180	30	28	5	63	428
16:30	47	114	0	161	120	71	5	196	32	34	1	67	424
16:45	53	130	1	184	98	60	4	162	37	35	3	75	421
Total	201	553	5	759	445	250	13	708	125	124	9	258	1725
17:00	68	149	2	219	133	65	0	198	30	35	0	65	482
17:15	43	111	2	156	100	67	1	168	29	29	0	58	382
17:30	30	86	0	116	111	63	0	174	33	26	1	60	350
17:45	37	99	0	136	109	62	1	172	23	25	1	49	357
Total	178	445	4	627	453	257	2	712	115	115	2	232	1571
Grand Total	613	2851	14	3478	2199	798	23	3020	651	879	36	1566	8064
Apprch %	17.6	82.0	0.4		72.8	26.4	0.8		41.6	56.1	2.3		
Total %	7.6	35.4	0.2	43.1	27.3	9.9	0.3	37.5	8.1	10.9	0.4	19.4	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Bleigh St @ Wissonoming
Date: Thursday, February 17, 2000
Counter: JI

File Name : bs0217j
Site Code : 0000000(
Start Date : 02/17/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	I-95 SB Exit Ramp Southbound					Bleigh Avenue Westbound					Wissonoming Street Northbound					Bleigh Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 AM	5	32	44	0	81	0	12	0	0	12	0	0	0	0	0	0	13	0	0	13	106
06:15 AM	6	38	70	0	114	0	11	1	0	12	0	0	0	0	0	0	10	0	0	10	136
06:30 AM	14	29	126	0	169	0	6	2	0	8	0	0	0	0	0	1	14	0	0	15	192
06:45 AM	21	35	129	0	185	0	13	0	0	13	0	0	0	0	0	4	31	0	0	35	233
Total	46	134	369	0	549	0	42	3	0	45	0	0	0	0	0	5	68	0	0	73	667
07:00 AM	11	33	123	0	167	0	32	4	0	36	0	0	0	0	0	1	41	0	0	42	245
07:15 AM	12	51	158	0	221	0	16	0	0	16	0	0	0	0	0	1	49	0	0	50	287
07:30 AM	18	48	152	0	218	0	23	2	0	25	0	0	0	0	0	4	52	0	0	56	299
07:45 AM	9	46	122	0	177	0	27	2	0	29	0	0	0	0	0	9	53	0	0	62	268
Total	50	178	555	0	783	0	98	8	0	106	0	0	0	0	0	15	195	0	0	210	1099
08:00 AM	16	50	145	0	211	0	26	0	0	26	0	0	0	0	0	6	80	0	0	86	323
08:15 AM	14	49	129	0	192	0	24	1	0	25	0	0	0	0	0	5	57	0	0	62	279
08:30 AM	23	76	120	0	219	0	17	1	0	18	0	0	0	0	0	5	35	0	0	40	277
08:45 AM	33	96	135	0	264	0	24	1	0	25	0	0	0	0	0	2	38	0	0	40	329
Total	86	271	529	0	886	0	91	3	0	94	0	0	0	0	0	18	210	0	0	228	1208
09:00 AM	34	55	92	0	181	0	27	4	0	31	0	0	0	0	0	11	29	0	0	40	252
09:15 AM	19	60	47	0	126	0	8	0	0	8	0	0	0	0	0	3	35	0	0	38	172
09:30 AM	23	53	63	0	139	0	18	1	0	19	0	0	0	0	0	2	19	0	0	21	179
09:45 AM	14	42	49	0	105	0	25	4	0	29	0	0	0	0	0	4	21	0	0	25	159
Total	90	210	251	0	551	0	78	9	0	87	0	0	0	0	0	20	104	0	0	124	762
10:00 AM	18	50	49	0	117	0	30	2	0	32	0	0	1	0	1	9	20	0	0	29	179
10:15 AM	19	54	61	0	134	0	22	3	0	25	0	0	0	0	0	3	38	0	0	41	200
10:30 AM	19	40	57	0	116	0	32	4	0	36	0	0	1	0	1	1	17	0	0	18	171
10:45 AM	25	56	67	0	148	0	31	3	0	34	0	0	0	0	0	8	27	0	0	35	217
Total	81	200	234	0	515	0	115	12	0	127	0	0	2	0	2	21	102	0	0	123	767
11:00 AM	23	65	45	0	133	0	32	2	0	34	0	0	0	0	0	7	30	0	0	37	204
11:15 AM	23	50	35	0	108	0	36	0	0	36	0	0	0	0	0	5	21	0	0	26	170
11:30 AM	21	52	47	0	120	0	29	3	0	32	0	0	0	0	0	5	24	0	0	29	181
11:45 AM	20	63	45	0	128	0	30	0	0	30	0	0	0	0	0	7	34	0	0	41	199
Total	87	230	172	0	489	0	127	5	0	132	0	0	0	0	0	24	109	0	0	133	754
12:00 PM	20	59	41	0	120	0	50	4	0	54	0	0	0	0	0	5	37	0	0	42	216
12:15 PM	31	66	47	0	144	0	43	6	0	49	0	0	0	0	0	4	35	0	0	39	232
12:30 PM	22	49	48	0	119	0	34	0	0	34	0	0	0	0	0	6	28	0	0	34	187
12:45 PM	30	51	49	0	130	0	42	5	0	47	0	0	0	0	0	3	35	0	0	38	215
Total	103	225	185	0	513	0	169	15	0	184	0	0	0	0	0	18	135	0	0	153	850
01:00 PM	20	56	46	0	122	0	33	2	0	35	0	0	0	0	0	0	29	0	0	29	186
01:15 PM	24	58	60	0	142	0	25	2	0	27	0	0	0	0	0	2	31	0	0	33	202
01:30 PM	16	49	52	0	117	0	36	2	0	38	0	0	1	0	1	5	38	0	0	43	199
01:45 PM	22	62	49	0	133	0	41	5	0	46	0	0	0	0	0	7	44	0	0	51	230
Total	82	225	207	0	514	0	135	11	0	146	0	0	1	0	1	14	142	0	0	156	817
02:00 PM	27	60	65	0	152	0	47	4	0	51	0	0	0	0	0	2	37	0	0	39	242
02:15 PM	24	65	56	0	145	0	40	2	0	42	0	0	0	0	0	2	27	0	0	29	216
02:30 PM	24	63	65	0	152	0	33	1	0	34	0	0	0	0	0	3	26	0	0	29	215
02:45 PM	29	81	72	0	182	0	28	2	0	30	0	0	0	0	0	3	36	0	0	39	251
Total	104	269	258	0	631	0	148	9	0	157	0	0	0	0	0	10	126	0	0	136	924

