ESTIMATING AND MONITORING 1993 VMT IN THE DELAWARE VALLEY REGION





DELAWARE VALLEY REGIONAL PLANNING COMMISSION

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Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency which provides continuing, comprehensive and coordinated planning for the orderly growth and development 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. The Commission is an advisory agency which divides its planning and service functions between the Office of the Executive Director, the Office of Public Affairs, and four line Divisions: Transportation Planning; Regional Planning; Regional Information Services Center which includes the office of Regional Planning; and Finance and Administration. DVRPC's mission for the 1990s is to emphasize technical assistance and services, and to conduct high priority studies for member state and local governments, while determining and meeting the needs of the private sector.



The DVRPC logo is adapted from the official seal of the Commission 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 flowing through it. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey. The logo combines these elements to depict the areas served by DVRPC.

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

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Geographic Area Covered:

The nine counties in the DVRPC region including Burlington, Camden, Gloucester, and Mercer in New Jersey and Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania

Key Words:

Vehicle-Miles Traveled (VMT), Highway Performance Monitoring System (HPMS), Sample traffic counts, Geographic Information System (GIS).

ABSTRACT

This report presents the estimates of daily vehicle-miles traveled in the nine-county Delaware Valley region. It includes a comparison of VMT estimates based on the HPMS counts (as generated by the states), DVRPC travel simulation model, and by the DVRPC enhanced HPMS method of traffic counts. These methods are analyzed and compared at the county and regional levels.

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EXECUTIVE SUMMARY

The Clean Air Act Amendments of 1990 (CAAA) require metropolitan areas that do not meet national ozone and/or carbon monoxide (CO) air quality standards to develop transportation control measures and prepare an emissions budget. These areas are also required to monitor actual emissions and compare them with the emissions budget to ensure attainment. Since a significant amount of these pollutants are emitted through automobile exhaust, the volume of emissions in a metropolitan area is measured and estimated according to automobile and truck use. More specifically, the volume of mobile source emissions is linked to the number of vehicle-miles traveled (VMT) in the region.

EPA requires that estimates of VMT for past years be based on Highway Performance Monitoring System (HPMS) sample traffic counts and/or regional travel simulation models. However, these methods of estimating VMT have disadvantages; HPMS does not monitor travel characteristics on local roads, and travel simulation models traditionally include only a small portion of the local roads and collectors. Therefore, the Delaware Valley Regional Planning Commission (DVRPC) developed a third method to estimate VMT. This enhanced method involved a new round of traffic counts taken by DVRPC, which included a randomly selected panel of roads in the Delaware Valley Region. This method followed the Federal Highway Administration HPMS field manual guidelines. The sample panel included the current HPMS stations as well as count locations on local roads and collectors. The sample size was compared to the states' existing HPMS samples (i.e., Pennsylvania and New Jersey) and additional locations were selected to supplement these existing samples. Moreover, the sample size was designed to yield a desired precision rate of 4.2 percent with a 90 percent confidence level for the region.

Traffic counting was performed by DVRPC at each location of the VMT sample network. At the end of a typical 48 hour recording period, the data were delivered to the office for processing.

A Geographic Information System (GIS) was used to facilitate data analysis. This required the sample panel to be geocoded and each traffic count station to be identified by geographic coordinates.

DVRPC examined various mathematical methods to determine the best and most accurate method of estimating total VMT by area type and facility class. The method that was selected required that the data be grouped by Annual Average Daily Traffic (AADT), area type, and facility type at the county level. The estimated VMT for each state's portion of the DVRPC region and for the Delaware

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Valley Region as a whole was then calculated. These estimated VMT were compared to the estimated VMT reached by the HPMS and travel simulation methods. This comparison was performed at the county, state, and regional levels.

I. Introduction

The Clean Air Act Amendments of 1990 (CAAA) require that metropolitan areas which do not meet national ozone and/or carbon monoxide (CO) air quality standards to develop transportation control measures and prepare an emissions budget. These areas are also required to monitor actual emissions and compare them with the emissions budget in order to ensure attainment. Since a significant share of these pollutants are emitted through automobile exhaust, the volume of emissions in a metropolitan area is measured and estimated according to automobile and truck use. More specifically, the volume of mobile source emissions is linked to the number of vehicle-miles traveled (VMT) in the region. The Environmental Protection Agency's (EPA) guidance for Section 187 of the CAAA states that "while trip length and traffic flow characteristics also influence emissions and are to some extent sensitive to influence by clean air programs, the more VMT growth there is in an area, the more effort is required to reduce both per vehicle and stationary source emissions to attain the ambient standards by the required deadlines. Consequently, the air quality attainment plan is built largely around forecasted VMT."¹

EPA requires that estimates of VMT for past years be based on Highway Performance Monitoring System (HPMS) sample traffic counts for all functional classes. Tracking VMT using this historical data helps identify situations in which actual VMT growth rates exceed VMT forecasts used in attainment plans. A weakness of the HPMS is that it does not require that travel on rural and urban roads be monitored or that local roads' share of regional VMT be estimated. Only higher classification roadways (e.g. expressways, arterials and collectors) are counted in the HPMS sample panel, despite the fact that 12-18% of regional travel occurs on local roads. In addition, the relationships between speed, temperature, and emissions indicate that a disproportionate amount of emissions may be released on local roads. While HPMS is useful for determining regional VMT, it may not accurately estimate the contribution of local VMT to the overall amount.

EPA's guidance recommends a second method to compute VMT forecasts; this method is based on regional travel simulation models. The DVRPC travel simulation model follows the traditional steps of trip generation, trip distribution, modal split, and travel assignment. The model contains about 11% of the region's local roads, and was used to estimate VMT in the Delaware Valley Region for

¹United States Environmental Protection Agency. "Section 187 VMT Forecasting and Tracking Guidance." Washington, DC, January 1992.

1990, 1993, 1994, 1995, and 1996. DVRPC is required by EPA to validate its travel simulation models with actual traffic volumes.

DVRPC developed a third enhanced method to estimate VMT, which involved a new round of traffic counts taken by the Commission. DVRPC included local roads in the sample stratification, and designed the sample size with higher confidence and precision levels than those used by the states for HPMS. Traffic counts were taken on existing HPMS stations, and supplemented by additional counts on all functional classes including collectors and local roads.

Guidance from the EPA states that the VMT forecasts reached by the traffic simulation models must be within 5 percent of actual VMT numbers, as determined by traffic counts. The allowable margin of error will fall to 4 percent in 1995, and 3 percent in 1996. If VMT forecasts fall below actual VMT by the margin of error for any of these years, EPA will enforce contingency measures, which are designed to ensure compliance with national standards.

The purpose of this report is to present the estimates of daily vehicle-miles traveled in the nine-county Delaware Valley Region, determined by each of the methods described above. It includes a comparison of VMT determined by the HPMS counts (as generated by the states), by the DVRPC travel simulation model, and by the DVRPC enhanced HPMS method of traffic counts. These methods are analyzed and compared, and the absolute and percent of error found at both the county and state levels are presented in this report.

II. VMT Estimation Methods

This section of the report presents the three alternate VMT estimation methods in some detail. As noted above, these include state HPMS results, the DVRPC travel simulation model, and DVRPC's enhanced sample of traffic counts.

A. State VMT Estimates using HPMS Method

The first method used to determine regional VMT utilizes traffic counts from the state HPMS. FHWA requires that both Pennsylvania and New Jersey participate in the federal HPMS, a nationwide inventory system that includes all highway and non-local road mileage. The HPMS is an ongoing program, with annual reporting requirements for the states.

While FHWA sets standards for HPMS, the state highway departments are responsible for data collection. The state highway departments compile the data, and furnish the completed database to the FHWA. The data are submitted on several levels: areawide data consisting of statewide summaries for several data items (e.g. system length, population, net land area); "universe" data, which are a limited set of data items -- such as average daily traffic and number of lanes -- reported for the entire public road system; and standard sample section records, which contain the universe data plus additional data items related to the physical characteristics, condition, performance, use, and operation of the sampled sections of highways. These additional data are used as the basis for evaluating change in the conditions and operation of the nation's highways.

While the areawide and universe data sets are important to HPMS, the main purpose of the system is to provide a limited panel of randomly-selected road sample sections throughout each state. It is in the collection of this sample section data that most of the effort is concentrated.

1. Sample Section Panel Design

The HPMS sample panel is selected from the state's roadway network as a simple random sample. The states stratify their highway systems according to three variables: area type, functional classification, and volume group. The total number of highway sections in each stratum is determined, and then the sample panel size is found through application of a mathematical formula, given predetermined precision and confidence levels from the FHWA. The number of

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sample sections depends upon the coefficient of variation, confidence level, desired precision rate, and the number of sections in each stratum.

The formula for determining the sample size for HPMS is as follows:

$$n = \frac{Z^2 C^2/d^2}{1 + (1/N) [(Z^2 C^2/d^2) - 1]}$$

Where:

n = Sample size of highway sections in a stratum;

- Z = Value of the standard normal statistics for confidence level, 1.645 and 1.282 for confidence level 90% and 80%, respectively;
- C = Coefficient of variation, S_x / \overline{X} , $S_x =$ standard deviation of traffic volumes in a stratum, $\overline{X} =$ mean of traffic volumes in a stratum;
- d = Desired precision rate, 5% for interstate, expressway, principal and minor arterials, and 10% for collectors; and
- N = Universe stratum size, number of sections in a volume group of facility.

Once the sample size is determined, the sample sections are allocated throughout the state, and the location and date of the individual counts are specified. Locations selected and counted for HPMS will form the major element of the state's VMT monitoring efforts.

The sample sections are randomly selected from the universe of arterial and collector roads (excluding rural minor collector). Local roads are not included in the sampling process, and HPMS does not require states to monitor this functional class of road.

2. Estimation of Annual Average Daily Traffic Volumes

Each section in the HPMS sample panel is counted once every three years. Daily traffic on the sample section is recorded using an automatic counting machine for a time period of 48 hours to yield a continuous 24-hour count ("short counts"). It is important that the sample sections be distributed temporally (over time) as well as spatially (over the total highway network). Traffic sections counted on the same day should be distributed by location and functional class.

After the volumes along each sample section are obtained, the raw counts are factored to determine annual average daily traffic (AADT). The AADT is calculated as:

$$AADT_{FL} = VOL_{FL} \times M_F$$
, $D_F \times A_F \times G_F$

Where:

- $AADT_{FL}$ = the annual average daily traffic at location L of functional class F
- VOL_{FL} = the 24-hour axle volume at location L of functional class F
- M_F , D_F = the applicable monthly and/or daily factor for functional class F
- A_F = the applicable axle-correction factor for functional class F
- G_F = the applicable growth factor for functional class F

All of the above factors are estimated by sampling techniques and represent additional areas of potential error in the VMT estimation process. The first two factors adjust the count for the day of week and the season during which the count is taken.

The purpose of the axle correction factor is to adjust the count to correct the over-counting of vehicles caused by multi-axles vehicles. The axle correction factor adjusts the raw count to the volume of vehicles. The factor is attributed to multi-axles applied for each functional classification.

Growth factors adjust traffic counts according to the growth in traffic over a certain time period during which actual counts have not been recorded. There are several methods that can be used to determine growth factors. Growth factors can be found on a point-specific basis (using the change in AADT at a specific sample section), or on a systems basis (using the change in vehicle miles traveled). There is no need to use the growth factor if the sample count was recorded during the current year.

3. VMT Estimation

The states derive VMT from the section-level AADT traffic volume estimates. The formula for determining daily vehicle miles of travel (DVMT) for a section is:

 $DVMT_s = (AADT_s \times Length_s \times Stratum Expansion Factor)$

The VMT for a volume group is the sum of the VMT for the sections in that volume group. Similarly, the VMT for a given functional class is the sum of the VMT for volume groups within that functional class.

$$DVMT_F = \sum_{V=1}^{n} (DVMT_V)$$

To determine the total daily VMT for the region, the VMT figures for each of the functional classes are added.

$$DVMT_{Region} = \sum_{F=1}^{n} (DVMT_{F})$$

The result of this calculation is the daily VMT for the region. The annual VMT of the region can be reached by multiplying regional DVMT by 365. Annual VMT can also be calculated for any sample strata for which average daily traffic figures are available.

Through these calculations and adjustments, the state determines the amount of vehicle miles traveled on its road network for a series of levels (state, regional, county, functional class, or volume group). The VMT is also used to fulfill CAAA requirements.

NJDOT prepares its VMT estimates at the state level. The sampling procedures are carried out at the individual Urbanized Area, aggregated Small Urban Areas, and statewide rural levels. The samples are not valid at the county level.

To determine the number of counts on non-HPMS facilities, NJDOT extends the proportion of sampled to universe mileage for each functional system to the county level; evaluates the current sample level; and adds samples to reach the same proportion of sample to universe mileage for each stratum. Using this sampling method, NJDOT monitored and estimated approximate VMT at the county level. This method was used in 1990 and 1991.

PennDOT calculates VMT based on traffic volumes collected over the years on every section of the highway system. The universe mileage, and volume and length of every section are included in the database.

B. VMT ESTIMATION USING DVRPC's TRAVEL SIMULATION MODEL

DVRPC computed VMT within the region based on the DVRPC travel simulation model. As part of the FY 1994 Conformity Demonstration, DVRPC recalibrated and validated its established travel simulation model. 1990 Census data for population and employment were incorporated and the model outputs were checked against actual transit and highway counts. A simulation of travel for 1996 was prepared based on the DVRPC board adopted socio-demographic projections and highway and transit networks that incorporate facilities anticipated to be opened to traffic. VMT estimates for 1993 were then made by interpolating the traffic growth trends established by the baseline 1990 and 1996 simulations.

1. DVRPC Travel Simulation Process

The travel simulation models at DVRPC follow the traditional steps of trip generation, trip distribution, modal split, and travel assignment. The process described in this section is shown in Figure 1. Shaded boxes in the figure show the four steps in the travel simulation.

Trip Generation

Trip generation is the first step in the modeling process. Person, truck, and taxi travel is generated from census tract-level estimates of households and employment through the use of trip rates disaggregated by trip purpose (home based work, home based nonwork, non-home based), auto ownership, and area type (CBD, fringe, urban, suburban, rural, and open rural). Estimates of external and through highway and transit travel are developed from population and employment estimates in counties surrounding the Delaware Valley region.

Trip Distribution

Travel from census tracts within the region is allocated to destinations within the region with a gravity model. This model assumes that the propensity to travel to a destination tract increases with the attractiveness of the destination (as measured by employment) and decreases as the difficulty of traveling between zones increases. This travel impedance is measured by travel time and cost for both the highway and transit modes.

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Figure 1 : DVRPC TRAVEL SIMULATION PROCESS

Modal Split

The modal split model divides the travel between census tracts within the region into transit and highway components. Generally, the propensity to use public transit increases with the relative transit-tohighway service levels. The relative service levels are estimated through highway and transit out-of-vehicle time and in-vehicle time; highway operating costs and parking charges; and transit fares. In addition, auto ownership, transit submode, household income, trip purpose, and the consumer price index further define the trip-maker's choice between highway and transit. The auto occupancy model determines the average number of persons per automobile. This value is used to convert auto person trips to auto vehicle trips. Auto occupancy is estimated by trip purpose and trip length.

Highway Assignment

The final step in the process is to assign the estimated highway vehicle interchanges to specific facilities. This is accomplished by determining the best route (minimum time and cost) route through the highway network and on this basis allocating highway travel to individual links. Congestion levels are considered in determining the best route.

The procedure for the highway assignment is based on a minimum time path subject to the "equilibrium" capacity restraining method. In an equilibrium assignment, the trips between zones are allocated to alternate paths in such a way that the travel time over each path is equal, and therefore, no faster path can be found given prevailing congestion levels. Once route assignments are made, link volumes needed for VMT calculations are available.

2. Travel Simulation Model Assumptions

The travel simulation model requires a series of inputs that reflect the magnitude and distribution of socio-economic activity within the region and the transportation facilities that are assumed to be open to traffic.

Highway Network

The highway network used to estimate VMT contains all freeways and arterial roadway segments within the nine-county area currently opened to traffic. The network is very large, covering the 9,886 square kilometer (3,817 square mile) DVRPC region at an average density of about 12.2 one-way links per square mile. Overall, the network contains over 1400 traffic centroids, 12,500 nodes, and more than 34,000 network links for purposes of minimum path building and highway assignment.

This network contains more than 6,700 miles of highways, which constitute virtually all freeways and arterial facilities, and about 11 percent of the local roads. These local facilities are mostly minor streets within local communities, industrial parks, and residential subdivisions. Significant amounts of vehicular travel also occur on local streets not included in DVRPC's regional highway network. For purposes of VMT, this off-network VMT was estimated by county, based on the mileage of missing streets and an average off-network link traffic volume. Local roads usually carry small traffic volumes and, in total, are thought to contribute 12 to 18 percent of VMT, despite comprising about two thirds of the region's highway mileage.

Projected Socio-economic Trends

Table 1 presents state and regional totals of principal socio-economic inputs to the travel simulation models together with the resulting person and vehicle travel estimates. The results of the 1990 and 1996 simulations show a continuing growth of travel in the region. Population is projected to grow almost 3% in the 6 years between 1990 and 1996 to about 5.3 million persons. Over this time period, the number of households and auto ownership is expected to continue to grow faster than population (4.7 and 11.5% respectively). Employment across the region will also increase faster than population, reflecting a continuation of the current trend toward two-earner households. The regional employment increase is estimated to be about 5%. Growth rates are substantially larger in New Jersey than they are in Pennsylvania. These population and employment projections were interpolated from projections for the year 2000 adopted by DVRPC in June 1993.

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	Sel	ected Sir	nulation	Selected Simulation Model Inputs and Outputs	uts and (Outputs			
	Pen	Pennsylvania		Ne	New Jersey		Tota	Total Region	
Input	1990	1996	% Diff	1990	1996	% Diff	1990	1996	% Diff
Population (000s)	3,729	3,806	2.1%	1,454	1,529	5.2%	5,183	5,335	2.9%
Households (000s)	1,383	1,441	4.2%	511	542	6.1%	1,894	1,983	4.7%
Vehicles Available (000s)	1,910	2,134	11.7%	861	956	11.0%	2,771	3,090	11.5%
Employment (000s)	1,968	2,059	4.6%	726	767	5.6%	2,694	2,826	4.9%
Output									
Person trip origins (000s)	11,115	11,973	7.7%	5,341	5,588	4.6%	16,456	17,561	6.7%
Vehicle trip origins (000s)	9,252	10,088	9.0%	4,748	5,006	5.4%	14,000	15,094	7.8%

3. 1990 and 1996 Travel Simulations

In total, about 17.6 million person-trips are projected within the Delaware Valley region on an average weekday in 1996 (Table 1). Of these, 4.1 million will be home-based work trips. Average trip times and distances are projected to increase slightly as a result of disproportionate increases in travel in the suburban and rural parts of the region. Generally, regional vehicle trip origins are growing faster than either population or employment - almost 8% between 1990 and 1996. This growth results from declining household size, a significant projected increase in the number of multi-car households, and ongoing decentralization of regional residential and commercial activities from urban into suburban and rural areas.

The simulations project a slight decline in public transit's share of regional trips, from 5.3% in 1990 to 5.1% by the year 1996, primarily as a result of projected growth in residential and commercial activity in suburban and rural areas with little or no transit service. Actual transit ridership is projected to increase by 1.4% to slightly more than 885,000 trips on an average weekday, but total trip demand is expected to increase by 7.8%. Most of this increase in demand will be accommodated by private automobiles. The average automobile moving on the region's highways now carries 1.43 persons, and this is expected to change little over the planning period. Residents are most likely to drive alone when traveling to or from work, averaging an occupancy of 1.14. When traveling between home and non-work destinations, however, the vehicle occupancy rate increases to 1.68 persons per vehicle. According to DVRPC's travel assignment model, regional VMT is projected to grow by about 10.2% over this six year period to about 97.3 million VMT during an average weekday. VMT estimates for 1993 were made by interpolation. For each municipality within the region, the simulated VMT from the highway assignment was tabulated for 1990 and 1996. A fixed percentage of the VMT difference between 1996 and 1990 was added to the 1990 estimate to produce the 1993 estimate for that municipality. The resulting VMT estimates were then added to produce county, state, and regional totals.

The 1990 and 1993 VMT differences at the municipal level vary, depending on the rate of VMT growth in the underlying travel simulation. Some municipalities grow rapidly, many are stable, and some may decline in VMT as a result of changes in the underlying socio-demographic forecasts.

Table 2 displays the total VMT estimates for 1990 and 1993 summarized by county, state, and for the entire region. Table 3 displays the total VMT estimates

Table 2

1990 :	and 1993	
Simulated Vehi	cle Miles o	f Travel
by (County	
	VMT (The	ousands)
County	1990	1993
Bucks County	10,601.2	11,229.7
Chester County	9,747.8	10,589.7
Delaware County	8,598.7	9,483.7
Montgomery County	15,634.5	16,758.9
Philadelphia County	15,696.7	16,043.6
PA Total	60,278.9	64,105.6
Burlington County	9,749.5	10,060.9
Camden County	10,212.2	10,475.0
Gloucester County	5,329.9	5,587.6
Mercer County	6,732.9	7,075.9
NJ Total	32,024.5	33,199.4
Region Total	92,303.4	97,305.0

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1993 Simulated Vehicle Miles of Travel by Area Type		
	VMT (Thousands)	
Area Type	1993	
Rural Urban	9,755.2 54,350.4	
PA Total 64,105.6		
Rural Urban	6,004.1 27,195.3	
NJ Total	33,199.4	
Region Total	97,305.0	

for 1993 at the urban and rural levels. At the regional level, VMT is projected to grow by 5.4 percent between 1990 and 1993. Pennsylvania is projected to grow somewhat faster than New Jersey.

C. DVRPC Enhanced Sample of Traffic Counts

DVRPC developed an enhanced HPMS sample to estimate VMT in the Delaware Valley Region. The first step in the VMT estimation was to design the sampling procedures. The sampling plan consists of the random selection of a panel of road sections. These procedures followed the FHWA guidelines.²

The FHWA field manual requires that, for sampling purposes, the road network be stratified according to area type and functional classification of the roads; these classifications are stratified further according to pre-determined volume groups (using AADT as a measure of volume). The volume groups represent the universe data sets from which samples are taken. Stratifying the road network by functional class and volume ensures that counts will be taken on relatively homogenous groups of sections. This procedure reduces the overall sampling error and sample size requirement and increases the efficiency of traffic counting.

The DVRPC procedure varies from the HPMS field manual in three respects. First, samples were taken on rural minor collector and local roads. The federal monitoring system does not require that rural minor collector and rural and urban local roads undergo the stratification process; nor does the manual require that counts be taken on such roads. While local roads comprise the majority of road mileage in the Delaware Valley Region, preliminary studies suggest that only 12-18% of the total regional VMT is driven on these roads. However, this relatively small share of VMT may contribute disproportionately to the region's emissions. It is during the early minutes of car travel that the heaviest emissions are released. In order to examine the amount of emissions, it is necessary to determine the amount of VMT traveled on local roads, based on ground counts.