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Bleigh St @ Wissonoming
Date: Thursday, February 17, 2000
Counter: JI

File Name : bs0217i
Site Code : 00000000
Start Date : 02/17/2000
Page No : 2

Groups Printed- Cars - Heavy Vehicles - Buses

	I-95 SB Exit Ramp Southbound					Bleigh Avenue Westbound					Wissonoming Street Northbound					Bleigh Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:00 PM	36	56	74	0	166	0	54	6	0	60	0	0	0	0	0	8	25	0	0	33	259
03:15 PM	34	75	70	0	179	0	36	6	0	42	0	0	1	0	1	2	30	0	0	32	254
03:30 PM	30	75	91	0	196	0	35	4	0	39	0	0	0	0	0	7	23	0	0	30	265
03:45 PM	52	92	85	0	229	0	32	5	0	37	0	0	0	0	0	6	24	0	0	30	296
Total	152	298	320	0	770	0	157	21	0	178	0	0	1	0	1	23	102	0	0	125	1074
04:00 PM	44	76	70	0	190	0	46	16	0	62	0	0	0	0	0	3	24	0	0	27	279
04:15 PM	32	82	85	0	199	0	55	6	0	61	0	0	0	0	0	1	10	0	0	11	271
04:30 PM	64	76	97	0	237	0	52	4	0	56	0	0	0	0	0	2	20	0	0	22	315
04:45 PM	48	80	77	0	205	0	55	4	0	59	0	0	1	0	1	2	26	0	0	28	293
Total	188	314	329	0	831	0	208	30	0	238	0	0	1	0	1	8	80	0	0	88	1158
05:00 PM	55	91	77	0	223	0	69	3	0	72	0	0	1	0	1	6	11	0	0	17	313
05:15 PM	46	96	121	0	263	0	48	1	0	49	0	0	0	0	0	2	17	0	0	19	331
05:30 PM	48	115	99	0	262	0	42	4	0	46	0	0	0	0	0	2	13	0	0	15	323
05:45 PM	39	103	84	0	226	0	52	1	0	53	0	0	0	0	0	2	13	0	0	15	294
Total	188	405	381	0	974	0	211	9	0	220	0	0	1	0	1	12	54	0	0	66	1261
Grand Total	1257	2959	3790	0	8006	0	1579	135	0	1714	0	0	6	0	6	188	1427	0	0	1615	11341
Apprch %	15.7	37.0	47.3	0.0		0.0	92.1	7.9	0.0		0.0	0.0	100.0	0.0		11.6	88.4	0.0	0.0		
Total %	11.1	26.1	33.4	0.0	70.6	0.0	13.9	1.2	0.0	15.1	0.0	0.0	0.1	0.0	0.1	1.7	12.6	0.0	0.0	14.2	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Cottage St/Princeton Ave
Date: Tuesday, May 2, 2000
Counter: WC

File Name : bsa0502e
Site Code : 00000000
Start Date : 05/02/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Cottage Street Southbound					Princeton Avenue Westbound					Cottage Street Northbound					Princeton Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Ped	Thru	Left	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	2	19	10	0	31	0	6	1	0	7	0	0	0	0	0	2	65	0	0	67	105
06:45 AM	4	33	12	0	49	0	6	1	0	7	0	0	0	0	0	3	68	0	0	71	127
Total	6	52	22	0	80	0	12	2	0	14	0	0	0	0	0	5	133	0	0	138	232
07:00 AM	3	31	18	0	52	0	12	1	0	13	0	0	0	0	0	6	71	0	0	77	142
07:15 AM	7	25	16	0	48	0	13	2	0	15	0	0	0	0	0	3	87	0	0	90	153
07:30 AM	3	38	13	0	54	1	7	0	0	8	0	0	0	0	0	4	57	0	0	61	123
07:45 AM	0	49	12	0	61	0	11	4	0	15	0	0	0	0	0	2	67	0	0	69	145
Total	13	143	59	0	215	1	43	7	0	51	0	0	0	0	0	15	282	0	0	297	563
08:00 AM	7	38	20	0	65	0	12	2	0	14	0	0	0	0	0	3	79	0	0	82	161
08:15 AM	7	36	12	0	55	0	15	2	0	17	0	0	0	0	0	1	57	0	0	58	130
08:30 AM	10	28	10	0	48	0	11	5	0	16	0	0	0	0	0	4	59	0	0	63	127
08:45 AM	10	29	20	0	59	0	20	2	0	22	0	0	0	0	0	3	56	0	0	59	140
Total	34	131	62	0	227	0	58	11	0	69	0	0	0	0	0	11	251	0	0	262	558
*** BREAK ***																					
04:00 PM	8	40	16	0	64	0	19	4	0	23	0	0	0	0	0	4	67	0	0	71	158
04:15 PM	12	28	17	0	57	0	19	4	0	23	0	0	0	0	0	3	62	0	0	65	145
04:30 PM	15	33	12	0	60	0	23	2	0	25	0	0	0	0	0	7	85	0	0	92	177
04:45 PM	6	25	12	0	43	0	15	2	0	17	0	0	0	0	0	5	65	0	0	70	130
Total	41	126	57	0	224	0	76	12	0	88	0	0	0	0	0	19	279	0	0	298	610
05:00 PM	9	27	8	0	44	0	23	5	0	28	0	0	0	0	0	4	74	0	0	78	150
05:15 PM	10	29	14	0	53	0	19	2	0	21	0	0	0	0	0	5	70	0	0	75	149
05:30 PM	11	38	17	0	66	0	27	1	0	28	0	0	0	0	0	3	80	0	0	83	177
05:45 PM	12	45	15	0	72	0	10	2	0	12	0	0	0	0	0	4	77	0	0	81	165
Total	42	139	54	0	235	0	79	10	0	89	0	0	0	0	0	16	301	0	0	317	641
Grand Total	136	591	254	0	981	1	268	42	0	311	0	0	0	0	0	66	1246	0	0	1312	2604
Apprch %	13.9	60.2	25.9	0.0		0.3	86.2	13.5	0.0		0.0	0.0	0.0	0.0		5.0	95.0	0.0	0.0		
Total %	5.2	22.7	9.8	0.0	37.7	0.0	10.3	1.6	0.0	11.9	0.0	0.0	0.0	0.0	0.0	2.5	47.8	0.0	0.0	50.4	

Tri-State Traffic Data, Inc.
(610) 444-8030

Location: Philadelphia, PA
Intersection: Cottage St. @ Cottman Ave
Date: Thursday, April 13, 2000
Counter: wc

File Name : bsa0413A
Site Code : 00000000
Start Date : 04/13/2000
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Buses