Second, counts were taken in the same year. The HPMS requires that the sample panel be counted in three years; one -third of the facilities are counted every year. Growth factors are applied to those roads that were not counted in the current year. DVRPC counted all roads in the sample panel in the same year.

²FHWA Order M 5600.1A , "Highway Performance Monitoring System: Field Manual for the continuing analytical and statistical database", FHWA, August 1993.

Finally, the DVRPC sampling method varies from the HPMS procedure in the sample size. The sample size was designed with a higher confidence level and precision level than those required by HPMS. These requirements increased the size of the sample panel, and enhanced the accuracy of the results.

1. Sample Size Design for VMT Estimation

DVRPC estimated the length and number of highway sections (links) by functional class, area type, and volume group based on the current highway system in each county, state, and in the region as a whole. The total road mileage in the region is 20,411. These roads were divided into two categories, urban or rural, depending on the area where they are located. For this project, DVRPC counted traffic along six functional classes in rural areas and six functional classes in urban areas (Table 4). Each functional classification is stratified further according to AADT. The HPMS field manual's recommended stratification for urban and rural areas is shown in Appendix A, along with DVRPC's stratification for local roads. DVRPC selected the number of highway sections that were required for each stratum using the FHWA formula shown on page 6. Appendix A contains the universe mileage for New Jersey and Pennsylvania, by county.

The sample was designed to yield a desired precision rate of 4.2% with a 90% confidence level at the regional level. The precision rate is the desired range within which a produced estimate will fall. The confidence level represents the probability that the count will fall within that range. The precision and confidence levels for each functional classification are more stringent than the level recommended by FHWA. Table 5 indicates the results of the sample design with calculations displayed by state and region, including functional class of facility.

The necessary sample size was compared to the existing HPMS samples (already being sampled by PennDOT and NJDOT). Additional locations were selected to supplement the states' existing samples. The additional samples, in effect, represented an enhanced HPMS for the Delaware Valley region. The additional sample locations were submitted to PennDOT and NJDOT for their review and approval. The sample incorporated the 1990 urban boundaries for the DVRPC region and also utilized the 1990 functional classification for all highway facilities in Pennsylvania and New Jersey. Appendix A shows the sample size by county and the regional links and actual traffic counts.

Tabl	e 4
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Hig	hway Functional Classifications and	Highway Functional Classifications and Mileage		
Code	Functional Class	Mileage		
Rural	Areas			
01	Principal Arterial – – Interstate	23.4		
02	Principal Arterial – – Other	162.7		
06	Minor Arterial	85.7		
07	Major Collector	101.3		
08	Minor Collector	66.8		
09	Local	84.9		
Subtotal 524.8				
Urban Areas				
11	Principal Arterial – – Interstate	101.6		
12	Principal Arterial Other Freeways	73.9		
14	Other Principal Arterial	237.6		
16	Minor Arterial	227.6		
17	Collector	109.2		
19	Local	31.0		
Subto	Subtotal 780.9			
ΤΟΤΑ	L	1,305.7		

Table 5

Sample Design for E	stimating VM	esign for Estimating VMT by Functional Class	ŝS
Major Highway Functional Class	Traffic Counts	Confidence Level	Precision Rate
Interstate/Expresswav	129	%06	5.6%
Other Principal Arterial	555	%06	4.7%
Minor Arterial	447	80%	6.4%
Collector	415	80%	4.6%
Local	235	80%	7.6%
PA Total	1,061	%06	5.4%
NJ Total	720	%06	6.6%
Regional Level	1,781	%06	4.2%

2. Selection of the Sample

After designing the sample, DVRPC selected the individual sample locations to be counted in each county by functional class. Once the sample requirement was determined at the state and county levels, DVRPC determined the sample requirement by area type (urban or rural) for each functional class. The criteria for this selection were the miles of road by area type for each functional class. It was also necessary to consider the sample requirement based on the area type of the county as a whole -- for example, Philadelphia is a totally urban county, so rural samples could not be chosen from it. Thus, rural samples had to be selected from those counties that contain rural areas; in Pennsylvania, this essentially limited rural samples to Bucks, Chester, and Montgomery counties. In the sample selection process, it was also desirable to select facilities which were locally owned and maintained, as well as State-owned routes. This selection was not available in all functional classes of roads, such as interstate and arterial roads.

The next step in the selection process was to identify the current HPMS samples which could be utilized for the VMT estimation. After identifying the existing HPMS samples, the remaining number of samples were determined for each functional class, county, and state. For this effort, a road map of each county was used in conjunction with a functional class map for that particular county. Samples were selected at random from every geographical section of the county based on area type and functional class of the facility. Where previous traffic volumes were available these were used to estimate current traffic volume to assist in selecting a range of volume groups for each functional class. In most cases, the estimated volume for the facility was used to develop a range of samples for each volume group within a functional class.

Utilizing the road and functional classification maps and taking into account the 1990 urban boundaries for each county and state, the candidate facilities were determined. The samples were randomly chosen to yield the required number of sections for each state, county, functional class, and area type. The selected samples were then located and identified by functional class on the appropriate county map. A listing of the selected samples was prepared for each county by functional class and area type, and this listing was used to prepare field sheets for setting traffic counting machines at each location.

3. Collecting and Processing of Traffic Counts

Several steps are involved in collecting and processing the data used to derive Average Annual Daily Traffic (AADT) estimates. The first step is collecting traffic counts. DVRPC uses automatic traffic recorders to collect traffic counts. This is the most common type of count collected by DVRPC when only the total number of all vehicles is sought for the purposes of traffic analysis. It consists of a counting unit installed by a field technician at a predetermined location and is anchored to a fixed object, such as utility pole, tree, sign pole, etc.

Two types of counting equipment were used by DVRPC: the paper tape counter and the more sophisticated electronic counter, which is considered stateof-the-art in traffic counting. The operational aspect of these two types is similar: both use a rubber hose stretched from one side of the road to the counter on the opposite side of the road. A clock mechanism set by the field operator determines the time for tallying the total number of vehicles counted at the end of prescribed intervals. A diaphragm switch, actuated by the tires of a vehicle passing over the hose, sends an air pulse to the recorder, which in turn activates the counting mechanism, or in the case of the electronic counter, activates the electronic memory. At the end of a counting interval, the data are either printed or stored electronically in the counter memory. Power for both types of counters is supplies by rechargeable batteries.

At the end of a typical forty-eight hour recording period, the data were delivered to the office for verification and processing. In the case of the paper tape counts, the data were entered into a spreadsheet program, while electronic counter data were downloaded onto a PC that arranges the data in a readable format.

Once the "raw" counts of the chosen samples were available in a standard and readable format, they were processed to derive estimates of average annual daily traffic (AADT) representative of any day throughout the year. Factors representing route type, month of the year, and /or day of the week were applied to 24-hour "raw" count total to adjust for daily and seasonal variations. Axle correction factors were also applied. Table 6 shows the axle correction factors used in the process.

Table 6

Axle Correction Fa for Adjusting 24–Hour	
Rural Areas	Factors
Principal Arterial – – Interstate	0.91
Principal Arterial —— Other Minor Arterial	0.93 0.95
Major Collector Minor Collector	0.97 0.99
Local	1.00
Urban Areas	Factors
Principal Arterial —— Interstate	0.92
Principal – – Other Freeways	0.94
Other Principal Arterial	0.96
Minor Arterial	0.98
Collector	0.99
Local	1.00

After the counts were factored with the seasonal adjustment, an edit was performed to check each count for reasonableness. Any count that failed this edit was rejected from further analysis or processing. All of the functional classes sampled were edited.

Because some counts were rejected as unreasonable, the actual number of samples was less than the designed number of samples for some functional classes in certain counties. In some instances, where counts were rejected, other counts were substituted if available, and the new counts were made a part of the sample selection for that county and functional class. The samples were then aggregated by county, functional class, and total AADT. In many cases, counts were taken by direction due to the configuration of the highway at the sample location, and these were totaled to obtain a total AADT for each location.

A Geographic Information System (GIS) on a Personal Computer (PC) environment, was used to facilitate data analysis. This GIS system uses TransCAD software. Two geographic layers (DVRPC region highway streets and municipalities) that are part of the Information Systems for Transportation Planning project were used.³ In addition, since the traffic counts information has been stored on computer files on an IBM mainframe environment, a dBase[©] computer database file was designed to transfer the traffic counts information into the PC environment. Then, this dBase[©] computer file transferred the traffic counts information into the existing GIS layers in order to relate traffic counts with these geographic layers. For example, in order to display and plot the traffic count location and traffic volume on Market Street between 5th and 6th streets in center city Philadelphia, the municipality and highway streets database were used to determine the location. Then, the traffic count information for this location was transferred from dBase[©] to TransCAD computer file format.

Developing this GIS database, however, required some preliminary preparation.

- Since every count in the sample could only be identified by its descriptive location, the geographic coordinates of each location had to be determined and entered into the database. This was vital since GIS can identify a location only by its longitude and latitude.
- On many major facilities, the sample counts were taken by direction. These had to be converted to two-way counts.

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³Delaware Valley Regional Planning Commission. "Geographic Information System for Transportation Planning." Publication No. 95007. Philadelphia, May 1995.

- To estimate sample VMT, a link distance was required for every sample count. Therefore, each sample count was examined individually and link distances were manually measured for all sample counts.
- To estimate universe VMT, universe link distances by functional class and counties were needed for the DVRPC region. The supplied mileage information was examined carefully by the DVRPC staff, and it was discovered that this initial mileage summary did not include all local mileage. This caused DVRPC to underestimate VMT for the five DVRPC counties in PA. After receiving the correct mileage for all local roads in PA, DVRPC resolved this problem.

After these preliminary preparations were completed, DVRPC developed the GIS database. All sample counts were geocoded based upon the FHWA functional classification. These counts were then sorted by county, functional class, and AADT. Appendix B contains the sample counts used in this study.

4. Vehicle Miles of Travel Estimation

DVRPC examined various mathematical methods to determine the best and most accurate method of estimating total VMT by area type and facility class. These methods are described in detail earlier in this report. The best results at the county level were obtained through the following steps:

- 1. Determine the estimated VMT for every sample count by multiplying the AADT times the link distance by functional class.
- 2. Aggregate the estimated VMTs and link distances for each volume group by functional class.
- 3. Divide the universe distance by the sample distance by functional class to obtain the sample expansion factor.
- 4. Estimate the total VMT by multiplying the aggregated VMTs for each volume group times the expansion factor by functional class.

After following these steps for each sample count, the estimated VMT was aggregated at three different geographic levels (i.e., county, state, and regional) by functional class. In order to aggregate the estimated VMT for the functional class 1 (i.e. Principal Arterial - Interstate, rural area) in Mercer County, NJ, the database was sorted by county, functional class, and AADT. Then, the volume group codes which are defined by the FHWA were entered into the database (i.e., Volume Group Code 1 represents an AADT range of 0 - 9,999). After the volume group codes were entered for all traffic counts, the database was re-sorted by the county, functional class, and volume group code. Then, the estimated VMT was aggregated at the county level by functional class. Appendix A contains a list of volume groups by functional class.

The estimated VMT for the portion of the DVRPC region in each state was then calculated. The database was sorted by state and by functional class, and then VMT and link distances for each sample section were aggregated by functional class and by state. However, in order to estimate VMT at the state level by functional class, the total estimated VMT for each county by functional class was compared to the total estimated VMT at the state level by functional class. The total estimated VMT at the state level were adjusted to reflect the estimated VMT by functional class and by county at the state level. For example, the total estimated VMT for the urbanized local roads in DVRPC's five counties in PA was approximately 9.055 million. However, the total estimated VMT for the same functional class aggregated at the state level, was approximately 8.563 million. Therefore, the estimated VMT for the urbanized local roads in five counties in PA was factored by 0.95 (The calculation is as follow: 9,055,801 - 8,563,274 = 492,527. Then, divide 492,527 by 9,055,801 = 0.05. The factor then was determined by simply 1-0.05 = 0.95).

Tables 7 and 8 illustrate estimated VMT, grouped by area type and facility type at the state level. Table 7 shows the estimated VMT for the four counties in New Jersey and Table 8 shows the same for the five counties in Pennsylvania. These tables indicate that the functional class "Other Principal Arterial" (functional class 2 in rural areas and functional class 14 in urban areas) has the largest share of VMT in NJ and PA. This is because there are more highway links with high traffic volumes within this functional class than in the other functional class. Table 7 also indicates that Burlington County has the largest share of VMT (2.96 millions per day) in the rural areas among the four counties in NJ. However, Camden County has the largest share of VMT (10.03 million VMT per day) in urban areas, reflecting the relative distribution of area types within these counties.

Table 8 indicates that Philadelphia County has the largest share of VMT (15.16 million per day), and indicates that all of the highway links in Philadelphia County are in urban areas. Furthermore, it shows that Chester County has the largest share of VMT in rural areas among the five counties in PA. Table 8 also illustrates that the functional class "Other Principal Arterial" (functional class 2 in rural areas and functional class 14 in urban areas) has the largest share of VMT in both rural and urban areas.

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	1993 Vehicle Miles o	hicle Miles of Travel Estimated Based on Sample Traffic Counts	ated Based or	n Sample Traf	iic Counts	
	at the	at the State Level (Thousands of VMT per Day)	lhousands of VM	T per Day)		
Ξ	Highway Functional Class		Vehicle	Vehicle Miles of Travel (VMT)	(LMV)	
Code	Description	Burlington	Camden	Gloucester	Mercer	TOTAL
	Rural Areas					2
T	Principal Arterial-Interstate	373.0	0.0	203.1	227.8	803.9
N	Principal Arterial-Other	1,387.2	303.5	963.1	173.5	2,827.3
Q	Minor Arterial	220.0	34.7	188.4	11.8	455.0
7	Major Collector	370.2	31.6	332.3	209.0	943.2
ω	Minor Collector	93.1	24.1	35.4	41.7	194.4
თ	Local	552.4	32.6	256.8	91.7	933.5
	Sub-Total	2,995.9	426.6	1,979.1	755.6	6,157.2
	Urban Areas					
+	Principal Arterial-Interstate	1,036.2	1,298.7	352.7	1,617.5	4,305.1
12	Principal Arterial-Other Freeways	569.8	1,006.1	1,092.1	1,105.0	3,772.9
14	Other Principal Arterial	2,504.2	2,553.7	648.4	1,881.2	7,587.5
16	Minor Arterial	1,690.9	2,899.4	1,089.7	1,663.1	7,343.1
17	Collector	616.7	637.6	311.1	454.0	2,019.4
19	Local	1,401.9	1,608.0	1,061.2	1,085.6	5,156.8
	Sub-Total	7,819.6	10,003.5	4,555.2	7,806.5	30,184.8
	ΤΟΤΑΓ	10,815.5	10,430.1	6,534.3	8,562.1	36,342.0

Table 7

Estimating and Monitoring 1993 VMT in the Delaware Valley Region

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	1993 Vehicle Mile	s of Travel I	Estimated B	ased on San	cle Miles of Travel Estimated Based on Sample Traffic Counts	ounts	
	at	the State Le	evel (Thousan	at the State Level (Thousands of VMT per Day)	Jay)		
Ï	Highway Functional Class		Vehicl	Vehicle Miles of Travel (VMT)	el (VMT)		
Code	Description	Bucks	Chester	Delaware	Montgomery	Philadelphia	TOTAL
	Rural Areas						
-	Principal Arterial-Interstate	0.0	287.9	0.0	0.0	0.0	287.9
N	Principal Arterial-Other	1,271.3	1,299.2	0.0	1,816.8	0.0	4,387.4
9	Minor Arterial	489.9	519.0	0.0	263.5	0.0	1,272.4
7	Major Collector	151.7	470.4	2.4	75.6	0.0	700.0
80	Minor Collector	387.8	340.3	0.0	45.7	0.0	773.8
б	Local	573.5	1,366.4	30.5	277.0	0.0	2,247.4
	Sub-Total	2,874.2	4,283.3	33.0	2,478.7	0.0	9,669.1
	Urban Areas						
1	Principal Arterial-Interstate	1,234.4	415.4	1,527.8	2,194.0	3,203.9	8,575.6
12	Principal Arterial-Other Freeways	959.7	1,275.5	203.3	1,550.2	498.9	4,487.6
14	Other Principal Arterial	3,027.8	1,547.8	2,666.7	3,325.7	4,972.3	15,540.4
16	Minor Arterial	1,926.2	1,172.3	1,285.8	3,276.6	2,815.7	10,476.6
17	Collector	1,083.6	1,027.8	689.2	1,457.7	949.7	5,208.0
19	Local	1,178.7	867.2	1,363.1	2,437.3	2,716.9	8,563.3
	Sub-Total	9,410.5	6,306.0	7,736.1	14,241.5	15,157.4	52,851.5
	TOTAL	12,284.7	10,589.3	7,769.0	16,720.2	15,157.4	62,520.5

Table 8

•
The VMT estimates at the regional level were calculated in the same manner as the state level. The database was sorted by functional class, and then VMT and link distances were aggregated by the functional class. The total estimated VMT at the regional level was compared to the total estimated VMT at the county level by functional class. The VMT at the regional level was adjusted to reflect the estimated VMT by county and functional class for the DVRPC region. For example, total estimated VMT for urbanized local roads in the DVRPC region was determined by sorting and grouping the data by volume group and functional class.

Tables 9 and 10 illustrate the estimated VMT, grouped by area type and functional class at the regional level. Table 9 shows the estimated VMT for the four counties in NJ and Table 10 shows the estimated VMT for the five counties in PA. These tables indicate that estimating VMT at the regional level produces results similar to VMT estimates at the state level.

In New Jersey, Burlington County has the largest share of VMT in rural areas, and Camden County has the largest share of VMT in urban areas. In Pennsylvania, Chester County has the largest share of VMT in rural areas, and Philadelphia County has the largest share of VMT in urban areas. These results are similar to the results obtained from estimated VMT at the state level.

An analysis of regional VMT estimates by functional class also indicates similar results to state VMT estimates. Results on the regional level indicate that "Other Principal Arterial" (functional class 2 in rural areas and functional class 14 in urban areas) has the largest share of VMT in rural and urban areas for both NJ and PA.

	1993 Vehicle	Vehicle Miles of Travel Estimated Based on	vel Estimat	ted Based	uc	
	Sample Traffic Counts at the Regional Level (Thousands of VMT per Day)	s at the Reg	jional Leve	(Thousands of	VMT per Day)	
Hiç	Highway Functional Class		Vehicle Miles of Travel (VMT)	f Travel (VMT)		
Code	Description	Burlington	Camden	Gloucester	Mercer	TOTAL
	Rural Areas					-
-	Principal Arterial-Interstate	376.6	0.0	205.0	230.0	811.6
Q	Principal Arterial-Other	1,426.5	312.1	990.4	178.4	2,907.3
9	Minor Arterial	234.0	36.9	200.4	12.6	483.8
7	Major Collector	385.3	32.9	345.8	217.5	981.6
80	Minor Collector	96.5	25.0	36.7	43.2	201.4
ი	Local	536.4	31.6	249.3	89.1	906.5
	Sub-Total	3,055.1	438.6	2,027.6	770.8	6,292.2
	Urban Areas				00000	
11	Principal Arterial-Interstate	1,047.5	1,312.9	356.6	1,635.2	4,352.2
12	Principal Arterial – Other Freeways	591.5	1,044.4	1,133.6	1,147.1	3,916.6
14	Other Principal Arterial	2,635.9	2,688.0	682.5	1,980.2	7,986.6
16	Minor Arterial	1,643.4	2,817.9	1,059.1	1,616.4	7,136.8
17	Collector	604.7	625.2	305.0	445.2	1,980.1
19	Local	1,434.5	1,629.9	1,097.2	1,107.0	5,268.6
	Sub-Total	7,957.4	10,118.3	4,634.1	7,931.0	30,640.8
	TOTAL	11,012.6	10,556.9	6,661.7	8,701.8	36,933.0

Table 9

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Estimating and Monitoring 1993 VMT in the Delaware Valley Region

	1993	1993 Vehicle Miles of Travel Estimated Based on	s of Travel E	stimated Bas	ed on		
	Sample Traffic	Counts at the	e Regional L	evel (Thousan	ıple Traffic Counts at the Regional Level (Thousands of VMT per Day)	Jay)	
Т	Highway Functional Class		Vehicle	Vehicle Miles of Travel (VMT)	(TMV) I		
Code	Description	Bucks	Chester	Delaware	Montgomery	Philadelphia	TOTAL
	Rural Areas						
-	Principal Arterial-Interstate	0.0	290.7	0.0	0.0	0.0	290.7
N	Principal Arterial-Other	1,307.3	1,336.0	0.0	1,868.3	0.0	4,511.6
9	Minor Arterial	521.0	551.9	0.0	280.2	0.0	1,353.1
2	Major Collector	157.8	489.5	2.5	78.7	0.0	728.5
Ø	Minor Collector	401.8	352.6	0.0	47.3	0.0	801.7
თ	Local	556.8	1,326.9	29.7	269.0	0.0	2,182.4
	Sub-Total	2,944.8	4,347.5	32.2	2,543.5	0.0	9,868.0
	Urban Areas						
11	Principal Arterial-Interstate	1,247.9	420.0	1,544.5	2,218.0	3,238.9	8,669.4
12	Principal Arterial-Other Freeways	996.3	1,324.1	211.1	1,609.2	517.9	4,658.6
4	Other Principal Arterial	3,187.1	1,629.2	2,807.0	3,500.6	5,233.9	16,357.9
16	Minor Arterial	1,872.1	1,139.3	1,249.7	3,184.5	2,736.5	10,182.2
17	Collector	1,062.5	1,007.7	675.8	1,429.3	931.2	5,106.5
19	Local	1,204.3	886.0	1,388.3	2,492.3	2,778.0	8,748.9
	Sub-Total	9,570.1	6,406.4	7,876.5	14,434.0	15,436.4	53,723.5
	TOTAL	12,515.0	10,753.9	7,908.6	16,977.5	15,436.4	63,591.5

Estimating and Monitoring 1993 VMT in the Delaware Valley Region

III. Comparison of the DVRPC Estimated VMT based on Traffic Counts and Travel Simulation

DVRPC compared the VMT estimates based on traffic counts and the estimates based on DVRPC's travel simulation model. However, it should be noted that the current DVRPC travel simulation contains the following percentages of actual roadway mileage (by functional class):

Freeways and expressways	100%
Arterial streets	100%
Collectors and local roads	10.9%

As the above statistics indicate, the current travel simulation does not include many local roads or geocoded highway links by functional class and area type. However, as a part of updating the 1990 travel simulation process, the network geocoding effort has already begun.⁴

The above statistics also show that only about 11% of local roads are included and coded in the travel simulation process. These local facilities are mostly minor streets within local communities, industrial parks, and residential subdivisions. Many of these local roads carry small to moderate traffic volumes. Therefore, for the purpose of estimating VMT using the travel simulation method, VMT estimates were calculated separately by county, based on the mileage of missing streets and an average off-network link traffic volume. This estimation also relied on DVRPC's past experience of estimating VMT on local roads using the FHWA and EPA guidelines.

Table 11 compares the estimated VMT based on traffic counts and on the DVRPC travel simulation for the five counties in PA. This table also shows estimated VMT for 1990 based on the 1990 to 1993 traffic growth rate. This table indicates that the difference between the VMT estimates based on 1993 traffic counts and the VMT estimates based on the DVRPC travel simulation ranges from -1.3% (Montgomery County) to 19.9% (Delaware County).

Table 11 also compares estimated VMT based on the 1993 enhanced traffic counts and on PA HPMS data methods. The table shows that the differences between the estimates based on the traffic counts and the estimates based on PA HPMS ranges from -1.8% (Philadelphia County) to -11.3% (Chester County). This

⁴Delaware Valley Regional Planning Commission. "Conformity of the Delaware Valley's Direction 2020 Transportation Plan." Philadelphia, July 1995.

comparison indicates that Chester County needs to have more highway links sampled to obtain more accurate HPMS data for the county. This is true also for Delaware County, which has a difference of approximately 11%.

Overall, however, Table 11 illustrates that the difference between the statelevel VMT estimates based on the enhanced traffic counts, the DVRPC travel simulation, and PA HPMS is relatively small. The total difference between 1993 VMT estimates based on the DVRPC travel simulation and estimates based on the enhanced traffic count procedures is approximately 0.8%. The total difference between 1993 VMT estimates based on the PA HPMS and estimates based on the enhanced traffic counts is about -3.5%. These results indicate that, while there is very little difference in the results of the three estimation methods, two of the methods, the DVRPC travel simulation and PA HPMS methods, estimate VMT more accurately at the state than at the county level.

This comparison was not possible for NJ counties due to the unavailability of the state's HPMS data at the publication of this report.

	Comp Sample	Comparison of PA Vehicle Miles of Travel Estimated Based on DVRPC Sample Traffic Counts and Travel Simulation (Thousands of VMT Per Da	A Vehicle Miles of Travel Estimated Based on DVRPC unts and Travel Simulation (Thousands of VMT Per Day)	Travel Es nulation (timated Base Thousands o	ed on DVR if VMT Per	PC Day)	
						Difference	JCe	
		Vehicle	ehicle Miles of Travel		Travel	Traffic	PA	Traffic
		DVRPC Traffic	DVRPC Travel	PA	Simulation -	- Counts	HPMS -	Counts
County	Year	Counts (1)	Simulation	HPMS	Absolute	Percent	Absolute	Percent
Bucks	1990	11,607.3	10.601.2	11.445.6	(1.006.1)	-8.7%	(161.7)	-1.4%
	1993	12,515.0	11,229.7	11,825.3	(1,285.3)	-10.3%	(689.7)	-5.5%
Chester	1990	9,800.3	9,747.8	8,882.7	(52.5)	-0.5%	(917.6)	-9.4%
	1993	10,753.9	10,589.7	9,534.3	(164.2)	-1.5%	(1,219.6)	-11.3%
Delaware	1990	7,266.7	8,598.7	7,613.9	1,332.0	18.3%	347.2	4.8%
	1993	7,908.6	9,483.7	8,768.2	1,575.1	19.9%	859.6	10.9%
Montgomery	1990	15,740.1	15,634.5	15,304.4	(105.6)	-0.7%	(435.7)	-2.8%
	1993	16,977.5	16,758.9	16,102.6	(218.6)	-1.3%	(874.9)	-5.2%
Philadelphia	1990	15,254.1	15,696.7	15,342.1	442.6	2.9%	88.0	0.6%
	1993	15,436.4	16,043.6	15,164.4	607.2	3.9%	(272.0)	-1.8%
TOTAL	1990 1993	59,668.5 63.591.4	60,278.9 64.105.6	58,588.7 61.394.8	610.4 514.2	1.0% 0.8%	(1,079.8) (2,196.6)	-1.8% -3.5%

(1) 1990 VMT is estimated based on the 1990-1993 traffic growth rate.

Table 11

Table 12 compares VMT estimates by area type for PA and NJ. This table indicates the following:

- 1. The difference between VMT estimates based on travel simulation and VMT estimates based on enhanced traffic counts by area type is larger in NJ than in PA.
- 2. The difference between the total estimated VMT based on travel simulation and total estimated VMT based on enhanced traffic counts at the regional level is relatively small (-1.6%).

A comparison of NJ traffic counts and NJ HPMS could not be made due to the unavailability of the data at both the county and area type levels.

	Cor	nparison of 19	Comparison of 1993 DVRPC, PA, and NJ Vehicle Miles of Travel	and NJ Vehicle	Miles of Trav	e	
		by /	by Area Type (Thousands of VMT Per Day)	ands of VMT Per Day	(
					Difference	nce	
	Vel	ehicle Miles of Travel	ivel	DVRPC Travel	DVRPC Traffic	State HPMS	DVRPC Traffic
Area Type	DVRPC Traffic	DVRPC Travel	State HPMS	Simulation	- Counts	Data –	- Counts
	Counts	Simulation	Data	Absolute	Percent	Absolute	Percent
Pennsylvania							
Rural	9,669.1	9,755.2	7,530.7	86.1	%6.0	(2,138.4)	-22.1%
Urban	52,851.5	54,350.4	53,864.2	1,498.9	2.8%	1,012.7	1.9%
Sub-Totals	62,520.6	64,105.6	61,394.8	1,585.0	2.5%	(1,125.8)	-1.8%
New Jersey							
Rural	6,157.2	6,004.1	N/A	(153.1)	-2.5%	N/A	N/A
Urban	30,184.8	27,195.3	29,376.0	(2,989.5)	%6.6-	(808.8)	-2.7%
Sub-Totals	36,342.0	33,199.4	N/A	(3,142.6)	-8.6%	N/A	N/A
TOTAL	98,862.6	97,305.0	N/A	(1,557.6)	-1.6%	N/A	N/A

Table 12

IV. Findings and Conclusions

To determine the VMT for the region as required by the Clean Air Act Amendments of 1990 (CAAA), DVRPC has derived two sets of VMT figures using two methodologies: the travel simulation model and the enhanced HPMS method. The latter consists of the HPMS records supplemented by a number of counts collected at other locations in order to: 1) enlarge the sample size, and 2) have a more balanced representation of roads in rural and urban areas and at all functional classification levels, including the local system.

The results of the two VMT methodologies were compared. The analysis of the results revealed that :

- The enhanced counts method for the rural and urban areas of the Pennsylvania side of the region predicted a lower VMT than the one predicted by the simulation method (0.9% in the rural area, and 2.8% in the urban area, respectively). The reverse held true for the New Jersey side of the region, where VMT determined by the travel simulation was lower than VMT reached by the enhanced counts method by 2.5% in the rural area and by 9.9% in the urban area.
- In the region as a whole, the urban area accounted for a VMT of 83.0 million (enhanced method) versus 81.5 for the simulated VMT. The VMT in the rural area was approximately 15.8 million in both methods.
- The VMT's determined at the regional level showed a closer relationship between the two methods than the estimation calculated at the state level.

The two states' methods of determining VMT are based on actual counts taken for the HPMS project every three years and updated to a common year through application of a growth factor. While this method has been used until 1991 in New Jersey, PADOT estimates VMT on the basis of traffic volumes collected over the years and updated to the common year by a factor. The only shortcoming of this method is the lack of local street traffic count data that, although present in New Jersey at a minimum level, is practically nonexistent in the PADOT Roadway Management System. From a comparison of the states' method and analysis of the DVRPC enhanced counts method, the following became apparent :

- Under the two states' methods, VMT in the rural area is considerably underestimated; in Pennsylvania's, VMT was underestimated by 22.0%. This information is not available for the New Jersey side of the region.
- The VMT for the Pennsylvania urban area, on the other hand, is over 2.0% higher than the DVRPC enhanced method. The VMT for the New Jersey urban area is 2.7% lower when the state HPMS calculation is compared with results from DVRPC's the enhanced method.

Appendix A

HPMS Field Manual's Prescribed Volume Groups and Precision Levels Universal Mileage for New Jersey Universal Mileage for Pennsylvania Sample Size for Estimating 1993 State and Regional VMT Regional Highway Links and Sample Traffic Counts for Estimating VMT

PRESCRIBED VOLUME GROUPS AND PRECISION LEVELS

Standard Sample Volume Groups and Precision Levels

RURAL AREAS

Vol. Grp.	Interstate (90-5)	Other Principal Arterial (90-5)	Minor Arterial (90-10)
01 02 03 04 05 06 07 08 09 10 11 12 13	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0- 4,999 5,000- 9,999 10,000- 14,999 15,000- 19,999 20,000- 29,999 30,000- 39,999 40,000- 49,999 50,000- 59,999 60,000- 69,999 70,000- 84,999 85,000- 99,999 100,000-114,999 > or = 115,000	0- 2,499 2,500- 4,999 5,000- 9,999 10,000-19,999 20,000-29,999 30,000-39,999 40,000-49,999 50,000-59,999 60,000-69,999 70,000-79,999 80,000-89,999 90,000-99,999 > or = 100,000
Vol. Grp.	Major Collector (80-10)	Local (80-10)	
 01 02 03 04 05 06 07 08 09 10 11 12 13	0-2,499 2,500-4,999 5,000-9,999 10,000-19,999 20,000-29,999 30,000-39,999 40,000-49,999 50,000-59,999 60,000-69,999 70,000-79,999 80,000-89,999 90,000-99,999 > or = 100,000	$\begin{array}{c} 0-99\\ 100-199\\ 200-299\\ 300-499\\ 500-999\\ 1,000-1,999\\ 2,000-2,999\\ 3,000-3,999\\ 4,000-4,999\\ 5,000-5,999\\ 6,000-6,999\\ 7,000-7,999\\ > \text{ or } = 8,000\\ \end{array}$	

Standard Sample Volume Groups and Precision Levels

For <u>URBANIZED AREAS</u> \geq 200,000 Population and Smaller Areas that are in NAAQS Nonattainment Areas

Vol. Grp.	Interstate (90-10)	Other Freeways and Expressways (90-10)	Other Principal Arterial (90-10)
01 02 03 04 05 06 07 08 09 10 11 12 13	0- 24,999 25,000- 49,999 50,000- 74,999 75,000- 99,999 100,000-124,999 125,000-149,999 150,000-174,999 175,000-174,999 200,000-224,999 225,000-249,999 250,000-274,999 250,000-274,999 275,000-299,999 > or = 300,000	0- 24,999 25,000- 49,999 50,000- 74,999 75,000- 99,999 100,000-124,999 125,000-149,999 150,000-174,999 175,000-199,999 200,000-224,999 225,000-249,999 250,000-274,999 275,000-299,999 > or = 300,000	0- 2,499 2,500- 4,999 5,000- 9,999 10,000-14,999 15,000-19,999 20,000-24,999 25,000-34,999 35,000-44,999 45,000-54,999 55,000-69,999 70,000-84,999 85,000-99,999 > or = 100,000

Vol.Minor Grp.Collector (90-10)Local (80-10)010-2,4990-999 (80-10)0-999 (80-10)022,500-4,999 5,000-9,9991,000-1,999 2,000-4,99900-999 100-199 200-499035,000-9,999 10,000-14,9992,000-4,999 5,000-9,99900-999 10,000-14,999 1,000-1,4990410,000-14,999 15,000-24,9991,000-1,499 1,000-1,499 1,500-2,4991,000-1,499 1,500-2,499 2,500-3,4990620,000-24,999 15,000-34,999 0725,000-34,999 35,000-44,999 45,000-54,9993,500-4,499 4,500-5,499 5,500-6,9990835,000-44,999 45,000-54,999 1170,000-84,999 70,000-84,999 85,000-99,9993,500-4,499 5,500-6,999 7,000-8,499 8,500-9,9991285,000-99,999 13> or = 100,000> or = 100,000					
022,500-4,9991,000-1,999100-199035,000-9,9992,000-4,999200-4990410,000-14,9995,000-9,999500-9990515,000-19,99910,000-14,9991,000-1,4990620,000-24,99915,000-24,9991,500-2,4990725,000-34,99925,000-34,9992,500-3,4990835,000-44,99935,000-44,9993,500-4,4990945,000-54,99945,000-54,9994,500-5,4991055,000-69,99955,000-69,9995,500-6,9991170,000-84,99970,000-84,9997,000-8,4991285,000-99,99985,000-99,9998,500-9,999			Arterial		
	-	02 03 04 05 06 07 08 09 10 11 12	2,500- 4,999 5,000- 9,999 10,000-14,999 15,000-19,999 20,000-24,999 25,000-34,999 35,000-44,999 45,000-54,999 55,000-69,999 70,000-84,999 85,000-99,999	1,000-1,999 2,000-4,999 5,000-9,999 10,000-14,999 15,000-24,999 25,000-34,999 35,000-44,999 45,000-54,999 55,000-69,999 70,000-84,999 85,000-99,999	100-199 200-499 500-999 1,000-1,499 1,500-2,499 2,500-3,499 3,500-4,499 4,500-5,499 5,500-6,999 7,000-8,499 8,500-9,999

_		Universal
County	Functional Class	Mileage
Burlington	Rural: Principal Arterial-Interstate	13.05
_	Rural: Principal Arterial-Other	64.99
	Rural: Minor Arterial	33.91
	Rural: Major Collector	133.08
	Rural: Minor Collector	45.10
	Rural: Local	697.71
	Urban: Principal Arterial-Interstate	20.38
	Urban Principal Arterial–Other	12.41
	Urban: Other Principal Arterial	89.90
	Urban: Minor Arterial	226.59
	Urban: Collector	117.35
	Urban: Local	985.45
	Totals	2,439.92
Camden	Totals Rural: Principal Arterial–Interstate	2,439.92 0.00
Camden		
Camden	Rural: Principal Arterial–Interstate	0.00
Camden	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other	0.00 15.38
Camden	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other Rural: Minor Arterial	0.00 15.38 6.32
Camden	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other Rural: Minor Arterial Rural: Major Collector	0.00 15.38 6.32 11.57
Camden	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector	0.00 15.38 6.32 11.57 9.40
Camden	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local	0.00 15.38 6.32 11.57 9.40 45.72
Camden	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate	0.00 15.38 6.32 11.57 9.40 45.72 17.90
Camden	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other	0.00 15.38 6.32 11.57 9.40 45.72 17.90 24.31
Camden	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other Urban: Other Principal Arterial	0.00 15.38 6.32 11.57 9.40 45.72 17.90 24.31 85.04
Camden	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial–Interstate Urban Principal Arterial–Other Urban: Other Principal Arterial Urban: Minor Arterial	0.00 15.38 6.32 11.57 9.40 45.72 17.90 24.31 85.04 275.80
Camden	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other Urban: Other Principal Arterial Urban: Minor Arterial Urban: Minor Arterial	0.00 15.38 6.32 11.57 9.40 45.72 17.90 24.31 85.04 275.80 172.84

Universal Mileage for New Jersey

County	Functional Class	Universal Mileage
Gloucester	Rural: Principal Arterial–Interstate	7.51
	Rural: Principal Arterial–Other	38.74
	Rural: Minor Arterial	25.86
	Rural: Major Collector	94.38
1	Rural: Minor Collector	17.28
	Rural: Local	340.00
	Urban: Principal Arterial-Interstate	9.29
	Urban Principal Arterial–Other	25.56
	Urban: Other Principal Arterial	36.17
	Urban: Minor Arterial	140.27
	Urban: Collector	71.29
	Urban: Local	543.65
	Totals	1,350.00
Mercer	Rural: Principal Arterial-Interstate	9.95
	Rural: Principal Arterial–Other	8.96
	Rural: Minor Arterial	2.85
	Rural: Major Collector	52.73
	Rural: Minor Collector	23.32
	Rural: Local	131.46
	Urban: Principal Arterial-Interstate	29.47
	Urban Principal Arterial–Other	14.85
	Urban: Other Principal Arterial	94.52
	Urban: Minor Arterial	174.41
	Urban: Collector	97.19
	Urban: Local	654.40
	Totals	1,294.11
	New Jersey Totals	6,905.03

County	Functional Class	Universal Mileage
Bucks	Rural: Principal Arterial-Interstate	0.00
	Rural: Principal Arterial–Other	77.01
	Rural: Minor Arterial	100.05
	Rural: Major Collector	77.98
	Rural: Minor Collector	204.15
	Rural: Local	769.00
	Urban: Principal Arterial-Interstate	30.72
	Urban Principal Arterial–Other	23.83
	Urban: Other Principal Arterial	156.72
	Urban: Minor Arterial	166.96
	Urban: Collector	178.76
	Urban: Local	1,153.00
	Totals	2,938.18
Chester	Rural: Principal Arterial-Interstate	10.40
	Rural: Principal Arterial-Other	81.62
	Rural: Minor Arterial	94.15
	Rural: Major Collector	154.11
	Rural: Minor Collector	185.03
	Rural: Local	1,585.00
	Urban: Principal Arterial-Interstate	15.60
	Urban Principal Arterial–Other	39.38
	Urban: Other Principal Arterial	77.45
	Urban: Minor Arterial	110.85
	Urban: Collector	217.57
	Urban: Local	616.02
	Totals	3,187.18

Universal Mileage for Pennsylvania

County	Functional Class	Universal Mileage
Delaware	Rural: Principal Arterial–Interstate	0.00
Denamare	Rural: Principal Arterial–Other	2.67
	Rural: Minor Arterial	0.00
	Rural: Major Collector	1.96
	Rural: Minor Collector	0.00
	Rural: Local	33.00
	Urban: Principal Arterial–Interstate	25.60
	Urban Principal Arterial–Other	4.71
-	Urban: Other Principal Arterial	132.02
	Urban: Minor Arterial	128.44
	Urban: Collector	182.28
	Urban: Local	1,203.00
	Totals	1,713.68
Montgomery		1,713.68 0.00
	Rural: Principal Arterial–Interstate	0.00
	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other	0.00 71.66
	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other Rural: Minor Arterial	0.00 71.66 44.61
	Rural: Principal Arterial–Interstate Rural: Principal Arterial–Other Rural: Minor Arterial Rural: Major Collector	0.00 71.66 44.61 37.86
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector	0.00 71.66 44.61 37.86 38.35
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local	0.00 71.66 44.61 37.86 38.35 346.00
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate	0.00 71.66 44.61 37.86 38.35 346.00 38.75
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other	0.00 71.66 44.61 37.86 38.35 346.00 38.75 34.14
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other Urban: Other Principal Arterial	$\begin{array}{c} 0.00\\ 71.66\\ 44.61\\ 37.86\\ 38.35\\ 346.00\\ 38.75\\ 34.14\\ 188.29\end{array}$
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other Urban: Other Principal Arterial Urban: Minor Arterial	$\begin{array}{c} 0.00\\ 71.66\\ 44.61\\ 37.86\\ 38.35\\ 346.00\\ 38.75\\ 34.14\\ 188.29\\ 284.07\end{array}$
	Rural: Principal Arterial-Interstate Rural: Principal Arterial-Other Rural: Minor Arterial Rural: Major Collector Rural: Minor Collector Rural: Local Urban: Principal Arterial-Interstate Urban Principal Arterial-Other Urban: Other Principal Arterial Urban: Minor Arterial Urban: Collector	$\begin{array}{c} 0.00\\ 71.66\\ 44.61\\ 37.86\\ 38.35\\ 346.00\\ 38.75\\ 34.14\\ 188.29\\ 284.07\\ 296.29\end{array}$

County	Functional Class	Universal Mileage
Philadelphia	Rural: Principal Arterial–Interstate	0.0
-	Rural: Principal Arterial–Other	0.0
	Rural: Minor Arterial	0.0
	Rural: Major Collector	0.0
	Rural: Minor Collector	0.0
	Rural: Local	0.0
	Urban: Principal Arterial–Interstate	34.5
	Urban Principal Arterial–Other	6.0
	Urban: Other Principal Arterial	218.6
	Urban: Minor Arterial	201.0
	Urban: Collector	142.0
	Urban: Local	1,810.0
	Totals	2,412.4
	Pennsylvania Totals	13,506.4

.