	Cottage Street Southbound					Cottman Avenue Westbound					Cottage Street Northbound					Cottman Avenue Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:30 AM	6	28	1	0	35	0	87	0	0	87	0	0	0	0	0	4	156	0	0	160	282
06:45 AM	6	19	4	1	30	0	127	2	0	129	0	0	0	0	0	4	128	0	1	133	292
Total	12	47	5	1	65	0	214	2	0	216	0	0	0	0	0	8	284	0	1	293	574
07:00 AM	5	40	3	1	49	0	148	4	1	153	0	0	0	1	1	6	121	0	1	128	331
07:15 AM	14	39	7	1	61	0	131	10	2	143	0	0	0	0	0	15	183	0	2	200	404
07:30 AM	15	69	11	7	102	0	200	16	4	220	0	0	0	6	6	8	180	0	7	195	523
07:45 AM	15	53	6	0	74	0	202	12	7	221	0	0	0	0	0	12	166	0	30	208	503
Total	49	201	27	9	286	0	681	42	14	737	0	0	0	7	7	41	650	0	40	731	1761
08:00 AM	11	72	3	4	90	0	183	7	4	194	0	0	0	2	2	7	116	0	14	137	423
08:15 AM	17	36	5	2	60	0	195	8	1	204	0	0	0	2	2	5	119	0	17	141	407
08:30 AM	11	30	1	0	42	0	199	7	2	208	0	2	0	5	7	3	117	0	36	156	413
08:45 AM	13	57	6	12	88	0	223	9	2	234	0	0	0	0	0	7	95	0	17	119	441
Total	52	195	15	18	280	0	800	31	9	840	0	2	0	9	11	22	447	0	84	553	1684
*** BREAK ***																					
04:00 PM	10	33	1	0	44	0	298	14	3	315	0	0	0	0	0	19	147	0	6	172	531
04:15 PM	8	26	5	1	40	0	302	13	4	319	0	0	0	0	0	12	155	0	5	172	531
04:30 PM	2	52	4	1	59	0	293	15	0	308	0	0	0	0	0	15	133	0	5	153	520
04:45 PM	16	39	5	1	61	0	330	13	2	345	0	0	0	2	2	12	158	0	8	178	586
Total	36	150	15	3	204	0	1223	55	9	1287	0	0	0	2	2	58	593	0	24	675	2168
05:00 PM	9	36	6	2	53	0	321	15	2	338	0	0	0	2	2	11	148	0	18	177	570
05:15 PM	8	34	4	0	46	0	358	20	2	380	0	0	0	4	4	17	151	0	6	174	604
05:30 PM	11	40	6	1	58	0	321	21	2	344	0	0	0	3	3	10	146	0	6	162	567
05:45 PM	15	60	3	0	78	0	328	14	1	343	0	0	0	3	3	17	139	0	1	157	581
Total	43	170	19	3	235	0	1328	70	7	1405	0	0	0	12	12	55	584	0	31	670	2322
Grand Total	192	763	81	34	1070	0	4246	200	39	4485	0	2	0	30	32	184	2558	0	180	2922	8509
Apprch %	17.9	71.3	7.6	3.2		0.0	94.7	4.5	0.9		0.0	6.3	0.0	93.8		6.3	87.5	0.0	6.2		
Total %	2.3	9.0	1.0	0.4	12.6	0.0	49.9	2.4	0.5	52.7	0.0	0.0	0.0	0.4	0.4	2.2	30.1	0.0	2.1	34.3	

Title of Report: I-95 Interchange Enhancement and Reconstruction
Cottman/Princeton Interchange Traffic Study

Publication No.: 02025

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Geographic Area Covered: I-95 Cottman Avenue/Princeton Avenue Interchange Complex, City of Philadelphia (Near Northeast section)

Key Words: Traffic Volumes, Peak Hour Traffic, Travel Forecast, I-95, Cottman Avenue, Princeton Avenue, Philadelphia

ABSTRACT
This report presents traffic forecasts and analysis for the I-95 Cottman/Princeton interchange complex in northeast Philadelphia. The report examines the impacts of 2025 traffic volumes on I-95, the interchange ramps, and the local roadway system of four improvement alternatives: the No Build alternative, which would encompass only minor changes to the system, and three Design Options, which would reconfigure the I-95 on- and off-ramps as well as making other improvements to roadways in the ramps' vicinity. The report also briefly describes the methodology used to develop the traffic forecasts.

Delaware Valley Regional Planning Commission
8th Floor - The Bourse Building
111 South Independence Mall East
Philadelphia, PA 19106-2582

Phone: 215-592-1800
Fax: 215-592-9125
Internet: www.dvrpc.org

Staff contact: Sarah Oaks
Direct Phone: (please use main switchboard number)
E-mail: soaks@dvrpc.org

-or- Matt Gates
215-238-2911
mgates@dvrpc.org

Delaware Valley
Regional Planning
Commission

The Bourse Building, 8th Floor
111 South Indpendence Mall East
Philadelphia, PA 19106

www.dvrpc.org
215.592.1800