Sample Size for Estimating 1993 State and Regional Vehicle Miles of Travel							
	(Number of Traffic Counts)						
		Highway Fur	nctional Cl	ass			
	Expressway/	Other Principal	Minor				
County	Freeway	Arterial	Arterial	Collectors	Local	TOTAL	
Duales	14	70	CO	61	07	004	
Bucks	14	70	62	61	27	234	
Chester	13	76	61	63	26	239	
Delaware	14	44	34	28	24	144	
Montgomery	15	75	60	62	28	240	
Philadelphia	17	66	53	38	30	204	
PA Total	73	331	270	252	135	1,061	
Burlington	13	68	64	62	27	234	
Camden	14	56	37	33	25	165	
Gloucester	15	53	39	38	24	169	
Mercer	14	47	37	30	24	152	
NJ Total	56	224	177	163	100	720	
TOTAL	129	555	447	415	235	1,781	

A-8

Regional Highway Links and Sample Traffic Counts for Estimating Vehicle Miles of Travel by Functional Class						
Major HighwayRegionalSample Traffic CountsPercent of Total LinksFunctional ClassLinksDesignActualDesign						
Expressway/Freeway	337	129	130	38.3%	38.6%	
Other Principal Arterial	3,641	555	516	15.2%	14.2%	
Minor Arterial	4,032	447	448	11.1%	11.1%	
Collector	5,124	415	388	8.1%	7.6%	
Local	27,890	235	198	0.8%	0.7%	
TOTAL	41,024	1,781	1,680	4.3%	4.1%	

Appendix B Sample Traffic Counts by County and by Functional Class

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	mon		4407		FUNCT.	DISTANCE
LOCATION	FROM	ТО		COUNTY		DISTANCE 3.810
Tr 295 M.p. 54.8	Rising Sun	Tr 656	31206	5		
Garden St. Pkwy.	Interchange 52	Interchange 58	40253	5		6.000
Garden St. Pkwy.	Interchange 48	Interchange 50	40076	5	2	2.000
Garden St. Pkwy.	Interchange 50	Interchange 52	37100	5	2	2.000
Pa-NJ Turnpike Connection	Tr 130	Nj Turnpike	26500	5	2	3.619
Tr 38 M.p. 18.7	Smithville Rd	Tr 206	23653	5	2	0.905
Tr 206 M.p. 25.5	Tr 530	Tr 537	19801	5	2	3.429
Tr 206 M.p. 26.3	Tr 537	Tr 670	18405	5	2	1.381
Tr 206 M.p. 31.8	Tr 68	Tr 543	17922	5	2	1.714
Tr 70 M.p. 15.5	Tr 206	Skeet Rd	17709	5	2	2.667
Tr 206 M.p. 17.0	Tr 70	Tr 648	17193	5	2	1.143
Tr 206 M.p. 30.1	Mt Pleasant Rd	Jobstown Rd	16975	5	2	1.381
Tr 70 M.p. 19.0	Tr 206	New Rd	16424	5	2	1.238
Tr 206 M.p. 8.5	Hampden Rd	Stokes Rd	15860	5	2	3.238
Tr 206 M.p. 19.5	Tr 642	Tr 70	15372	5	2	1.333
Tr 70 M.p. 23.5	Burrs Mill Rd	Tr 72	9736	5	2	3.429
Tr 70 M.p. 26.0	Tr 72	Four Mile Rd	8554	5	2	0.952
Tr 68 M.p. 7.5	Tr 206	White Pine Rd	7615	5	2	1.048
Tr 70 M.p. 33.4	Lakehurst Rd	Burlington Co Li	6810	5	2	0.190
Tr 68 M.p. 3.3	Mt Plesant Rd	Tr 537	5339	5	2	0.571
Tr 68 M.p. 0.75	Saylors Pond Rd	High Bridge Rd.	5325	5	2	0.619
Tr 545/Trenton Rd	Tr 630	Tr 530	12367	5	6	2.313
Tr 616 / Wrightstown Rd	Mcguire Rd	Francis St	10692	5	6	0.188
Tr 541 / Mt Holly-Medford Rd	Tr 636	Tr 616	9388	5	6	2.000
Tr 9 M.p. 56.5	Gs Parkway	Tr 542	9152	5	6	0.813
Tr 9 M.p. 58.5	Tr 654	Ocean Co Line	8993	5	6	2.500
Tr 545/Wrightstown Rd	Tr 537	Sykesville Rd	8829	5	6	1.500
Tr 537/Monmouth Rd	Tr 68	Tr 545	7322	5	6	1.000
Tr 537/Monmouth Rd	Tr 206	Tr 670	7243	5	6	2.500
Tr 72 / M.p. 2.3	Tr 70	Tr 563	6512	5	6	3.500
Tr 616 / Wrightstown Rd	Service Center R	Browns Mill Rd	6370	5	6	0.563
Tr 669/Johnstown-Browns Mill R		Tr 530	5218	5	6	2.500
Tr 72 M.p. 11.0	Stephensons Rd	Ocean Co Line	5018	5	6	0.688
Tr 537 / Monmouth Rd	Meany Rd	Monmouth Co Line	4643	5	6	0.438
Tr 669/Juliustown-Browns Mill	Tr 616	Ash Rd	3581	5	6	0.625
Tr 530/Lakehurst Rd	Tr 70	Whitebogs Rd	2521	5	6	1.313
Tr 541/Stokes Rd	Tr 534	Tr 206	1531	5	6	1.625

					FUNCT.	
LOCATION	FROM	ТО		COUNTY		DISTANCE
Tr 630	Tr 206	Tr 668	7296	5	7	2.820
Tr 644/Magnolia Rd	Tr 645	Oak Pines Blvd	6739	5	7	0.780
Tr 530	Tr 616	Anderson Rd.	6460	5	7	1.562
Tr 528 (spur)	Mary St	Monmouth Co Line	4987	5	7	0.813
Tr 670 / Jacksonville–Jacobsto	Tr 628	Tr 206	4509	5	7	2.120
Tr 528 / Chesterfield-Arneytow	Tr 660	Tr 677	4095	5	7	1.625
Tr 534/Jackson Rd	Atsion Rd	Camden Co Line	4075	5	7	1.625
Tr 528 / Jacobstown-New Egypt	Meany Road	Monmouth County Line	4059	5	7	0.625
Tr 670 / Saylors Pond Rd	Tr 537	Tr 68	3836	5	7	1.570
Tr 543 / Columbus Rd	Tr 660	Tr 656	3780	5	7	1.875
Junction Ave	Mt. Misery Rd	Gallagher Rd	3748	5	7	0.938
Tr 677/Chesterfield Crosswicks	Tr 660	Tr 528	3143	5	7	0.857
Tr 612 / W Bellabridge Rd	Vincetown Rd	Tr 641	3052	5	7	1.062
Tr 669 / Juliustown Rd	Tr 206	Tr 668	2828	5	7	1.940
Tr 681/Vincetown-Columbus Rd	Tr 206	Vincetown Rd	2257	- 5	7	1.120
Tr 542 / Batsto Bridgeport Rd	Tr 563	Seaf Weeks Rd	2113	5	7	1.875
Tr 542 Batsto-Bridgeport Rd	Elmwood Batsto R	Atlantic Co Line	2101	5	7	0.625
Tr 532	Vincentown Rd	ZimmermanRd	2097	5	7	0.688
Tr 660/ Old York Rd	Mercer Co Line	Tr 677	2021	5	7	0.381
Tr 668 / Arneys Mount Rd	Juliustown Rd	N Pemberton Rd	1900	5	7	1.937
Tr 612 / Elbowlane	Hartford Rd	Ark Rd	1775	5	7	0.686
Tr 563 / New Gretna-Chattswort	Tr 532	Dukesbridge Rd	1648	5	7	1.625
Tr 620 / Medford India Hills R	Tr 534	Tr 648	1622	5	7	1.830
Columbus Rd / Mt Pleasant Rd	Tr 68	Georgetown Rd	1252	5	7	0.625
Tr 612 / W Bellabridge Rd	Tr 541	Conrail	1081	5	7	0.437
Tr 612 / Mt Laurel-Eavrestown	Ark Rd	Fostertown Rd	950	5	7	1.750
Tr 679/Maple Ave	Tr 633	Tr 654	888	5	7	1.250
Tr 660	Tr 628	Tr 661	657	5	7	2.250
Tr 563/Greenbank-Chatsworth Rd	Tr 542	Seaf Weeks Rd	618	5	7	0.625
Tr 616 Vincentown & Pemberton	Tr 530	Tr 643	4884	5	8	0.375
Tr 628 Jacksonville Rd	Tr 670	Tr 630	3776	5	8	1.625
Tr 545 Bordentown-Georgetown	Tr 660	White Pine Rd	3612	5	8	1.375
Tr 668 Arney's Mount Rd	Tr 669	Tr 630	3463	5	8	1.937
Tr 653	Tr 542	Tr 679	2851	5	8	1.625
Tr 636 Fostertown Rd	Tr 674	Phillips Rd	2082	5	8	0.875
Tr 642 Ridge Rd	Tr 643	Bridge Rd	1932	5	8	0.688
Tr 643 Ridge Rd	Tr 616	Tr 642	1904	5	8	0.562

LOCATION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
LOCATION Retreat Rd	Tr 206	Tr 642	1545	5	CLA35 8	1.780
Tr 665 Jacobstown-Cookstown	Tr 537	Tr 666	1345	5	8	0.938
Tr 678 Hedding-Kinkora Rd	Tr 130	Tr 660	1030	5	8	0.875
Tr 645 Magnolia-New Lisbon	Tr 644	Tr 646	1026	5	8	1.875
Big Hill Rd	Retreat Rd	Tr 70	932	5	8	2.812
Tr 654 Greenbush Rd	Stage Rd	Garden State Pkw	617	5	8	0.938
Vincetown Rd.	Tr 612	Tr 681	2099	5	9	2.048
Tr 639-Oxmead Rd.	Nj Turnpike	Kings Rd.	2060	5	9	1.238
Tr 638	Tr 541	Tr 639	1032	5	9	1.524
Tr 641–Lion Rd.	Freedom Rd.	Eavrestown Red Lion Rd.	1019	5	9	1.714
Tr 648-Flyatt Rd.	Hampton Gate Rd.	Tr 206	904	5	9	1.476
Mansfield-Georgetown Rd.	Tr 206	Tr 68	705	5	9	2.286
Tr 678	Nj Turnpike	Tr 206	539	5	9	1.238
Patty Bowker Rd.	Vincetown Rd.	Tr 532	513	5	9	2.100
Retreat Rd.	Big Hill Rd.	Burks Mill Rd.	481	5	9	1.762
Tr 663	Tr 670	Tr 669	458	5	9	1.190
Barclay St.	S. Of Hanover Blvd.	Street End	414	5	9	0.190
Orr Rd	Ellisdale Rd	Extonville Rd	331	5	9	0.758
Warner Rd.	Tr 670	Tr 537	208	5	9	2.095
Harker Rd	Ellisdale Rd	Extonville Rd	174	5	9	0.900
Tr 295 M.p. 43.5	Tr 626	Creek Rd	68776	5	11	2.667
Tr 295 M.p. 49.0	Tr 541	Tr 656	50583	5	11	4.857
NJ Turnpike	Interchange 4	Interchange 5	44804	5	12	10.190
Tr 130 M.p. 41.5	Tr 626	Tr 613	49334	5	14	1.250
Tr 38 M.p. 5.0	Tr 41	Camden Co Line	48625	5	14	1.375
Tr 206 M.p. 38.0	Mercer Co Line	Tr 130	47990	5	14	2.750
Tr 73 M.p. 25.5	Tr 295	Tr 70	46776	5	14	1.188
Tr 130 M.p. 55.3	Tr 206	Tr 295	46229	5	14	0.875
Tr 38 M.p. 6.0	Tr 608	Tr 73	45888	5	14	0.500
Tr 130 M.p. 40.5	Tr 613	Tr 605	45656	5	14	0.875
Tr 38 M.p. 9.0	Tr 295	Tr 603	42980	5	14	1.125
Tr 73 M.p. 24.0	Tr 70	S Maple Ave	40476	5	14	0.688
Tr70 M.p. 8.5	Tr 73	Tr 607	40419	5	14	0.250
Tr 38 M.p. 10.3	Tr 686	Tr 295	39367	5	14	1.313
Tr 70 M.p. 8.0	Camden Co Line	Tr 73	36987	5	14	1.875
Tr 130 M.p. 46.5	Tr 413	Tr 543	35924	5	14	0.500
Tr 541	Tr 295	Tr 660	32528	5	14	1.429

					FUNCT.	
LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Tr 130 M.p. 57.0	Tr 206	Old Highbridge R	30121	5	14	1.000
Tr 541	Tr 295	NJ Turnpike	29965	5	14	1.333
Tr 38 M.p. 14.7	Tr 541 Alt	Tr 641	26507	5	14	1.000
Tr 206 M.p. 35.5	Tr 130	NJ Turnpike	25029	5	14	2.188
Tr 38 M.p. 12.7	Union Mills Rd	Tr 674 / Mt Laurel	23394	5	14	0.667
Tr 626 Rancocas Byp	Tr 625	Tr 295	22825	5	14	0.563
Tr 541 Burl Mt Holly Rd	Nj Turnpike	Burr Rd	22486	5	14	0.938
Tr 70 M.p. 13.5	Hartford Rd	Tr 541	22301	5	14	1.125
Tr 130 M.p. 51.3	Potts Mill Rd.	Hornberger Ave	20857	5	14	0.476
Tr 130 M.p. 49.1	Pa Tpke Conn	Neck Rd	20713	5	14	1.938
Tr 626 Mt Holly Rd	Tr 130	Rittenhouse Cir	20487	5	14	0.438
Tr 541	3Rd Street	Tr 130 Nb	18914	5	14	0.238
Tr 543 North Broad St	Union Landing Rd	Taylor's Lane	18575	5	14	0.750
Tr 70 M.p. 15.0	Tr 541	Little Creek	17820	5	14	0.938
Tr 541 Bypass	Tr 537	Tr 38	17750	5	14	0.363
Tr 70 M.p. 11.8	Troth Rd	Tr 618	17559	5	14	1.238
Tr 626 Rancocas Rd	Tr 295	Tr 637	16337	5	14	1.125
Tr 541 Bypass	High St.	Tr 626	14011	5	14	0.762
Tr 626 Rancocas Rd	Tr 541 Bypass	Lambert Rd	12344	5	14	0.438
Tr 543 North Broad St	Tr 607	Tr 73	8717	5	14	0.750
Tr 543 North Broad St	Tr 130	Woodlawn Ave	8342	5	14	1.563
Tr 543 North Broad St	Tr 73	Waterworks Rd	7783	5	14	1.375
Tr 626/Bridgeboro Rd	Tr 543	Tr626 (Split)	2387	5	14	0.875
Tr 607/North Maple Ave	Tr 674	Tr 70	19625	5	16	1.438
Tr 537/Marne Hwy	Tr 603	Tr 615	18218	5	16	0.938
Tr 619 / Taunton Lake Rd	Tr 620	Tr 623	17766	5	16	0.875
Tr 600 / Marlton Pike	Tr 70	Tr 620	17637	5	16	1.125
Tr 620 / Tuckerton Rd	Tr 623	Jackson Rd	14196	5	16	1.375
Pine St	Mill St	Monroe St	13531	5	16	0.150
Tr 623 / Taunton Blvd	Tr 620	Tr 619	13500	5	16	1.313
Levitt Pkwy.	Tr 130	Tr 630	11824	5	16	1.000
Tr 537/Marne Hwy	Tr 674	Tr 541 Bypass	11815	5	16	1.563
Tr 611 / Kings Hwy	Tr 537	Tr 608	11764	5	16	1.125
Mill St.	Pine St.	Branch St.	11635	5	16	0.189
Tr 541 / Madison Ave	Tr 537	Tr 38	11562	5	16	0.750
Tr 614/Westfield Rd	Tr 613	Tr 615	11429	5	16	1.688
Tr 541/burl Mt Holly Rd	541 Bypass	Woodpecker Ln	11369	5	16	0.375

LOGUIION	EDOL 4	BO	4 4 D.T.		FUNCT.	DIOTANCE
LOCATION Tr 620 / E Main St	FROM Tr 607	TO Tr 619	AADT 11186	COUNTY 5	CLASS 16	DISTANCE 1.250
	Tr 295	Nj Turnpike	10615	5	10	0.688
Rising Sun Rd.	New Albany Rd	Tr 537	9580	5	16	1.118
Tr 607 / Church St Tr 686/Hartford Rd	Tr 674	Union Mills Rd	9368	5	10	1.118
		Hartford Rd	9308	5	16	0.625
Tr 613 / Bridge Boro Rd	Tr 636			5		
Tr 608 / Lenola Rd	Tr 607	Tr 537	8521		16	2.625
Tr 603 / Main St	Tr 543	Tr 130	8393	5	16	1.438
Tr 607 / Cinnaminson Rd	Tr 543	Tr 130	8088	5	16	1.250
Tr 637 / Irick Rd	Tr 630	Tr 626	7898	5	16	1.000
Tr 618 / Evesboro-Medford Rd	Tr 674	ElmwoodRd	7520	5	16	2.250
Tr 543	Tr 541	Bur Bristol Brid	7338	5	16	0.500
Tr 613 / Bridge Boro Rd	Tr 543	Tr 130 Interchan	7300	5	16	1.625
Columbus St	Broad St	Tr 130	6612	5	16	0.500
Tr 635 / Rancocas Rd	Tr 634	Tr 630	6401	5	16	1.813
Tr 636 / Creek Rd	Tr 613	Tr 295	6296	5	16	3.500
Tr 673 / Fellowship Rd	Tr 607 Church St	Tr 616 Church Rd	5946	5	16	1.625
Tr 686 / Hartford Rd	Tr 613	Tr 615	5923	5	16	2.188
Tr 670 / Jacksonville Rd	Tr 130	Tr 660	5908	5	16	1.000
Tr 616 / Church Rd	Tr 674	Tr 603	5287	5	16	2.250
Pine St.	Tr 38	Bolds New Rd.	5175	5	16	1.313
Tr 674 / Evesboro Rd	Tr 636	Ark Rd	4893	5	16	1.000
Tr 534 / Oakshade Rd	Tr 532	Tr 620	4579	5	16	1.938
Neck Rd	Tr 543	Tr 660	3856	5	16	0.938
Tr 606	Tr 130	Tr 603	3836	5	16	1.500
Tr 660 / Fountain Ave	Tr 541	Tr 670	3790	5	16	0.938
Tr 621 / Park Ave	Camden Co Line	Fork Landing Rd	3566	5	16	0.375
Union Mill Rd	Tr 686	Tr 603	2712	5	16	1.875
Tr 636 / Fostertown Rd	Tr 38	Tr 674	1889	5	16	0.375
Tr 636 / Fostertown Rd	Tr 537	Union Mill/Tr38	1331	5	16	0.875
Tr 635 / Ark Rd	Fleetwood Ave	Marne Hwy	10248	5	17	0.375
Tr 605 / Fairview St	Tr 43	Tr 130	9887	5	17	1.500
Tr 528 / Crosswicks St	Tr 662	Nj Turnpike	8737	5	17	2.187
New Albany Rd	Tr 608 Lenola Rd	Tr 607 Church St	8160	5	17	1.000
Tr 630/ Cooper St	Tr 543	Tr 130	7061	5	17	1.562
Van Sciver Pkwy	Tr 630	Salem Rd	5988	5	17	1.500
Tr 624	Tr 543	Bridgeboro Rd	3486	5	17	1.625
Union Mills Rd	Ark Rd	Tr 38	3190	5	17	0.688

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LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Union Landing Rd	Tr 543	Tr 130	3081	5	17	1.375
Tr 625 / Creek Rd	Tr 624	Tr 130	2844	5	17	1.437
Tr 662 / Burlington St.	Tr 545	Tr 130	2600	5	17	1.937
Tr 658 / Neck Rd	Tr 656	Tr 130	1794	5	17	0.780
Tr 563	Jenkins Rd	Tr 679	1124	5	17	1.313
Tr 656/ Pearl Blvd	Tr 541	Bur Bristol Brid	1030	5	17	0.500
Pearl St	Wood St	Dilwyn St	955	5	17	0.313
Ward Ave	Charles Bossars Dr	Willow Rd	3365	5	19	0.132
Martin Ave	Alexander Ave	Center St.	1656	5	19	0.310
Collins Ln.	Fork Landing Rd.	North Coves Ave	1566	5	19	0.200
Park Ave	Elm Terrace	Linden Ave	1385	5	19	0.048
Lippincott Ave	Tr 534	4Th St.	823	5	19	0.210
Harvard Ave	Laurelton Ave	N. Stiles Ave	549	5	19	0.110
Delaware Ave	4Th St.	5Th St.	428	5	19	0.100
Sylvan St	Tr 613	Butler St.	352	5	19	0.055
Lincoln St	Pilaski Ave	Chester Ave	284	5	19	0.100
Leach St	Filmore St.	Taylor St.	255	5	19	0.050
Penn St	3Rd St.	4Th St.	210	5	19	0.050
Salmon Ave	Pine Ave	Balley Ave	196	5	19	0.045
Oakland Ave	Woodland Ave	Germantown Ave	144	5	19	0.200
AC Expressway	Tr 73	Atlantic Co. Line	41874	7	2	1.830
AC Expressway	Winslow Rd.	Tr 73	37474	7	2	1.437
Tr 73 M.p. 10.5	Tr 536	Braddock Rd	11529	7	22	1.052
Tr 30	Tr 722	Tr 726	11353	7	2	1.436
Tr 30 M.p. 27.8	Walker Rd	Camden Co Line	11101	7	2	2.516
Tr 73 M.p. 6.5	Ac Expressway	Winslow Rd	9366	7	2	1.241
Tr 536 Spur / Williamstown Rd	Lakedale Rd	Old Egg Harbor R	10091	7	6	1.509
Tr 536 / New Brooklyn Rd	Tr 720	Central Ave	4991	7	6	1.045
Tr 561 Spur / Mays Landing Rd	Piney Hollow Rd	Atlantic Co Line	4914	7	6	1.503
Tr 530 / New Brooklyn Rd	Tr 73	Old Egg Harbor R	4819	7	6	1.013
Tr 561 / Cedarbrook Rd	Tr 73	Tr 710	4110	7	6	1.157
Tr 561 / Cedarbrook Rd	Laurel Ave	Atl Co Line	5894	7	7	0.444
Tr 561 / Blue Anchor Rd	Tr 73	7Th Ave	3602	7	7	0.686
Tr 536 / Chew Rd	W Of Atl Co Line	Price Ave	2731	7	7	1.653
Tr 536 / Chew Rd	Tr 716	Church Ave	2549	7	7	0.307
Tr 724 / Wiltseys Mill Rd	Tr 30	Alt Co Line	2360	7	7	1.045
Tr 723 / Williamstown Rd	Glo Co Line	Ac Expressway	3049	7	8	1.241

					FUNCT.	
LOCATION	FROM	то	AADT	COUNTY		DISTANCE
Tr 723 / Fleming Pike	Tr 726	Tr 561	2137	7	8	0.405
Tr 726 / Spring Garden	Tr 721	Tr 561	2119	7	8	0.640
Hammontown Rd	Tr 561	Camden Co. Line	1459	7	9	0.800
Tr 725	Tr 561	Tr 726	1373	7	9	1.000
Pestleton Rd	Tr 536	Wharton Ave	1039	7	9	1.500
Wharton Ave	Pestleton Rd.	Tr 716	858	7	9	1.480
Central Ave	Tr 73	Cedar St.	740	7	9	1.520
Church Ave	Tr 536	Middle Ave	670	7	9	0.500
Spring Rd	Union Rd.	Tr 30	550	7	9	1.133
Bates Mill / Ancora	Tr 722	Tr 30	475	7	9	0.505
Filtertown Rd	Tr 724	Tr 73	333	7	9	1.400
Walker Rd	Tr 30	Union Rd.	284	7	9	1.067
Conard Ave	Tr 536	Middle Ave	265	7	9	0.500
Tr 76	Market St.	Kings Hwy.	150000	7	11	0.392
Tr 76 M.p. 2.5	@ W.W. Bridge		106000	7	11	0.464
Tr 295 M.p. 2.5	Tr 76	Tr 168	80000	7	11	1.111
Tr 295 M.p. 26.3	Nj 42	Creek Rd	79172	7	11	0.457
Tr 295 M.p. 35.7	Tr 70	Burlington Co. Line	78748	7	11	1.209
Tr 295 M.p. 31.5	Tr 30	Tr 561	73000	7	11	2.516
Tr 676 M.p. 0.4	Tr 76	Morgan Blvd	64046	7	11	0.359
Tr 676 M.p. 3.0	Federal St	Pine St	49270	7	11	0.163
Tr 42 M.p. 7.7	Grenloch Little	Gloucester Co Li	75122	7	12	0.327
AC Expressway	Tr 689	Gloucester Co. Line	43446	7	12	2.222
NJ Turnpike	Interchange 3	Interchange 4	40100	7	12	9.000
AC Expressway	Williamstown-New Freedom	Malaga Rd.	38794	7	12	3.430
Tr 90 M.p. 11.2	Tr 95	Tr 130	34600	7	12	1.751
Tr 30 M.p. 2.0	Baird Blvd.	Federal St.	67156	7	14	0.915
Tr 38 M.p. 3.1	Haddonfield Rd	Tr 616	56538	7	14	1.104
Tr 73 M.p. 32.5	Tr 130	Hylton Rd.	54667	7	14	0.797
Tr 130 M.p. 35.0	Tr 73	Industrial Hwy.	54108	7	14	0.536
Tr 38 M.p. 2.1	Tr 636 Lexington	Haddonfield Rd	53225	7	14	1.431
Tr 70 M.p. 5.7	Nj Turnpike	Tr 673	51794	7	14	0.849
Tr 70 M.p. 2.0	Cornell Rd	Haddonfield Rd	51489	7	14	0.776
Tr 130 M.p. 27.2	Tr 76	W W Bridge Conne	49954	7	14	0.915
Tr 70 Mp 4.5	King'S Hwy.	Tr 295	49259	7	14	1.509
Tr 70 M.p. 7.0	Old Orchard Rd	Burl Co Line	49015	7	14	0.541
Tr 38 M.p. 14.25	Tr 616	Burlington County Line	46004	7	14	0.542

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LOCATION	FROM	TO Tr 636	AADT 42497	COUNTY	CLASS 14	DISTANCE 0.974
Tr 38 M.p. 1.25	Tr 70			7		
Tr 130 M.p. 33.7	Tr 90	Tr 616	40293	7	14	0.889
Tr 73 Mp 20.5	Tr 693 Lafayette Ave	Cooper Rd	36186	7	14	0.229
Tr 73 M.p. 21.0	Tr 671	Dutchtown Rd	36168	7	14	0.653
Tr 130 Mp 30.7	Tr 38	Marlton Ave	34627	7	14	0.477
Tr 130 M.p. 25.5	Tr 551	Creek Rd	33528	7	14	0.200
Tr 73 M.p. 16.7	Cherry Cir	Taunton Ave	33424	7	14	0.248
Tr 30 M.p. 9.1	Ashland Ave	Nj Turnpike	31167	7	14	0.621
Tr 30 M.p. 10.3	Chews Landing Rd	Jefferson Rd	30906	7	14	0.722
Tr 636 Cuthbert Ave	Tr 70	Park Dr	30888	7	14	0.484
Tr 636 / Cuthbert Ave	Tr 38	Tr 70	30810	7	14	0.536
Tr 561 / Berlin Rd	Tr 295	Morris Dr	30797	7	14	0.890
Tr 561 / Berlin Rd	Tr 295	Brace Rd	30484	7	14	0.804
Tr 30 Mp 13.3	Tr 686	Linden Ave	29784	7	14	0.640
Tr 644 / Haddenfield Rd	Tr 38	Chapel Rd	28558	7	14	0.320
Tr 168 Mp 7.0	Nj Turnpike	Tr 295	27238	7	14	0.947
Tr 168 Mp 8.5	Tr 551	W W Bridge Conn	25404	7	14	1.464
Tr 30 Mp 19.0	Tr 73	Atco Ave	23966	7	14	1.189
Tr 561 Berlin Rd	Tr 686	White Horse Rd	23082	7	14	0.722
Tr 30 Mp 7.5	Tr 551	Tr 41	22910	7	14	0.996
Tr 644 / Haddonfield Rd	Tr 70	Maple Ave	22025	7	14	0.810
Tr 561 / Berlin Rd Haddonfie	Tansboro Rd	Franklin Ave	21980	7	14	1.764
Tr 168 Mp 6.25	Nj Turnpike	Tr 573	21793	7	14	0.751
Tr 154 Brace Rd Mp 1.1	Tr 70	Evans Mill Rd	20396	7	14	0.817
Tr 644	Tr 38	Church Rd.	20297	7	14	0.601
W.w. Bridge Conn	Tr 76	Tr 130	20159	7	14	0.686
Tr 168 Mp 3.2	Tr 42	Blenheim Rd	18109	7	14	0.399
Tr 30 Mp 14.8	United States Av	Franklin Ave	16976	7	14	0.981
Tr 154 Mp 0.15	Tr 561	Kresson Rd.	16391	7	14	0.307
Tr 636 / Cuthbert Ave	Tr 30	Macarthur Blvd	16037	7	14	0.653
Tr 168 Mp 1.5	Grenloch Little	Cressmont Ave	15723	7	14	1.111
Tr 635 / Nicholson Rd	Tr 168	Ward Ave	14971	7	14	0.529
Tr 644	Tr 130	Dover Lane	14809	7	14	0.588
Tr 73 Mp 14.5	Tr 30	Hayes Mill Rd	13712	7	14	2.548
Tr 30 Mp 5.1	Tr 130	Collins Ave	12582	7	14	0.601
W.w. Bridge Conn	Tr 168	Tr 130	11370	7	14	0.261
Tr 551/4th Street	Jefferson Ave	Van Hook St	4953	7	14	0.261

LOCATION	FROM	то	AADT	COUNTY	FUNCT.	DISTANCE
Tr 644	Tr 73	Tr 90	3966	7	14	0.412
Tr 544	Gibbsboro Rd.	Burlington Co. Line	24365	7	16	0.771
Tr 673 / Laurel Rd	Tr 30	Warwick Rd	20436	7	16	0.843
Tr 544	Tr 561	Tr 673	20130	7	16	1.516
Tr 670	Tr 544	Tr 678	20128	7	16	0.529
Tr 673	Tr 561	Tr 544	19359	7	16	0.608
Tr 683 / Chews Landing Rd	Tr 681	Tr 759	18995	. 7	16	0.732
Tr 689 / Crosskeys Rd	Ac Expressway	Tr 705	17779	7	16	0.445
Tr 689 / Crosskeys Rd	Tr 30	Tr 691	17343	7	16	1.261
Tr 673	Tr 544	Tr 671	16647	7	16	1.583
Tr 673	Tr 70	Greentree Rd.	16227	7	16	0.183
Tr 544	Tr 30	Park Ave	16054	7	10	0.105
Tr 706 / Erial Rd	Tr 534	Peter Cheeseman	15856	7	10	0.947
Tr 530 Spur / Williamstown Rd	Ac Expressway	Tr 705	15274	7	16	0.856
Tr 669 / Warwick Rd	Tr 677	Jefferson Ave	14888	7	16	0.050
Tr 551 / Kings Hwy	Tr 168	Wyoming Ave	14000	7	16	1.104
Tr 544 / Evesham Rd	Tr 168	Tr 573	12012	7	10	0.699
Tr 41	Tr 70	Caldwell Lane	11753	7	10	0.549
Tr 534 / Berlin Rd	Tr 42	Tr 168	11702	7	10	0.647
Tr 561 / Haddon Ave	Knight Ave	Tr 130	11/02	7	16	0.668
Tr 759 / Little Gloucester Rd	Tr 706	Tr 688	11148	7	10	1.300
Tr 534 / Blackwood Clementon	Tr 30	Tr 691	9714	7	16	1.568
Tr 604 / Newton Ave	Tr 168	Federal St	8250	7	10	0.359
Tr 623 / Hampton Rd	Cuthbert Blvd	Chapel Ave	7269	7	10	0.559
Tr 691 New Freedom Rd	Tr 689	Tr 534	6918	7	10	0.021
Tr 675 / Cropwell Rd	Tr 73	Victor Blvd	6469	7	10	0.437
Tr 675 / Cropwell Rd	Taunton Ave	Commerce Lane	6331	7	10	0.033
Euclid Ave	Linden Ave	Haddon Ave	6105	7	10	0.197
	Tr 168	Tr 561	5861	7	10	0.190
Tr 603 / Ferry Ave Tr 688 / Hickstown Rd	Tr 705	Peter Cheeseman	5703	7	10	0.804
-		Brick Rd.	4255	7	16	0.830
Marlowe Rd.	Cropwell Rd.		4233 3376	7	16	0.732
Tr 713 / Cooper Rd	Tr 524	Raritan Ave				
Tr 716 / Old White Horse Pike	Burnt Mill Rd	Bisbee Ave	2661	7	16	2.365 1.019
Tr 687 / Jarvis Rd	Tr 688	Tr 706	2585		16	
Tr 710 / Atco Ave	Hayes Mill Rd	Tr 20	2302	7	16	0.490
Tr 708 / Walker Ave	Minck Ave	Tr 73	13528	7	17	0.663
Tr 628 / Park Blvd	Curtis Ave	Tr 644	8210	7	17	0.248

LOCATION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE	
West End Ave	Tr 41 / 573	Elm Ave	6233	7	17	0.523	
Tr 704/chews Landing/williamst	Tr 687	Tr 689	4881	7	17	1.634	
United States Ave	Tr 30	Crowland St	3516	7	17	0.392	
Euclid Ave	Tr 561	Greenwood Ave	3493	7	17	0.196	
Remington Ave	Hylton Rd	Tipton Blvd	3375	7	17	0.284	
Mouldy Rd	Tr 30	Tr 669	2672	7	17	0.386	
Tr 628	Tr 130	Kaighn Ave	1903	7	17	0.359	
Tr 715 / Maple Ave	Tr 534	Raritan Ave	1589	7	17	0.751	
4th St	Federal St	Pine St	1328	7	17	0.536	
Congress Rd	Collings Rd	Republic Rd	1063	7	17	0.314	
ReadRd	Smiths Ave	Tr 41 / 573	1060	7	17	0.614	
Victor Blvd	Tr 561	Tr 675	997	7	17	1.241	
Chelton Pkwy.	Durand Ave	Kingston Rd.	864	7	17	0.131	
Higgins Ave	Tr 30	Tr 534	851	7	17	0.470	
Magill Ave	Tr 30	Browning Rd	745	7	17	0.287	
9th St.	Tr 168	Central Ave	2834	7	19	0.083	
Over Mill Rd.	Buttonwood Rd.	Longwood Dr.	1774	7	19	0.042	
4th St.	EvergreenAve	Elm Ave	895	7	19	0.042	
Columbia Ave	Tr 727	Grand Ave	830	7	19	0.167	
Saratoga Rd.	Liberty Dr.	Oak Dr.	604	7	19	0.168	
Cypress Ave	Woodlynne Ave	3Rd St.	590	7	19	0.167	
Lakewood Ave	Tr 544	Madison Ave	437	7	19	0.063	
Valley Dr.	Willow Way	Glendale Dr.	383	7	19	0.250	
Park Ave	Ava Ave	Gloucester Ave	355	7	19	0.063	
Williams Ave	West Of David Place	Street End	303	7	19	0.167	
Johnson Ave	Tr 573	Patricia Ln.	269	7	19	0.333	
Simpson Ave	Center Ave	West Of 1St Ave	249	7	19	0.083	
Tr 295 Mp 12.5	Tr 322	Oak Grove Rd	31610	15	1	2.476	
Tr 295 Mp 9.66	Salem County Lin	Tr 620 (Center Square Rd)	29011	15	1	1.381	
Tr 295 Mp 10.99	Tr 620	Tr 322	25300	15	1	1.619	
Nj Turnpike	Interchange 2	Interchange 3	36100	15	2	12.860	
Nj Turnpike	Interchange 1	Interchange 2	34800	15	2	5.000	
Tr 322 Mp 1.09	Comm. Barry Bridge	Tr 130	27000	15	2	1.524	
Tr 55 Mp 44.43	Tr 553	Little Mill Rd	22765	15	2	1.905	
Tr 322 Mp 15.8	Hampton Blvd	Tr 55	15356	15	2	0.810	
Tr 130 Mp 13.68	Tr 44	Tr 295	14826	15	2	0.762	
Tr 322 Mp 15.13	Tr 635	Tr 55	14407	15	2	0.524	
TACKATION FROM TO AADT COUNTY CLASS DISTANCE 17 322 / Ju 22 / Jp 3.07 Ir 130 Ir 295 13601 15 2 1.762 17 322 / Jp 3.07 Ir 45 Ir 667 12807 15 2 1.476 17 322 / Jp 3.43 Ir 322 Ir 44 12403 15 2 0.887 17 322 / Jp 3.44 Ir 607 Nj Turmpike 11611 15 2 0.667 17 322 / Jp 2.6.5 Ir 659 17 651 2 0.667 17 522 1287 5 6 0.571 17 45 // Jp 7.5 Ir 322 Ir 613 Little Ease Run 10996 15 6 0.476 17 322 // Jp 3.0.5 Old Black Horse Coles Mill Lane 9843 15 6 0.476 17 322 // Jp 3.1 Ir 557 Atlantic Co. Lin 8323 15 6 1.330 17 40 Mp 3.2.1 Ir 557 Atlantic Co. Lin 8323 15 6 1.330 17 40 Mp 3.3						FUNCT.	
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Tr 322 Mp 30.5 Old Black Horse Coles Mill Lane 9843 15 6 0.760 Tr 322 Mp 32.1 Piney Hollow Rd Atlantic Co. Lin 9391 15 6 1.330 Tr 40 Mp 32.1 Tr 557 Atlantic Co. Lin 8323 15 6 1.330 Tr 71 Mp 21.7 Tr 581 Tr 618 6289 15 6 0.570 Tr 77 Mp 17.9 Oldmans Creek Springtown Pine 4848 15 6 0.0760 Tr 553 / Centerton Glassboro R Garrison Rd Frank/Monroville 4402 15 6 0.0760 Tr 45 Mp 15.9 Swedesboro Rd S.Branch Raccoon 3792 15 6 0.570 Tr 44 Mp 1.4 Tr 130 Tr 684 2156 15 6 0.587 Tr 555 / Tuckahoe Rd Tr 512 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Tr 522 Tr 554 5207 15 7 0.857 Tr 555 / Tuckahoe Rd Tr 538 Colea Mill Tr 659 6665 15 7 0.762 <t< td=""><td>1 1</td><td></td><td>1</td><td></td><td></td><td></td><td>1</td></t<>	1 1		1				1
Tr 322 Mp 32.1 Piney Hollow Rd Atlantic Co. Lin 9391 15 6 1.330 Tr 40 Mp 32.1 Ir 557 Atlantic Co. Lin 8323 15 6 1.330 Tr 70 Mp 21.7 Ir 581 Ir 618 6289 15 6 1.810 Tr 130 Mp 9.3 Salem Co. Line Center Square Rd. 5410 15 6 0.048 Tr 75 Mp 17.9 Oldmans Creek Springtown Pine 4848 15 6 0.048 Tr 45 Mp 15.9 Swedesboro Rd S.Branch Raccoon 3792 15 6 0.760 Tr 45 Mp 12.8 Oldmans Creek Marl Rd 3019 15 6 0.857 Tr 555 / Tuckahoe Rd Ir 612 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Ir 530 Ir 538 6162 15 7 0.857 Tr 555 / Tuckahoe Rd Ir 538 6162 15 7 0.857 Tr 555 / Tuckahoe Rd Ir 538 Coles Mil Tr 659 (Marshall 5100 15 7 0.857 Tr 555 / mainlake Rd	· ·						
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Tr 130 Mp 9.3 Salem Co. Line Center Square Rd. 5410 15 6 0.570 Tr 77 Mp 17.9 Oldmans Creek Springtown Pine 4848 15 6 0.048 Tr 553 / Centerton Glassboro R Garrison Rd Frank/Monroville 4402 15 6 0.0380 Tr 45 Mp 15.9 Swedesboro Rd S.Branch Raccoon 3792 15 6 0.760 Tr 44 Mp 1.4 Tr 130 Tr 684 2156 15 6 0.857 Tr 555 / Tuckahoe Rd Ir 612 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Ir 521 Spur Ir 664 6350 15 7 0.762 Tr 551 / Kings Highway Ir 322 Ir 538 6162 15 7 0.762 Tr 555/tuckahoe Rd Ir 538 Coles Mil Tr 659 (Marshall 5100 15 7 0.476 Tr 538/paulsboro-swedesboro Ir 322 Tr 551 Kemp Hwy 5001 15 7 0.476 Tr 620 / Center Square Rd. Ir 601 Ir 295 4463 15 7 1.048 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
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Tr 553 / Centerton Glassboro R Garrison Rd Frank/Monroville 4402 15 6 0.380 Tr 45 Mp 15.9 Swedesboro Rd S.Branch Raccoon 3792 15 6 0.760 Tr 45 Mp 12.8 Oldmans Creek Marl Rd 3019 15 6 0.570 Tr 44 Mp 1.4 Tr 130 Tr 684 2156 15 6 0.857 Tr 555 / Tuckahoe Rd Ir 612 Janvier Ave 6665 15 7 1.143 Tr 551 / Kings Highway Ir 522 Ir 538 6162 15 7 0.762 Tr 605 / Kings Highway Ir 630 Ir 551 5207 15 7 0.857 Tr 555/tuckahoe Rd Ir 538 Coles Mil Ir 659 (Marshall 5100 15 7 0.857 Tr 555/minalke Rd Ir 40 Weymouth Rd 4921 15 7 0.476 Tr 620/center Square Rd. Ir 601 Ir 295 4463 15 7 1.048 Tr 633 (Blue Bel Ir 528 (Coles Mi 3409 15 7 1.143 Tr 659 Ir 633 (Blue Bel			Center Square Rd.	5410	15	6	0.570
Tr 45 Mp 15.9 Swedesboro Rd S.Branch Raccoon 3792 15 6 0.760 Tr 45 Mp 12.8 Oldmans Creek Marl Rd 3019 15 6 0.570 Tr 44 Mp 1.4 Ir 130 Ir 684 2156 15 6 0.857 Tr 555 / Tuckahoe Rd Ir 612 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Ir 551 Spur Ir 664 6350 15 7 0.762 Tr 605 / Kings Highway Ir 530 Ir 551 7 0.857 0.872 15 7 0.872 Tr 605 / Kings Highway Ir 530 Ir 551 5207 15 7 0.876 Tr 555/mainlake Rd Ir 538 Coles Mil Ir 659 (Marshall 5100 15 7 0.667 Tr 525/mainlake Rd Ir 40 Weymouth Rd 4921 15 7 1.238 Tr 620/Center Square Rd. Ir 601 Ir 295 4463 15 7 1.048 Tr 633 (Blue Bel Ir 295 Idensity Particle 3889 15 7 1.143 T		Oldmans Creek		4848	15	6	0.048
Tr 45 Mp 12.8 Oldmans Creek Marl Rd 3019 15 6 0.570 Tr 44 Mp 1.4 Tr 130 Tr 684 2156 15 6 0.857 Tr 555 / Tuckahoe Rd Ir 612 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Ir 551 Spur Ir 664 6350 15 7 1.143 Tr 551 / Kings Highway Ir 322 Ir 538 6162 15 7 0.762 Tr 605 / Kings Highway Ir 538 Coles Mil Ir 659 (Marshall 5100 15 7 0.857 Tr 555/nuckahoe Rd Ir 538 Coles Mil Ir 659 (Marshall 5100 15 7 0.667 Tr 538/paulsboro-swedesboro Ir 322 Ir 551 Kemp Hwy 5001 15 7 0.667 Tr 525/mainlake Rd Ir 40 Weymouth Rd 4921 15 7 1.238 Tr 620 / Center Square Rd. Ir 601 Ir 295 4463 15 7 1.43 Tr 659 Ir 633 (Blue Bel Ir 528 (Coles Mi 3409 15 7 1.43 Tr 659				4402	15	6	0.380
Tr 44 Mp 1.4 Tr 130 Tr 684 2156 15 6 0.857 Tr 555 / Tuckahoe Rd Tr 612 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Tr 551 Spur Tr 664 6350 15 7 1.143 Tr 551 / Kings Highway Tr 322 Tr 538 6162 15 7 0.762 Tr 605 / Kings Highway Tr 630 Tr 551 5207 15 7 0.857 Tr 555/tuckahoe Rd Tr 538 Coles Mil Tr 659 (Marshall 5100 15 7 0.476 Tr 555/mainlake Rd Tr 40 Weymouth Rd 4921 15 7 1.238 Tr 620/center Square Rd. Tr 601 Tr 528 (Coles Mi 4463 15 7 1.238 Tr 633 (Blue Bel Tr 528 (Coles Mi 3409 15 7 1.143 Tr 633/coles Mill Tr 612 Pennsylvania Ave 3216 15 7 1.143 Tr 653/swedesboro Rd Tr 130 Tr 607 Tomlin St 3165 15 7 2.286 Tr 653/swedesboro Rd Tr 130		Swedesboro Rd	S.Branch Raccoon	3792	15	6	0.760
Tr 555 / Tuckahoe Rd Tr 612 Janvier Ave 6665 15 7 1.333 Tr 551 / Kings Highway Tr 551 Spur Tr 664 6350 15 7 1.143 Tr 551 / Kings Highway Tr 322 Tr 538 6162 15 7 0.762 Tr 605 / Kings Highway Tr 630 Tr 551 5207 15 7 0.857 Tr 555/tuckahoe Rd Tr 538 Coles Mil Tr 659 (Marshall 5100 15 7 0.476 Tr 538/paulsboro-swedesboro Tr 322 Tr 551 Kemp Hwy 5001 15 7 0.667 Tr 555/mainlake Rd Tr 40 Weymouth Rd 4921 15 7 1.238 Tr 620/center Square Rd. Tr 601 Tr 295 4463 15 7 1.048 Tr 538/coles Mill Tr 612 Pennsylvania Ave 3216 15 7 1.143 Tr 538/coles Mill Tr 612 Pennsylvania Ave 3216 15 7 1.143 Tr 538/coles Mill Tr 612 Pennsylvania Ave 3216 15 7 2.381 Tr 553/swedes	Tr 45 Mp 12.8	Oldmans Creek	Marl Rd	3019	15	6	0.570
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Tr 551 / Kings HighwayIr 322Ir 53861621570.762Tr 605 / Kings HighwayIr 630Ir 55152071570.857Tr 555/tuckahoe RdIr 538 Coles MilIr 659 (Marshall51001570.476Tr 538/paulsboro-swedesboroIr 322Ir 551 Kemp Hwy50011570.667Tr 555/mainlake RdIr 40Weymouth Rd49211571.238Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381			Janvier Ave	6665	15	7	1.333
Tr 605 / Kings HighwayIr 630Ir 55152071570.857Tr 555/tuckahoe RdIr 538 Coles MilIr 659 (Marshall51001570.476Tr 538/paulsboro-swedesboroIr 322Ir 551 Kemp Hwy50011570.667Tr 555/mainlake RdIr 40Weymouth Rd49211571.238Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 551 / Kings Highway	Tr 551 Spur	Tr 664	6350	15	7	1.143
Tr 555/tuckahoe RdIr 538 Coles MilIr 659 (Marshall51001570.476Tr 538/paulsboro-swedesboroIr 322Ir 551 Kemp Hwy50011570.667Tr 555/mainlake RdIr 40Weymouth Rd49211571.238Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091571.143Tr 538/coles MillIr 612Pennsylvania Ave32161572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 551 / Kings Highway	Tr 322	Tr 538	6162	15	7	0.762
Tr 538/paulsboro-swedesboroIr 322Ir 551 Kemp Hwy50011570.667Tr 555/mainlake RdIr 40Weymouth Rd49211571.238Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Iownship Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091571.143Tr 538/coles MillIr 612Pennsylvania Ave32161572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 557/tuckahoe RdIr 555Dutch Mills Rd31021572.381Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 605 / Kings Highway	Tr 630	Tr 551	5207	15	7	0.857
Tr 555/mainlake RdIr 40Weymouth Rd49211571.238Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091571.143Tr 538/coles MillIr 612Pennsylvania Ave32161572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 557/tuckahoe RdIr 555Dutch Mills Rd31021572.381Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 555/tuckahoe Rd	Tr 538 Coles Mil	Tr 659 (Marshall	5100	15	7	0.476
Tr 555/mainlake RdIr 40Weymouth Rd49211571.238Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091571.143Tr 538/coles MillIr 612Pennsylvania Ave32161572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 557/tuckahoe RdIr 555Dutch Mills Rd31021572.381Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 538/paulsboro-swedesboro	Tr 322	Tr 551 Kemp Hwy	5001	15	7	0.667
Tr 620/center Square Rd.Ir 601Ir 29544631571.048Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091571.143Tr 538/coles MillIr 612Pennsylvania Ave32161572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 557/tuckahoe RdIr 555Dutch Mills Rd31021572.381Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 555/mainlake Rd	Tr 40		4921			
Tr 620 / Center Square RdIr 295Township Line38891571.143Tr 659Ir 633 (Blue BelIr 528 (Coles Mi34091571.143Tr 538/coles MillIr 612Pennsylvania Ave32161572.286Tr 653/swedesboro RdIr 130Ir 607 Tomlin St31651570.762Tr 557/tuckahoe RdIr 555Dutch Mills Rd31021572.381Tr 551 Spur/mickleton JeffersoIr 551Union Rd27931571.143Tr 605 / Woodstown RdIr 608Ir 60226521571.381	Tr 620/center Square Rd.	Tr 601		4463			
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Tr 538/coles Mill Tr 612 Pennsylvania Ave 3216 15 7 2.286 Tr 653/swedesboro Rd Tr 130 Tr 607 Tomlin St 3165 15 7 0.762 Tr 557/tuckahoe Rd Tr 555 Dutch Mills Rd 3102 15 7 2.381 Tr 551 Spur/mickleton Jefferso Tr 551 Union Rd 2793 15 7 1.143 Tr 605 / Woodstown Rd Tr 608 Tr 602 2652 15 7 1.381	Tr 659	Tr 633 (Blue Bel		3409			
Tr 653/swedesboro RdTr 130Tr 607 Tomlin St31651570.762Tr 557/tuckahoe RdTr 555Dutch Mills Rd31021572.381Tr 551 Spur/mickleton JeffersoTr 551Union Rd27931571.143Tr 605 / Woodstown RdTr 608Tr 60226521571.381	Tr 538/coles Mill						
Tr 557/tuckahoe Rd Tr 555 Dutch Mills Rd 3102 15 7 2.381 Tr 551 Spur/mickleton Jefferso Tr 551 Union Rd 2793 15 7 1.143 Tr 605 / Woodstown Rd Tr 608 Tr 602 2652 15 7 1.381							
Tr 551 Spur/mickleton Jefferso Tr 551 Union Rd 2793 15 7 1.143 Tr 605 / Woodstown Rd Tr 608 Tr 602 2652 15 7 1.381							
Tr 605 / Woodstown Rd Tr 608 Tr 602 2652 15 7 1.381							
	Tr 538/swedesboro/franklinvill	Tr 77	Tr 641 Ellis Mil	2052	15	7	0.524

LOCATION	EDOM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
LOCATION Tr 538 / Coles Mill Rd	FROM Tr 659	Blue Bell Rd	2056	<u>COUNT1</u> 15	CLA33 7	0.667
Tr 641	Tr 77	Tr 538	1782	15	7	0.810
Tr 538 / Swedesboro/franklinvi	Tr 45	Tr 581	1782	15	7	1.286
Tr 551 / Auburn Rd	Oldmans Creek	Moravian Church	1632	15	7	0.190
Weymouth Rd	Main Rd	Blue Bell Rd	1052	15	7	0.190
Tr 581 / Commissioner Rd	Springtown-Pine	Gloucester Co Li	969	15	7	0.371
Tr 607 / Tomlin Station Rd	Still Run Creek	Tr 130	909 967	15	7	0.531
	Tr 603	Tr 625	2783	15	8	0.857
Tr 609 (min) Richwood Rd		Tr 322	2783	15	8	0.837
Tr 667/richwood Aura Rd	Jackson Rd Tr 659	Camden Co. Line		15	8	2.286
Winslow Rd.			2353			
Tr 667/richwood Aura Rd	Tr 619 Woodstown	Tr 553 Central G	1561	15	8	0.429
Tr 604 / Franklinville/monroev	Row Rd 611	Pinard Rd	1533	15	8	0.571
Tr 609 (min) Elmer Barnsboro R	Tr 623	Tr 619 Woodstown	1201	15	8	1.333 0.438
Tr 662 (high Hill Rd.)	Center Square Rd.	Tr 295	2128	15	9	2.063
High St.	Tr 607	Tr 45	1421	15	9	0.844
Walters Rd.	Tr 667	Tr 322 Tr 623	1068	15	9	0.844
Tr 622-ewan Rd.	Tr 77	Tr 664	942	15	9	
Union Mill Rd.	Tr 551		880	15	9	0.900
Tr 607 (tomlin Station Rd.)	Tr 551	Tr 322	646	15	9	1.350
Tr 684 (rapaupo Rd.)	Warrington Mill Rd.	Tr 551	593	15	9	1.200
Tr 668 (swedesford Harrsionvil	Nj Turnpike	Tr 614	394	15	9	0.047
Tr 627 (old Jackson Rd.)	Tr 603	Tr 667	329	15	9	1.782
Tr 614 (davidson Rd.)	Russel Mill Rd.	Tr 605	242	15	9	1.500
Tr 669 (meetinghouse Rd.)	Tr 653	Tr 322	140	15	9	1.575
Tr 295 Mp 22.56	Tr 44	Red Bank Ave Ramps	55000	15	11	0.905
Tr 295 Mp 20.58	Mantua Creek	Church St	49079	15	11	2.524
Tr 295 Mp 25.27	Tr 130	Broadway	45999	15	11	0.810
Tr 295 Mp 18.0	Timber Lane	Tr 678	45956	15	11	1.095
Tr 42 Mp 11.52	Tr 544	Camden County Li	86817	15	12	0.857
Tr 55 Mp 54.93	Tr 553	Tr 47	43477	15	12	2.762
Tr 55 Mp 52.0	Tr 322	Tr 553	28351	15	12	2.952
Tr 55 Mp 38.93	S Of U.S 40 Inte	Cumberland Co Li	22544	15	12	0.524
Tr 42 Mp 6.03	Ac Expressway	Tr 651	47290	15	14	0.762
Tr 42 Black Horse Pike M.p	Tr 655	Tr 555	28177	15	14	1.333
Tr 551 Broad St	Tr 644	Tr 534	26944	15	14	0.286
Tr 322 Mp 24.4	Tr 42	Tr 654	24585	15	14	0.286
Tr 42 Mp 1.31	Tr 689	Tr 536 Spur	23726	15	14	2.667

LOCATION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
Tr 45 Mp 26.96	Tr 295	Tr 644	21326	15	14	1.191
Tr 47 Delsea Dr Mp 63.6	Tr 553	Tr 651	20930	15	14	0.095
Tr 553 Evergreen Rd	Cooper St	Barber Rd	20703	15	14	0.190
Tr 47 M.p 62.48	Tr 322 W	Tr 322 E	19193	15	14	0.381
Tr 534 Cooper St	Tr 45	Woodland Ave	19105	15	14	0.190
Tr 544 Clements Br Rd	Tr 42	Tr 41	18886	15	14	0.190
Tr 544 Clements Br Rd	Tr 621	Tr 42	17823	15	14	0.762
Tr 534 Cooper St	Tr 553	Nj Turnpike	15677	15	14	0.667
Tr 130 Mp 24.48	Tr 295	Tr 45	15451	15	14	1.429
Tr 536 Sicklerville Rd	Ac Expressway	Tr 42	15391	15	14	1.619
Delaware St	Tr 295	Myrtle La	14857	15	14	0.524
Tr 322 Mp 11.7	Tr 45	Milford Rd	12615	15	14	2.095
Tr 553 Woodbury/glassboro Rd	Elm St	Mantua Ave	11768	15	14	0.190
Tr 553 Woodbury/glassboro Rd	Mantua Creek	Barnsboro Blackw	11597	15	14	0.238
Tr 45 Mp 28.05	Tr 130	Tr 295	11108	15	14	0.905
Tr 168 Blackhorse Pk Mp 0.3	Camden Co Line	Tr 42	10354	15	14	0.952
Tr 553 Glassboro/woodburyrd	Tr 55	Tylers Mill Rd	10188	15	14	0.381
Tr 322 Mp 21.8	Tr 655	New St	9081	15	14	1.142
Tr 45 Mp 19.7	Tr 667	Tr 626	8591	15	14	1.100
Tr 322 Mp 23.9	Tr 654	Prince Ave	7841	15	14	0.714
Tr 553/Evergreen Ave	Hunter St	Red Bank Ave 644	18234	15	16	0.476
Tr 47 Mp 73.0	Nj Turnpike	Tr 644 Red Cedar	18198	15	16	0.905
Tr 47 Mp 71.4	Tr 534	Tr 665	13230	15	16	1.048
Tr 45 Mp 22.0	Tr 678	Tr 632	13097	15	16	0.810
Tr 41 Hiffulle Rd	Tr 621 Woodbury	Tr 630 Egg Harbo	12151	15	16	1.571
Tr 651 / Green Tree Rd	Tr 42	Tr 630	12132	15	16	1.714
Tr 40 Mp 26.1	Tr 55	Tr 47 Delsea Dri	12099	15	16	0.857
Tr 47 Mp 59.1	Carpenter Ave	Howard St	11667	15	16	1.286
Tr 630	Tr 654	Tr 639	10500	15	16	0.857
Tr 655 / Fries Mill Rd	Tr 42	Tr 654 Glass Bor	10204	15	16	1.524
Tr 651 / Greentree Rd	Tr 553	Pitman Rd	9928	15	16	1.333
Tr 47 / Nj 47 Mp 55.7	Tr 655 Blackwood	Tr 538 Swedesbor	8548	15	16	1.333
Tr 678 / Berkley Rd	Tr 551	Whiskey Mill Rd	7948	15	16	0.952
Tr 653 / Billingsport Rd	Tr 678	Delaware Ave	7231	15	16	1.238
Tr 553 Alt / Broadway	Tr 635	Cyrus Ave	5636	15	16	0.667
Tr 643 / Grove Rd	Tr 660	Tr 656	5549	15	16	1.667
Tr 610/Academy Clayton Rd	Tr 612	Tr 322	5342	15	16	1.429

Logumon	TROM	TVO		COUNTY	FUNCT.	DISTANCE
LOCATION	FROM	ТО	AADT 5215	15	CLA35 16	0.381
Tr 642	Tr 45	Lafayette Ave	4908	15	16	1.048
Tr 610 / Academy Rd	Tr 606 East	Tr 655 Fries Mil				0.520
Tr 653	Harmony Rd	Tr 44	4903	15	16	0.520
Tr 643 / Grove Rd	Tr 640	Tr 642	4825	15	16	1.191
Tr 553 Alt / Broadway	Tr 678	New York Ave	4490	15	16	0.571
Tr 663/TanyardRd	Tr 603	Salina Rd	4271	15	16	
Tr 678 / Harrison Ave	Tr 45	Tr 632	4237	15	16	0.714
Tr 676 / Mantua St	Indiana Ave	Bergen Ave	4162	15	16	0.810
Tr 47 Mp 51.9	Malaga Terr	Cumberland Co. L	3570	15	16	0.190
Tr 551 Spur / Democrat Rd	Tr 680	Birch Dr	2680	15	16	0.429
Tr 536 / Williamstown / New Br	Tr 659 Winslow M	Morgan Rd	2511	15	16	1.429
Tr 689 / New St	Tr 47	Mantua Creek	2205	15	16	0.952
Winslow Rd	Orbane'S Lane	Malaga Rd	2135	15	16	0.524
Tr 551 Spur/ Mickleton/jeffers	Broad St	Tr 653	1076	15	16	1.286
Joseph L Bowe Blvd	Tr 322	Tr 553 Alt	12948	15	17	0.762
Tr 555 / Mainlake Rd	Garden Rd	Cumberland Count	7971	15	17	0.381
Tr 615 / West Blvd	Mill Branch Cree	Cumberland Co Li	5540	15	17	1.048
Mantua Ave	Tr 44	2Nd St	3660	15	17	1.191
Tr 661/madison Ave	Tr 615	Tr 661	2126	15	17	0.429
Tr 608/academyRd	Tr 610	Silver Lake Rd	2108	15	17	0.714
Clayton Ave	Tr 47	Green St.	1631	15	17	0.381
Tr 637/glassboro Rd Academy	Oak St	Wilson Ave	1474	15	17	1.143
Tr 661 / Madison Ave	Tr 40	Catawba Ave	884	15	17	0.857
Tr 680	Friendship Rd.	Tr 551	2790	15	19	0.800
Tr 648-ogden Ave	Tr 551	Nj Turnpike	2690	15	19	1.400
Salina Rd.	Tr 47	Tr 630	2247	15	19	1.200
Friendship Rd.	Harmony Rd.	Tr 667	1985	15	19	1.050
Crafton Ave	Oak Crest Ave	Highland Terrace	694	15	19	0.150
6th St.	Beacon Ave	Billings Ave	575	15	19	0.050
Clonmell Rd.	N. Delaware St.	King St.	423	15	19	0.075
Grandview Ave	Franklin Ave	Mansfield Ave	324	15	19	0.150
Huff Ave	Swedes Borough Rd.	Morton Ave	166	15	19	0.150
Tr 195 Mp 5.84	Interchange 5	Interchange 6	28645	21	1	1.286
Tr 195 Mp 8.0	Interchange 7	Interchange 8	25272	21	1	2.423
Tr 33/130 Mp 66.3	Hawkins Rd	Voelbel Rd	31575	21	2	0.357
Tr 33/130 Mp 64.0	Woodside Rd	Gordon Rd	29431	21	2	0.857
Tr 31 Mp 9.5	Mar Cor Woodsvill	Yard Rd	22389	21	2	1.560

LOCATION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
LOCATION	Somerset Co Line	Ewing St	22011	21	2	1.269
Tr 206 Mp 56.5		Ewing St Church Rd	9786	21		0.857
Tr 29 Mp 13.5	Fiddlers Creek Rd		8901	21		0.837
Tr 29 Mp 16.5	Hunterdon Co Line	Valley Rd		21 21		0.714
Tr 31 Mp 12.2	Hunterdon Co Line	Tr 518	7030	21		0.118
Carter Rd	Rosedale Rd	Cold Soil Rd	8761			0.393
Robbisville-allentown Rd	Monmouth County L	Tr 195 Ramps	7235	21	6	
Robbinsville-allentown Rd	Tr 195 Ramps	Spring Garden Rd	6406	21	6	0.171
Etra Rd	Fieldsher Rd	Mercer County Lin	2915	21	6	0.566
Dutch Neck Rd	Old Trenton Rd	Dutch Neck Rd	876	21	6	0.583
Lambertville-hopewell-rd	West Broad St	Hart St	6024	21	7	0.538
Windsor Rd	Tr 535	South Lane	5243	21	7	1.120
Old York Rd	Windsor-Perrinevi	Mercer County Lin	5159	21	7	0.923
Harbourton Rd	Lambertville-Hope	Mercer County Lin	3956	21	7	0.615
Pennington-rockyhill Rd	Mores Mill Rd	Tr 569	3167	21	7	0.800
Crusher Rd	Tr 654	Tr 569	953	21	7	1.850
Hopewell-wertsville Rd	Minnietown Lane	Mercer County Lan	2147	21	8	0.385
Tr 630 (windsor-perrineville R	Old York Rd.	Imlaystown Rd.	2096	21	8	0.615
Windsor-perrineville Rd	Old York Rd	Tr 630	2096	21	8	0.615
Windsor Rd	Tr 130	Perrineville Rd	1714	21	8	0.154
Perrineville Rd	Tr 641	Voelbel Rd	1495	21	8	1.110
Sharon Rd	Gordon Rd	Monmouth County L	1407	21	8	2.000
Tr 632 / Blackwells Rd.	Tr 640	City Rd.	1812	21	9	1.292
Tr 601	Tr 518	Tr 579	1426	21	9	1.200
Tr 612 / Marshalls Woodsville	Tr 518	Tr 31	1263	21	9	2.154
Pennington-titusville Rd.	Tr 579	Burd Rd.	848	21	9	2.090
Mookes Mill Mount Rose Rd.	Tr 654	Tr 624	748	21	9	1.840
Titus Mill Rd.	Tr 31	Tr 624	653	21	9	1.970
Cleveland Brook Rd.	Tr 569	Mercer Co. Line	426	21	9	1.077
Harbourton/woodsville Rd.	Tr 579	New Rd.	338	21	9	2.000
Bay Berry Rd.	Tr 624	Tr 569	287	21	9	1.723
Aunt Molly Rd.	Tr 518	Tr 624	164	21	9	1.846
Yard Rd.	Burd Rd.	Tr 31	161	21	9	1.108
Tr 295 Mp 67.0	Princeton Ave	Tr 1	78133	21	11	2.229
Tr 295 Mp 71.2	Tr 206	Tr 195	53770	21	11	0.686
Tr 95 Mp 3.2	Tr 31	Scotch Rd	51758	21	11	1.326
Tr 295 Mp 63.0	Kuser Rd.	Mercerville-Edinburg Rd.	43457	21	11	1.440
Tr 195 Mp 4.0	Interchange 4	Interchange 5	30367	21	11	1.457

LOCATION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
Nj Turnpike	Interchange 8	Interchange 8A	96900	21	12	6.114
Nj Turnpike	Burlington Co. Line	Interchange 7A	91400	21	12	3.835
Tr 1 Exp Mp 1.7	Perry St	Olden Ave	51369	21	12	1.040
Tr 1 Expressway Mp 0.5	Tr 29	Broad St.	35000	21	12	0.464
Tr 29 Mp 3.5	Market St	Tr 1	25730	21	12	0.321
Tr 1 Exp Mp 3.4	Whitehead Rd	Brunswick Pk	23766	21	12	1.417
Tr 29 Mp 5.5	Lee Ave	Parkside Ave	11553	21	12	0.500
Tr 1 Mp 6.3	Baker Basin Rd	Tr 295 Ramps	43293	21	12	0.500
Tr 1	Broad St.	State Rd.	32000	21	14	1.330
Tr 31 Mp 5.4	Tr 95	Tr 546	28549	21	14	1.314
Tr 130 Mp 62.0	Tr 195	Tr 526	28469	21	14	1.089
Tr 130 Mp 58.7	Burlington County	Arlington Ave	28403	21	14	0.789
Tr 130 Mp 69.1	Rockybrook Rd	Middlesex County	27129	21	14	1.036
Tr 130 Mp 67.8	Tr 571	Hickory Cor Rd	26264	21	14	0.743
Tr 1 Alt Mp 4.1	Whitehead Rd	Lake Dr	20204	21	14	0.846
Tr 31 Mp 8.5	Franklin Ave	Yard Ave	22080	21	14	0.566
Tr 206 Mp 48.6	Tr 295	Manning Lane	21585	21	14	1.077
Tr 33 Mp 18.0	Middlesex County	Probasco Dr	21505	21	14	0.615
Tr 206 Mp 47.0	Darrah Lane	Eggert Crossing R	20003	21	14	0.107
Tr 571	Tr 526	Rabbit Hill Rd	20333	21	14	1.000
Tr 206 Mp 55.1	Ewing St	Red Hill Rd	18423	21	14	0.291
Tr 206 Mp 52.0	Province Line Rd	Tr 533	17954	21	14	0.231
Tr 571	Tr 1	Cranburry Rd	17883	21	14	1.326
Tr 622	Tr 31	Parkway Ave	17876	21	14	0.750
Tr 524	Tr 533	Tr 195	17750	21	14	0.214
Tr 524	Tr 130	Sunnybrae Rd	17609	21	14	0.679
Tr 571 Princeton Rd	Old Trenton Rd	Tr 130	17589	21	14	1.464
Tr 634	Scotch Rd	Lower Ferry Rd	17470	21	14	0.543
Tr 31 Mp 3.4	Stuart Ave	Theresa St	17230	21	14	0.829
Tr 571 Stockton St	Tr 130	Main St	16694	21	14	0.789
Tr 206 Mp 46.5	Fairfield Ave	Eggerts Crossing	16669	21	14	0.962
Tr 579 Bear Tavern Rd	Tr 95	West Upper Ferry	16550	21	14	0.771
Tr 31 Mp 4.3	Tr 95	Upper Ferry Rd	16131	21	14	0.913
Tr 206 Mp 50.5	Province Line Rd	Tr 569	14915	21	14	1.321
Tr 571/washington Ave	Tr 1	Faculty Rd	14091	21	14	0.929
Tr 29 Mp 10.4	Mountain View Rd	Tr 637	12256	21	14	0.464
Tr 622	E. State Rd	Tr 33	11646	21	14	0.196

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LOCATION	FROM	то	والمحافظ فالمحافظ والمراجر والمحافظ فالمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ	COUNTY		DISTANCE
Tr 29 Mp 11.5	Tr 546	Maddock Rd.	11644	21	14	0.981
Tr 27 Mp 2.2	East Of Mercer Co		11100	21	14	0.308
Tr 620	Tr 533	Tr 295	10193	21	14	0.643
Tr 33 Mp 4.0	Mercerville-Edinb	Quaker Bridge Rd	9570	21	14	0.357
Tr 33 Mp 7.7	Robinsville Rd	Tr 130	9298	21	14	0.393
Tr 31 Mp 0.7	Parkway Ave	Chelten Ave	8121	21	14	0.446
Quaker Bridge Rd	Tr 535	Sloan Ave	18939	21	16	0.923
Whitehorse Rd	Findley Ave	Clinton Ave	15706	21	16	0.964
Stockton St	Ward St	Boro Boundary	13728	21	16	0.794
Hamilton Ave	Broad St	Kuser Rd	13487	21	16	2.097
Clinton Ave	Beatty St	Greenwood Ave	13411	21	16	0.731
Clinton Ave	Tr 533	Park Ave	12277	21	16	1.214
Nottingham Way	Park Ave	Aberfoyl Ave	12101	21	16	0.231
Clarksville Rd	Tr 533	North Post Rd	11071	21	16	2.610
Nottingham Way	Tr 535	Sharps Ave	10880	21	16	0.154
Cedar Lane	New Kirk Ave	Kuser Ave	10737	21	16	0.462
Alexander Rd	Tr 1	North Post Rd	10472	21	16	1.420
Witherspoon St.	Nassau St	Leigh Ave	10425	21	16	0.385
Scotch Rd	Parkway Ave	Fireside Ave	9741	21	16	0.482
Prospect St	State St	Pennington St	9635	21	16	0.821
Tr 535 Edinburgh Rd	Middlesex Co Line	Princeton Rd	9064	21	16	0.821
Millstone Rd	Cranbury Rd	Middlesex Co Line	7595	21	16	0.393
Nottingham Way	Brown Dr	Tr 33	7315	21	16	0.308
Pennington Rd	Blackwells Rd	Federal City Rd	6329	21	16	0.994
North Post Rd	Clarksville Rd	Wood Meadow La	5919	21	16	0.440
Tr 539 Main St	East Ward St	Stockton St	4813	21	16	0.126
Yardville-allentown Rd	Doctors Creek	Mercer County Lin	3873	21	16	0.385
Providence Line Rd	Tr 206	Tr 583	3865	21	16	0.748
North Post Rd	Village Rd	Hollow Rd	3806	21	16	0.280
Tr 633 Monmouth St	Woodside Ave	Manlove Ave	3750	21	16	0.607
Grovers Mill Rd	Hightstown Pl	Cranbury Rd	3413	21	16	0.743
Tr 175	Tr 29	Upper River Rd	1887	21	16	0.475
Snowden La	Abernathy Rd	Herrtown Rd	1729	21	16	1.006
Herron Town Rd	Snoden La	River Rd	1558	21	16	0.743
Sullivan Rd	Lower Ferry Rd	Tr 29	9424	21	10	0.962
Eggerts Crossing Rd	Tr 636	Bunker Hill Rd	8576	21	17	0.577
Federal City Rd	Tr 640	Tr 31	8087	21	17	0.423

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LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Village Rd	Tr 533	North Post Rd	7596	21	17	1.850
Quaker Bridge Rd	Tr 583	Tr 533	7233	21	17	0.800
Ward Ave	Tr 535	Tr 606	6456	21	17	1.110
Paxson Ave	Tr 533	Tr 618	6152	21	17	1.190
Cranbury Rd	Rabbit Hill Rd	Mercer County Lin	4512	21	17	0.462
Sharon Rd	Tr 33/130	Sharon Mews Rd	3059	21	17	0.385
Tr 647 (nursery Rd.)	Tr 611	Tr 579	2000	21	17	1.620
Cypress Lane	Tr 533	Tr 606	1605	21	17	1.420
ReedRd	Tr 546	Tr 95	1317	21	17	1.230
Wilburtha Rd	Tr 29	Tr 634	1297	21	17	1.230
Spring Garden Rd	Tr 526	Sharon Rd	425	21	17	1.170
Bradford Ave	Arena Dr.	Damon Ave	2679	21	19	0.385
Hibben Rd.	Stockton Ave	Mercer St.	1268	21	19	0.173
Green St.	West Delaware Ave	Broener Place	1171	21	19	0.173
Bayard St.	Chestnut Ave	Whittaker Ave	958	21	19	0.077
Academy Ave	South Main Ave	Crawley Ave	939	21	19	0.067
Park Ave	Nottingham Way	Maple Shade Ave	840	21	19	0.154
Indiana Ave	Spruce St.	Pine St.	825	21	19	0.115
Plum St	Michigan Ave	Indiana Ave	685	21	19	0.038
Fogarty Dr.	Regina Ave	Collins Ave	439	21	19	0.058
Nassau St.	Paul Ave	Phillips Ave	432	21	19	0.077
Knowles St.	Tr 31	W. Franklin Ave	386	21	19	0.462
Bloomfield Ave	Clearfield Ave	Columbia Ave	300	21	19	0.167
S. Stanworth Ave	E. Of Tr 206	Stanworth Dr.	276	21	19	0.077
Tr 309	Sunshine Dr	West Pumping Sta	33915	17	2	0.553
Tr 309 / West End Blvd.	Rich Hill Rd.	Tollgate Rd.	38817	17	2	0.316
Tr 309	Cathill Rd	Lawn Ave	36085	17	2	0.575
Tr 309	Zion Hill Rd	Reservior Rd	33289	17	2	0.315
Tr 309	Mine Rd	Springfield St	32231	17	2	0.601
Tr 309	Quaker Way	Tollgate Rd	33423	17	2	0.674
Tr 309	Forrest Rd	Bethlehem Rd/Tr3	29104	17	2	0.383
Pa 9 Tpke Ne Ext.	Interchange 32	Lehigh County Line	27809	17	2	1.610
Tr 663	Allentown Rd	Weiss Rd	19428	17	2	0.595
Tr 313	Stump Rd	King Rd	18560	17	2	0.698
Tr 202	Bycroft Rd	Tr 263	20647	17	2	0.672
Tr 663	Commerce Dr	Portzer Rd	17576	17	2	0.642
Tr 202	Reeder Mill Rd	Shire Rd	15921	17	2	0.639

					FUNCT.	
LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Tr 313 Dublin Pike	Old Bethlehem Rd	Schott Rd	14050	17	2	0.481
Tr 313-dublin Pike	Sterner Rd	Tr 563	11662	17	2	0.480
Main St	Swamp Rd	Sawmill Rd	13533	17	2	0.704
Tr 611 Easton Rd	South Park Rd	Foellner La	12797	17	2	0.571
Tr 313 Broad St/doylestown	Tr 212	3Rd St	12075	17	2	0.268
Tr 663	Saw Mill Rd	Brinkman Rd	11807	17	22	0.755
Tr 413	Brownsburg Rd	Tr 232	11616	17	2	0.450
Tr 611	Rolling Hills Rd	Quarry Rd	11076	17	2	0.722
Tr 413	Upper Mouintain	Tr 263	8591	17	2	0.440
Tr 202	Del. River Bridge	Nj State Line	7955	17	2	0.430
Tr 611 Easton Rd	Frogtown Rd	Harrow Rd	7213	17	2	0.741
Tr 413	Paist Rd	Mechanicsville Rd	6850	17	2	0.401
Tr 532	Del. River Bridge	Nj State Line	6394	17	2	0.482
Tr 611 River Rd	Tr 32	Island Dr	5960	17	2	0.483
Tr 611	Spring Hill Rd	Maple Rd	5055	17	2	0.279
Tr 611	Marienstein Rd	Laurel Hill Rd	4703	17	2	0.496
Tr 413	Danboro Pt Pleas	Bradshaw Rd	6298	17	2	0.334
Tr 263	Del. River Bridge	Nj State Line	4202	17	2	0.070
Tr 611 Easton Rd	Laurel Hill Rd	Fairhill Rd	4191	17	2	0.672
Tr 413	Dark Hollow Rd	Cabin Run	3981	17	2	0.484
Lower York Rd	Sugan Rd	Old York Rd	13167	17	6	0.598
Bethlehem Pike	Keystone Dr	Schoolhouse Rd	11938	17	6	0.582
Tr 113	Bethlehem Pike	Keystone Dr	8867	17	6	0.365
Tr 113 Souderton Rd	Tr 313	Old Bethlehem Rd	6688	17	6	0.354
Swamp Rd	Tr 232	Penns Park Rd	6082	17	6	0.700
Tr 412-harrow Rd	Helen Rd	Tr 563 Mountain	6003	17	6	0.611
Tr 563-ridge Rd	Ridge Valley Rd	Lonely Rd	5929	17	6	0.496
Tr 212	Raub Rd	E Pumping Statio	5791	17	6	0.578
Tr 152 Walnut St	Orchard Rd	Perkasie Rd	5189	17	6	0.381
Tr 32-river Road	Brownsburg Rd	Cedar Glen Rd	5286	17	6	0.408
Tr 152	Skunk Hollow Rd	Upper Stump Rd	5002	17	6	0.566
Tr 32	Tr 232	Aquetong Rd	4971	17	6	0.534
Tr 563 Ridge Rd	Schwenk Mill Rd	Tr 313 Dublin Pi	4763	17	6	0.376
Tr 532	Wrightstown Rd	Old Dolingtin Rd	4296	17	6	0.368
Tr 412 Hellertown Rd	Highpoint Rd	Northampton Cb L	4212	17	6	0.453
Swamp Rd	Dark Hollow Rd	Mozart Rd	4168	17	6	0.687
Tr 563 Mt. View Dr	Tr 313 (Dublin P	Sterner Rd	3780	17	6	0.624

LOCUTION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
LOCATION Tr 32-river Rd	Hill Rd	Jugtown Hill Rd	3077	17	<u>CLASS</u> 6	0.455
Tr 563-mountain View Dr	Tr 412-Harrow Rd	Lake Nockamixon	3089	17	6	0.623
Tr 32 River Rd		Trails End La	2831	17	6	0.593
	Bridgeton Hill R		2051 2451	17	6	0.593
Tr 32 River Rd	Cuttalossa Rd Rattlesnake Rd	Greenhill Rd Durham Furnace R	1984		6	0.008
Tr 212 Durham Rd			2033	17	6	0.389
Tr 32-river Rd	Tr611-Easton Rd	Narrow Hills Rd			1	0.546
Tr 32 River Road	Geigel Hill Rd	Tinicum Creek Rd	1998		6	0.346
Tr 32	Smithtown Rd	Dark Hollow Rd	1657	17	6	
Tr 113 Bedminster Rd	Tr 313	Bucks Rd	4003	17	7	0.450
5th St	Cedar View Dr	Tr 313 (Dublin P	3790		7	0.410
Tr 232	Williams Ave	Skoures La	3749	17	7	0.597
Delaware Rd	Tr 611 Easton Rd	Delaware River C	3229	17	7	0.192
Tr 232	Great Oaks Dr	Pidcock Creek Rd	3386	17	7	0.458
Tr 212 Bethlehem Pike	Slifer Valley Rd	Pleasant View Rd	2857	17	7	0.443
Richlandtown Pike	Ebert Rd	Nemeth Rd	2753		7	0.422
Ridge Road	Butler La	Tr 313 (Dublin P	2750		7	0.462
Aquetong Rd	Upper Mountain R	Tr 202	1041	17	7	0.591
Tr 232	Aquetong Rd	Cornwell Dr	2407	17	7	0.485
Marienstein Rd	Tr 611 Easton Rd	Lonely Cottage D	2254		7	0.658
Tr 113	Rolling Mills Rd	Spruce Mill Rd	2029	17	7	0.483
Aquetong Rd	Covered Bridge R	Old Windy Bush R	1643		7	0.692
Ridge Valley Rd	Game Land Rd	Tower Rd	1580		7	0.587
South Park Rd	Fink Dr	Tr 611 (Easton R	1468		7	0.465
Church Hill Rd	Frogtown Rd	Tr 611 Easton Rd	1421	17	7	0.212
Greenhill Rd	Sugan Rd	River Rd	1130		7	0.681
Carversville Wismer Rd	Tollgate Rd	Ferry Rd	711	17	7	0.590
Old Bethlehem Rd	Dogwood Lane	Mountain View Dr	1604	17	7	0.735
Mechanicsville Rd	Holkong Rd	Oak Dr	5914		8	0.649
Diamond St	Schoolhouse Rd	Orchard Rd	4309	17	8	0.638
Forrest Grove Rd	Lower Mountain R	Creamery Rd	3813	17	8	0.652
Old Bethlehem Pike	Blue Church Rd	Trolley Bridge R	3344	17	8	0.514
Dublin Maple Ave	Tr 313	Frontier Rd	2674	17	8	0.754
Pineville Rd	Tr 232	Buckmanville Rd	2211	17	8	0.645
Allentown Rd	Grant Rd	Limeport Rd	2504	17	8	0.570
Dark Hollow Rd	Carversville Wis	Schlentz Hill Rd	2133	17	8	0.654
Danboro Point Pleasant Pike	Ferry Rd	Moyer Rd	2117	17	8	0.738
Thatcher Rd	Tr 313 Doylestow	Union Rd	1680	17	8	0.756

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LOCATION	FROM	ТО	Construction of the second states of the second sta	COUNTY		DISTANCE
Trumbauersville Rd	Esten Rd	Weistel Rd	1744	17	8	0.574
Wrightstown Rd	Highland Rd	Cooper Rd	1496	17	8	0.548
State Rd	Quarry Rd	Richlandtown Pik	1339	17	8	0.662
Deep Run Rd	Log Cabin Rd	Twin Oaks Dr	944	17	8	0.538
New Galena Rd	Tr 152	Callowhill Rd	846	17	8	0.671
California Rd	Richlandtown Pik	Groversville Rd	832	17	8	0.334
Gallows Hill Rd	Hunter Rd	Tr 412 Harrow Rd	814	17	8	0.631
Geigel Hill Rd	Upper Tinicum Ch	Tr 32 River Rdr	712	17	8	0.651
Curly Hill Rd	Old Easton Rd	Valley Park Rd	649	17	8	0.650
Blue School Rd	Old Bethlehem Rd	Schwenk Mill Rd	370	17	8	0.341
Pidcock Creek Rd	Tr 232	Covered Bridge R	266	17	8	0.660
Green St.	Tr 113	Park Ave	2080	17	9	0.237
Three Mile Run Rd	Rockhill Rd N	Tunnel Rd	1682	17	9	0.777
Meeting House Rd	Church Rd	Broad St East	993	17	9	0.284
Creamery Rd	Allentown Rd	Trumbauersville	635	17	9	0.426
Walnut St	Cherry Rd	Main St N	427	17	9	0.284
Elm St N	Tr 212	Prospect Ave	464	17	9	0.237
High St.	Tr 313	Quail Dr.	328	17	9	0.284
Smith Rd.	Tr 413	Forrest Grove Rd.	295	17	9	1.477
Edgewood Rd	Fern Rd	Delaware Rd	289	17	9	0.284
Tr 276	Interchange 27	Interchange 28	69116	17	11	5.114
Tr 95	Tr 413	Tr 1 Bus.	51722	17	11	3.476
Tr 95	Tr 332	Taylorsville Rd	50961	17	11	1.963
Tr 276	Interchange 28	Interchange 29	33376	17	11	6.100
Tr 276	Interchange 29	Nj State Line	31718	17	11	1.326
Tr 1 Exp	Highland Ave	Bridge & Walnut	48813	17	12	0.379
Tr 1 Exp	Old Lincoln Hwy	Tr 95	42662	17	12	1.259
Tr 1 Exp	Oxford Valley Rd	Stony Hill Rd	41679	17	12	1.664
Tr 13	Tyburn Rd	Newbold Rd	26955	17	12	0.195
Tr 611 Bypass	Tr 313	Broad St	22898	17	12	0.852
Tr 309	Church Rd	Swartley Rd	41265	17	14	0.540
Tr 1	Delaware River Bridge	Nj State Line	41400	17	14	0.685
Tr 132	Tr 1	Richlieu Rd	37717	17	14	0.516
Tr 132	Tr 13	High Ave	36680	17	14	0.529
Tr 132	Tr 532	Lindberg St	34860	17	14	0.482
Tr 13	Tr 276	Airport Rd	33700	17	14	0.462
Tr 611	Main St South	Edison Furlong R	32238	17	14	0.593

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LOCATION	FROM			COUNTY		DISTANCE
Tr 532	Franklin Ave	County Line Rd	28860	17	14	0.491
Tr 413	Spruce St	Latches La	27256	17	14	0.528
New Falls Rd	Bristol Oxford V	Tr 413	26680	17	14	0.598
Tr 263	Tr 132	Roberts Rd	25985	17	14	0.525
Tr 202	Tr 611	Burpee Rd	22359	17	14	0.440
Tr 1 Bus	Tr 95	Woodbourne Rd	22099	17	14	0.538
Tr 232	Knowles Ave	Rozel Ave	22041	17	14	0.607
Tr 413 Newtown Pike	Doublewoods Rd	Tollgate Rd	21803	17	14	0.150
Tr 263	Old York Rd	Mill Rd	18477	17	14	0.676
Tr 313	Ferry Rd	Neill Rd	19417	17	14	0.556
Tr 332	Penns Tr	Old Newtown–Yardley	20851	17	14	0.593
Tr 202	County Line Rd	School House Rd	18375	17	14	0.703
Tr 532	Neshaminy Creek	Tr 413 Newtown By	18272	17	14	0.378
Tr 132	Tr 611	Spruce Rd	17918	17	14	0.402
Tr 13	Bent Rd	Tr 132	16659	17	14	0.242
Tr 532 Buck Rd	Bustleton Pike	Old Bristol Rd	16017	17	14	0.514
Tr 1 Bus.	Oxford Valley Rd	Spencer Ave	16000	17	14	0.358
Tr 13	Franklin Ave	Tr 413	15583	17	14	0.525
Tr 202	Burnt House Hill Rd.	Tr 413	15468	17	14	0.422
Trenton Ave	Big Oak Rd	Pennsylvania Ave	17054	17	14	0.599
Old Lincoln Hwy	Tr 1	Rising Sun Ave	15124	17	14	0.429
Tr 232 Second Street Pike	New Rd	Bustleton Pike	15094	17	14	0.361
Tr 413 New Rodgers Rd	Lincoln Hwy	Highland Park Pl	17795	17	14	0.628
Tr 611 Main St	Tr 611 Byp	Sauerman Rd	13365	17	14	0.302
New Falls Rd	Levittown Pkwy	Parson Pl	13545	17	14	0.612
Tr 332 Jacksonville Rd	Tr 132	Kirk Rd	11945	17	14	0.590
Tr 413	Tr 413 Byp	Maple Lane	11623	17	14	0.347
Tyburn Rd	New Falls Rd	Tr 13	10378	17	14	0.635
Tr 532	Twist Dr	Rocksville Rd	9465	17	14	0.670
Tr 322 Newtown Yardley Rd/afto	Amain St	Newtown Yardley Rd	7737	17	14	0.471
Tr 152	Fairview Cir	Cornwall Drive	7268	17	14	0.568
Tr 332	Mirror Lake Rd	Langhorne Yardel	5282	17	14	0.536
Tr 32 River Rd	Richard Rd	Bedford Pl	5167	17	14	0.619
Tr 32	1-95 Overpass	Florence Ave	3146	17	14	0.450
Tr 213 Bridgetown Pk	Westfield Rd	Bristol Rd	19402	17	16	0.631
Levittown Pkwy	Hood Blvd	Trenton Rd	20023	17	16	0.001
Woodbourne Rd	Lincoln Hwy	Trenton Rd	17835	17	10	0.556

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LOCATION	FROM	то	AADT	COUNTY		DISTANCE
Bristol Rd	Galloway Rd	Neshaminy Blvd	17591	17	16	0.626
Oxford Valley Rd	New Falls Rd	Red Rose Way	16879	17	16	0.721
Tr 513	Byberry Rdd	Galloway Rd	16355	17	16	0.411
Trenton Rd	Woodbourne Rd	Forsythia Dr	15592	17	16	0.557
State Rd.	Bellevue Ave	Tr 413	13991	17	16	0.211
Bridge St	Harding Ave	Pennsylvania Ave	13424	17	16	0.375
Bristol Rd	Tr 232	Davisville Rd	13408	17	16	0.326
County Line Rd	Tr 532	Winding Lane	13293	17	16	0.626
Trenton Rd	Levittown Norway	Tyburn Rd	12572	17	16	0.506
Tr 232	Tr 332	Twining Ford Rd	12223	17	16	0.482
County Line Rd	Upper State Rd	Stump Rd	14401	17	16	0.673
County Line Rd	Kansas Rd	Park Rd	11892	17	16	0.658
Levittown Pkwy	Lakeside Dr	Pinewood Dr	11880	17	16	0.734
Tr 152 Main St North	Hamilton St	Hellberg Ave	11444	17	16	0.619
Bustleton Pike	Bristol Rd	Chinquapin Rd	11243	17	16	0.605
Bensalem Blvd	Tr 13	Bridgewater Rd	10973	17	16	0.620
Tr 213 Bridgetown Pk	Hawthorne Ave	Old Lincoln Hwy	10960	17	16	0.503
State Rd	Station Ave	Street Rd	10450	17	16	0.388
Bristol Rd	Tr 263	Meetinghouse Rd	10335	17	16	0.586
Bristol Pike	Tr 13	Mill Creek	10268	17	16	0.326
Taylorsville Rd	Tr 95	Mckinley Ave	9779	17	16	0.439
Bustleton Pike	Upper Holland Rd	Tanyard Rd	9921	17	16	0.452
Tr 532	Tr 413	Linton Hill Rd	7805	17	16	0.428
Edgely Ave	Tr 13	Headly Ave	9166	17	16	0.374
Pine Grove Rd	Arborlea Ave	Trenton Ave	8368	17	16	0.391
Tr 513 (hulmeville Rd)	Tr 13	Cornwells Ave	8161	17	16	0.514
Bristol Pike	Mill Creek Rd	Tyburn Rd	7728	17	16	0.629
Penns Trail	Washington Ave	Tr 332 Byp	7678	17	16	0.568
Winchester Ave	Tr 413(Newton Pk	Brendwood Dr	6933	17	16	0.269
Tyburn Road	New Ford Mill Rd	Penn Ave South	3936	17	16	0.667
Langhorne Yardley Rd	Mirror Lake Rd	Newton Yardley I	3573	17	16	0.671
Pennsylvania Ave	Tyburn Rd	Bristol Pike	3468	17	16	0.162
Holland Rd	Tr 332 Richboro	Lower Holland Rd	10925	17	17	0.737
Hood Blvd	Fairhurst Rs	New Falls Rd	10263	17	17	0.519
Almhouse Rd	Sunrise Way	Land Rd	9479	17	17	0.655
Bath Rd	Tr 413	Norwy Ave	9363	17	17	0.035
Mill Creek Rd.	Levittown Pkwy.	Poet Ln.	9038	17	17	0.237

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LOCATION	FROM	TO Olds Blvd	AADT 6898	COUNTY 17	CLA55 17	0.488
Hood Blvd	Levittown Pkwy		6808	17	17	0.468
New Ford Mill Rd	Bordentown Rd	Steel Rd			1	0.448
Big Oak Rd	Oxford Valley Rd	Stoney Hill	5955	17 17	17	0.473
Trevose Rd	Mill Rd	Lukens Rd	5798		17	
Big Oak Rd	Tr13-Pine Grove	MakefieldR	5785	17	17	0.540
Edison-furlong Rd	Woodcrest La	Pebble Hill Rd	5101	17	17	0.398
Neshaminy St	Bellevue Ave	Walnut St	4646	17	17	0.702
Stoney Hill Rd	Big Oak Rd	Oxford Valley Rd	5320	17	17	0.723
Dolington Rd	Quarry Commons D	Knoll Dr	3145	17	17	0.495
Fallsington-tullytown Rd	Lakeside Dr	Mill Creek Pkwy	4763	17	17	0.660
Old Dublin Pike	Tr 313 Swamp Rd	Pine Run Rd	3684	17	17	0.301
Lower Morrisville Rd	Tyburn Rd	Tr 13	2142	17	17	0.404
Hulmeville Ave	Gillam Ave	Richardson Ave	1046	17	17	0.583
Kansas Rd	Street Rd	Wodock La	2744	17	19	0.331
Rocksville Rd	Tr 532	Twist Dr	2597	17	19	0.284
Jefferson Ave	Garden St	Beaver Rd	2562	17	19	0.189
Mayflower Dr.	Don Allen Dr	Declaration Dr.	1998	17	19	0.189
Richardson Ave	Bellevue Ave	Tr 413	1960	17	19	0.142
Harding Ave North	Prospect Ave	Bridge Ave	1255	17	19	0.284
Penn St	State St	Lincoln Ave	663	17	19	0.284
Fir Dr	Misty Meadows Rd	Tr 332	521	17	19	0.331
Wrenwood Way	Oriole Rd	Tr 413	395	17	19	0.331
Beulah Rd	Tr 202	Blythewood Rd	370	17	19	0.331
Sandy Run Rd	Tr 332	Dickinson Dr	312	17	19	0.284
Walters Rd	New Galena	Railroad Ave	308	17	19	0.805
Tr 76	Interchange 22	Interchange 23	30425	29	1	10.400
Tr 1	Old Baltimore Pike	Delaware Co Line	36007	29	2	0.619
Tr 1	Bayard Rd	GreenwoodRd	33824	29	2	0.619
Tr 1	Tr 52	Savorys Mill Rd	25902	29	2	0.734
Tr 1	Tr 41	Newark Rd	23843	29	2	1.621
Tr 1	Newark Rd	Tr 82	23496	29	2	2.284
Tr 30	Tr 10	Compass Rd	20330	29	2	0.331
Tr 100	BeelerRd	Kutz Rd	18341	29	2	0.447
Tr 41	Glen Willow Rd.	3Rd Ave	19203	29		0.531
Tr 100	Tr 23	Cadmus Rd	18353	29		0.345
Tr 322	Valley Creek Rd	Skelp Level Rd	17016	29		0.506
Tr 30 Byp	Airport Rd	Tr 30 Bus	16247	29		2.784

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LOCATION	FROM	ТО	AADT	COUNTY	A reason of the second s	DISTANCE
Tr 322	Little Washingto	Guthriesville Rd	15250	29	2	0.436
Tr 322	Buck Rd	Corner Ketch Rd	15418	29	2	0.681
Tr 41	Kaolin Rd	Sunny Dell Rd	15571	29	2	0.695
Tr 41	Tr 372	Glen Run Rd	14768	29	2	0.598
Tr 41	Friendship Churc	Highland Rd	14576	29	2	0.752
Tr 30	Newlin Lane	Lancaster Co Lin	15589	29	2	0.358
Tr 41	Faggs Manor Rd	Tr 10	14356	29	2	0.628
Tr 41	Tr 10	Kauffman Rd	14927	29	2	0.798
Tr 1	Tr 796	Tr 841	13611	29	2	2.119
Tr 41	Tr 1	Howell Moore Rd.	13266	29	2	0.448
Tr 100	Tr 401	Horseshoe Trail	13284	29	2	0.315
Tr 41	Tr 796	Tr 926	13770	29	2	0.357
Tr 41	Mosquito Rd.	Tr 841	13430	29	2	0.582
Tr 100	Birch Run Rd	Prizer Rd	12741	29	2	0.534
Tr 41	Zook Rd	Lancaster Co Lin	12819	29	2	0.355
Tr 41	Newark Rd	Penn Green	13022	29	2	0.458
Tr 100	Fellowship R	Blackhorse Rd	13072	29	2	0.374
Tr 41	New Baltimore Pi	Tr 1	12743	29	2	0.225
Tr 41	Walter Rd.	White Horse School Rd.	13852	29	2	0.397
Tr 1	Tr 10	Tr 896	14373	29	2	2.613
Tr 322	Culbertsson Run	Swinehardt Rd	11846	29	2	0.402
Tr 322	Tr 82	Icedale Rd	11619	29	2	0.730
Limestone Rd	Del State Ln	Southwood Rd	10983	29	2	0.300
Tr 41	Kaolin Rd	Del State Line	11509	29	2	0.640
Tr 322	Tr 10	Broad St	10132	29	2	0.451
Tr 322	Chestnut Tree Rd	Kupola Rd	10636	29	2	0.640
Tr 322	Cambridge Rd	Poplar St	9765	29	2	0.745
Tr 1	W Ridge Rd	Md State Line	8018	29	2	0.294
Tr 322	Mill Rd	Lancaster Co Lin	7290	29	2	0.304
Tr 30 Bus	Octoraro	Old Wilmington	6145	29	2	0.425
Tr 23	Sunrise Dr	Talbot Dr	12264	29	6	0.456
Tr 724	Anderson Rd	Wells Rd	11852	29	6	0.380
Tr 23	Daisy Point Rd	Tr 100	10754		6	0.406
Tr 82	Balt Pike	Tr 1 Byp	9716	29	6	0.567
Tr 10	Sadsbury Rd	Octorado Rd	8732	29	6	0.611
Tr 10	White Birch Ave	Tr 1 Byp	8402	29	6	0.390
Tr 10	Tr 1 Byp	Reedville Rd	7901	29	6	0.719

LOCATION	FROM	то	AADT	COUNTY	FUNCT. CLASS	DISTANCE
Tr 10	Reservoir Rd	Lane Co Line	7593	29	6	0.244
Pa 23 Ridge	Grove Rd	Warwick Furnace	7469	29	6	0.456
Tr 10	Tr 896	Tr 926	7733	29	6	0.493
Tr 896	Tr 796	Oxford Rd	7032	29	6	0.612
Tr 23	Stanley Lee Dr	Warwick Rd	7002	29	6	0.540
Tr 896	Morgan Hollow Rd	Elbow Ln	6752	29	6	0.755
Tr 10	Cambridge Rd	Walnut Rd W	6508	29	6	0.425
Kaolin Rd.	Hillendale Rd.	Marshall Bridge	6365	29	6	0.258
Tr 23	Tr 100	Cook Rd	6257	29	6	0.558
Tr 82	ReecevilleRd	Beaver Creek Rd	6202	29	6	0.682
Tr 10	Street Rd	Faggs Manor-High	6043	29	6	0.667
Tr 23	Ellis Woods Rd	Bethel Rd	5859	29	6	0.397
Tr 82	Tr 322	Germont Hollow R	5732	29	6	0.726
Tr 10	Boot Jack Gumtre	FreemanRd	5434	1	6	0.289
Tr 896	Tr 841	Den Rd	5498		6	0.785
Tr 10	Tr 30	Compass Rd	5254		6	0.584
Tr 23	Frog Hollow Rd	Buckwater Rd	5127	29	6	0.469
Tr 82	Berks Co Line	Tr 23	4331	29	6	0.499
Tr 82	Indian Run Rd	Fairview Rd	4147	29	6	0.729
Tr 10	Tr 372	Beale Dr.	5152	29	6	0.647
Tr 82	Pa Tpke	Chestnut Tree Rd	3882	29	6	0.615
Tr 23	Berks Co Ln	Tr 82	4040		6	0.514
Tr 82	Tr 841	Highland Dairy R	3634		6	0.356
Tr 82	Strasburg Rd	Crest Pl	3357	29	6	0.649
Tr 82	Conestoga Rd	Lamney Rd	3245	29	6	0.647
Tr 82	Green Valley Rd	Northwest Rd	2884	29	6	0.448
Tr 896	Pusey Mill Rd	Tr 10	2783		6	0.513
Tr 896	Hood Rd	Baltimore Pike	2820	29	6	0.378
Tr 372	Rr Overpass	Lane Co Line	2214		6	0.561
Tr 896	Homeville Rd	Chester Co Line	1633	29	6	0.672
Tr 896	Janney Rd	Street Rd	1892	29	6	0.715
Tr 162	Highland Rd	Bradford Ave	7772	29	7	0.705
Tr 926	Denton Hollow Rd	Brintons Mill	7797	29	7	0.561
Strasburg Rd	Tr 162	Broad Run Rd	6400	29	7	0.423
Lincoln Ave	Chase St	Wheeler Ave	4452	29	7	0.302
Tr 272 (chrome Calvert Rd)	Greenhouse Rd	Md State Line	5699	29	. 7	0.123
Tr 401	Berks Co. Line	Tr 82	4657	29	7	0.563

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LOCATION	FROM	то	AADT	COUNTY		DISTANCE
Tr 401	Tr 100	Blackhorse Rd	4327	29	7	0.732
Strasburg Rd	Tr 372	Wagner Lyons Rd	4041	29	7	0.585
Tr 472	8Th St	Fulton Rd	4087	29	7	0.496
Tr 272 (christine Rd)	Glenroy Rd	Lanc Co Line	3498	29	7	0.479
Tr 340	Tr 10	Lanc Co Line	3404	29	7	0.186
Tr 472	Street Rd	Lanc Co Line	3943	29	7	0.477
Buck Run Rd	Beaver Dam Rd	Spring Dell Rd	3000	29	7	0.650
Tr 401	Hedge Rd	Tr 82	2135	29	7	0.396
Tr 162	Tr 82	Scotts Rd	2190	29	7	0.648
Tr 282	Marshall Rd	Brandywine Twp L	1783	29	7	0.646
Tr 926	Tr 841	Mosquito Rd	1626	29	7	0.724
Tr 100	Delaware St. Line	Cossard Rd.	1985	29	7	0.488
Cedarville Rd	Miller Rd	Spiece Rd	1182	29	7	0.662
Tr 282	Church Rd	Tr 82	947	29	7	0.646
Tr 82	Marshall Bridge	Del State Line	736	29	7	0.627
Tr 796 Kelton-jennersville Rd	New Baltimore Pi	Lewis Rd	7150	29	8	0.422
Little Conestoga Rd	Shoreline Dr	Pa Tpke	5219	29	8	0.729
White Horse Rd	Valley Park Rd	Ashenfelter Rd	4396	29	8	1.008
Barnsley-chrome Rd	New Balt Pike	Twin House Rd	3419	29	8	0.594
Tr 841	Oxford-Lewisvill	Md State Line	2556	29	8	0.662
Pughtown Rd	Tr 100	Bertolet School	2564	29	8	0.327
Old Wilmington Rd	Tr 30 Byp	Skiles Rd	2702	29	8	0.713
Harmonyville Rd	Laurelwood Rd	Cherry La	1983	29	8	0.562
Old Kennett Rd	Ashland Dr	Del State Line	1922	29	8	0.497
Oxford Rd	Tr 896	Hutchinson Rd	1805	29	8	0.233
Northbrook Rd	Tr 842	Beagle Rd	1444	29	8	0.651
Tr 842	Brandywine Creek	Allerton Rd	1711	29	8	0.361
St Mathews Rd	Tr 401	Miller Rd	1256	29	8	0.697
Bethel Rd	Tr 724	Stony Run Rd	1292	29	8	0.693
Fairview Rd	Tr 82	Indiantown Rd	1243	29	8	0.641
Tr 842	Tr 82	Newark Rd	1209	29	8	0.649
Chestnut Tree Rd	Rock Church Rd	Five Point Rd	1052	29	8	0.657
Tr 345–Pine Swamp Rd	Laurel Rd	Berks Co Line	1012	29	8	0.760
Hopewell Rd	Tr 1	Tr 472	1020	29	8	0.443
Tr 926	Faggs Manor Rd	Fernwood Rd	1556	29	8	0.250
Old Stottsville Rd	Boro Line Rd	Highland Rd	761	29	8	0.406
Brandywine Creek Rd	Tr 162	Valley Green Rd	845	29	8	1.326

					FUNCT.	
LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Suplee Rd	Pleasant View Rd	Dampman Hill Rd	685	29	8	0.683
Forge Rd	Street Rd	Lanc Co Line	722		8	0.675
Penn Green Rd.	Auburn Dr.	Laurel Bridge Rd.	926		8	0.754
Fairview Rd	Hollow Rd	Horseshoe Trail	642		8	0.565
Park Rd	Pa Tpk	Tr 100	2865	29	9	0.568
Catfish La	Tr 724	Cedarville Rd	1570		9	0.663
Osborne Rd	Tr 322	Fisherville Rd	1456		9	0.473
Woodchuck Way	Tr 1	Turkey Hollow Rd	925		9	0.426
Kemp Rd	Hanover St	Kein St	1045		9	0.568
Summit Ave	Willow St	Tr 841	1060		9	0.189
Morgantown Rd	Talbotville Rd	Lancaster Co Lin	1029		9	0.568
Goosetown Rd	Woodward Rd	18Th Ave	682	29	9	0.947
Ridge Ave	Tr 41	Price St	680	29	9	0.095
Polo Rd.	Church Rd.	Newark Rd.	573	29	9	0.758
Brick Lane	Tr 23	Tr 401	506	29	9	0.568
Frank Rd	Tr 322	Shenton Rd	442	29	9	0.417
Old Newport Wilmington Rd	Tr 372	Strasburg Rd	405	29	9	0.322
Cope Rd	Baltimore Pike	Perrone La	651	29	9	0.379
Horseshoe Trail	Tr 113	Lower Pine Creek	244	29	9	0.853
Beaver Dam Rd	Cambridge Rd	Lancaster Co Lin	647	29	9	0.095
Reisler Rd	5Th St	Tr 472	158	29	9	0.852
Tr 76	Interchange 23	Interchange 24	32400	29	11	14.300
Tr 202	Tr 252 Wb On-Ramp	Contention Ln.	77518	29	12	0.426
Tr 202	Tredyffrin Twp. Line	Cedar Hollow Rd.	54840	29	12	0.612
Tr 202	Swedesford Rd.	Church Rd.	44499		12	0.524
Tr 30 Bypass	Creek Rd	Tr 322	41293		12	0.752
Tr 202	King Rd	Railroad Tracks	37317	29	12	0.664
Tr 100 Connecter	Tr 202	Chester Creek Bridge	21675	29	12	0.440
Tr 30 Bypass	Airport Rd.	Tr 82	20891	29	12	2.736
Tr 202	Old Wilmington P	Green Tree Dr	46159		14	0.447
Tr 30	Whitford Rd.	Colebrook Rd.	38306		14	0.733
Tr 3	Strasburg Rd	Kings Hwy	37675		14	0.482
Tr 100	Ship Rd	Worthington Rd	34874		14	0.693
Tr 100	Tr 100 Conn	Howard Rd	34566		14	0.478
Tr 100	Tr 113	Pa Tpke	34291	29	14	0.694
Tr 30	Tr 202	Ship Rd.	27641	29	14	0.492
Tr 3	Tr 352	Manley Rd	26830		14	0.483

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LOCATION	FROM	TO	and the second	COUNTY		DISTANCE
Boot Rd	Tr100	Burke Rd	14190	29	16	0.700
Tr 82	Tr 30	Manor Rd	13528	29	16	0.655
Tr 401	Valley Hill Rd	Hillbrook Circle	13148	29	16	0.582
Tr 724	Snyder Ave	Spring Lane	12518	29	16	0.537
Tr 100	Bost Rd	Kirkland Ave	11923	29	16	0.365
Tr 52/100	Birmingham Rd	Tigue Rd	8566	29	16	0.455
Tr 926	Birmingham Rd	New St	8534	29	16	0.423
Devon State Rd	Valley Forge Rd	Spencer Rd	7619	29	16	0.681
Tr 352	Paoli Pike	Monte Vista Dr	6995	29	16	0.486
First Ave	Modena Rd	Gap Rd	6673	29	16	0.620
King Rd	Phoenixville Pik	Ravine Rd	6130	29	16	0.484
Tr 724	East Of Berks Co	Berks Co Line	5249	29	16	0.613
Tr 926	Tr 352	Powder Horn Dr	4365	29	16	0.471
Phoenixville Pike	Tr 401	Swedesford Rd	4328	29	16	0.491
Gulph Rd	Thomas Jefferson	Trout Creek	1398	29	16	0.633
Upper Gulph Rd	Old Eagle School	Croton Rd	11711	29	17	0.679
Waterloo Rd/swedesford Rd	Tr 100	Whitford Rd	9468	29	17	1.042
Westtown Rd	Tr 202	Joeck Dr	8303	29	17	0.545
White Horse Rd	Pothouse Rd	Tr 23	7057	29	17	0.654
Valley Rd	Central Ave	Hawthorne Place	4402	29	17	0.674
Swedesford Rd.	Valley Stream Pkwy.	Church Rd.	8053	29	17	0.381
Providence Rd	Warren Ave	Barr Rd	4180	29	17	0.508
Airport Rd	Tr 30 Bus	Tr 30 Bypass	4158	29	17	0.570
Sugartown Rd	Old Barn Lane	Spring Rd	3677	29	17	0.696
Coldstream Rd	Merlin Rd	Township Line Rd	4373	29	17	0.501
Greenhill Rd	Greenhill Ave	Tr 29	3317	29	17	0.442
Concord Rd	Westbourne Rd	Timberline Trail	2671	29	17	0.426
Hares Hill Rd	Miller Rd	Tr 23	2590	29	17	0.515
Tr 842	Brandywine Creek	Blue Rock Rd	2781	29	17	0.679
Dorlans Mill Rd	Shelmyce Rd	Moore Rd	2414	29	17	0.663
Township Line Rd	Tr 100	Kindra Dr	1897	29	17	0.758
Bailey Rd	Tr 340	Fisherville Rd	1813	29	17	0.095
Brandywine Creek Rd	Tr52/100	Blue Rock Rd	823	29	17	0.677
Merlin Rd	Western Rd	Crestview Rd	713	29	17	0.424
Barley Sheaf Rd	Tr 30	Clothier St	2944	29	19	0.474
Lincoln Ave	Point Rd	Garfield St	2471	29	19	0.663
Pleasant Grove Rd E.	Tr 202/322	Westwood Dr	1235	29	19	0.379

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LOCATION	FROM	то	AADT	COUNTY		DISTANCE
Caswallen Dr	Fredrick Dr	Pottstown Pk	613	29	19	0.284
Virginia Dr	High St	Walnut St	586	29	19	0.095
Garris Rd	Tr 113	Norwood Rd	448	29	19	0.284
Oakbourne Rd	Tr 202/322	Goodwin La	219	29	19	0.284
Michelle Dr	Ship Rd	Lisa Dr	150	29	19	0.189
Smith Bridge Rd	Ridge Rd	Wildness Way	1392	45	7	0.582
Beaver Valley Rd	Delaware State Line	Tr 202	924	45	9	1.610
Tr 95	Stewart Ave	Tr 476	125600	45	11	0.987
Tr 95	Delaware St. Line	Chichester Ave	92155	45	11	0.500
Tr 95	Tr 420 Ramp	Tr 420 Ramp	90217	45	11	0.500
Tr 95	Tr 452	Tr 322	99411	45	11	0.500
Tr 95	Chichester Ave	Tr 452	90605	45	11	0.505
Tr 476	Macdade Blvd.	Baltimore Pike	71500	45	11	2.424
Tr 476	Baltimore Pike	Tr 1 Bypass	68500	45	11	1.319
Tr 476	Tr 30	Montgomery Co. Line	67700	45	11	1.365
Tr 476	Tr 3	Tr 30	64100	45	11	4.013
Tr 476	Tr 1 Bypass	Tr 3	60900	45	11	3.220
Tr 476	Tr 95	Macdade Blvd.	59300	45	11	0.503
Tr 1	Tr 476	Collins Dr.	49200	45	12	0.519
Tr 1	Tr 252	Old State Rd.	45398	45	12	0.680
Tr 1	Old State Rd.	Tr 476	54500	45	12	0.480
Tr 1	Baltimore Pike	Tr 252	33400	45	12	1.808
Tr 3	Tr 476	Lawrence Rd.	49488	45	14	0.347
Tr 3	New Ardmore Ave	Tr 476	35738	45	14	0.628
Tr 202	Oakland Rd	Dilworthtown Rd	38626	45	14	0.530
Tr 322	Tr 95	Tr 452	35509	45	14	0.426
Tr 1	Tr 202	State Farm Rd.	34149	45	14	0.446
Tr 30	Tr 476	Radnor-Chester Rd.	34018	45	14	0.324
Tr 202	Del State Line	Pyle Rd	32266	45	14	0.452
Baltimore Pike	North Ave	Norwinden Dr.	29068	45	14	0.393
Tr 1	Lynn Blvd	West Chester Pike	28241	45	14	0.204
Tr 320	Springfield Rd	Reed Rd	28020	45	14	0.703
Baltimore Pike	Pine Ridge Ave	Grandview Rd.	27960	45	14	0.508
Pa 3	Tr 252	Boot Rd	27680	45	14	0.500
Tr 322	9Th Street	Nj State Line	27000	45	14	1.207
Tr 252	Palmer Mill Rd	Timberlake Rd	20913	45	14	0.637
Macdade Blvd	Arlington Ave	Swarthmore Ave	25380	45	14	0.037

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LOCATION	FROM	то	AADT	COUNTY		DISTANCE
Tr 452	Duttons Mill Rd	Willers Rd	24460	45	14	0.471
Tr 13	Tr 420	Washington Ave	24459	45	14	0.560
Tr 352	Tr 1 Balt Pike	Van Leer Ave	23296	45	14	0.614
Tr 30	Ithan Ave	TR 320	22765	45	14	0.346
Tr 452	Lenni Rd	Baltimore Pike	20006	45	14	0.586
Baltimore Pike	Old Balt Pike/Me	Indian La/Lwyn R	19620	45	14	0.350
Tr 352	Wyncroft Rd	Knowlton Rd	19302	45	14	0.592
Tr 420	McDade Blvd	16th Ave	19278	45	14	0.163
Tr 252	Wyola Dr	Chester Co Ln	18110	45	14	0.411
Tr 1	Tr 322	Concord Rd.	19906	45	14	0.444
Tr 420	Tr 320	Spring Valley Rd	17762	45	14	0.532
Tr 352	Sycamore Mills R	Green La	17462	45	14	0.568
Bishop Ave	Delmar Rd	Shipley La	17304	45	14	0.406
Macdade Blvd	Oak La	LafayetteAve	16184	45	14	0.577
Springfield Rd	Norwinden Dr	School La	17057	45	14	0.549
Tr 352	Farmers La	Chester Co Line	15555	45	14	0.475
Baltimore Pike	Runnemede Ave	Willowbrook Ave	15538	45	14	0.448
Garrett Rd	Midvale Rd	Hazel Ave	15152	45	14	0.569
Lawrence Rd	Springhouse Rd	Canterbury Dr	14966	45	14	0.264
Tr 252	Baltimore Pike	Monroe St	14863	45	14	0.540
Church Ln.	Cobbs Creek Pkwy.	Chester Ave.	15527	45	14	0.120
Macdade Blvd	Potter St	Madison St	11770	45	14	0.598
Ridge Rd	Us 322	Highland Ave	11062	45	14	0.267
Tr 13	Cedar Ave	Church La	10839	45	14	0.303
Tr 320	Swarthmore Ave	Elm Ave	10651	45	14	0.539
Tr 320	Tr 3	Springfield Rd	9317	45	14	0.517
Tr 13	Del State Ln	Blue Ball Ave	7716	45	14	0.496
Tr 252	Rose Valley Rd	Copples La	7266	45	14	0.542
Ridge Rd	National Ave	Blueball	6788	45	14	0.645
Tr 291	Hayes St	Yarnall St	6363	45	14	0.479
Tr 13	Mcdowell	Vauclain St	5141	45	14	0.249
Tr 291–Industrial Hwy	Tr 95 Off Ramp	Bartram Ave	23216	45	16	0.383
Darby Rd	Benedict Ave	Fairchild Rd	19572	45	16	0.366
Lansdowne Ave	Scottsdale Rd	Providence Rd	17761	45	16	0.451
Oak Lane	McDade Blvd	Chester Pike	14713	45	16	0.620
Providence Rd	Woodlawn Ave	Beech Ave	13902	45	16	0.543
South Ave	AcademyAve	Armstrong Ave	13873	45	16	0.743

					FUNCT.	
LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Swathmore Ave	Dupont Ave	McDade Blvd	13048	45	16	0.411
EagleRd	Earlington Rd	Merwood La	13047	45	16	0.690
Haverford Ave	Karakung Rd	HomesteadAve	12405	45	16	0.391
Concord Rd	Gerald Dr	Red Hill Rd	12306	45	16	0.701
Fairview Rd	Vauclain Ave	McDade Blvd	11954	45	16	0.583
Concord Rd	Mcdonald Blvd	Incinerator Rd	11071	45	16	0.734
Bryn Mawr Ave	Weldon La	Academy La	10903	45	16	0.295
Dutton Mill Rd	Pencoast Ave	Ronald Ave	11601	45	16	0.375
Conestoga Rd	Church Rd	Brookside Ave	10703	45	16	0.378
Providence Rd	Tr 3	Runnymeade Farms	10411	45	16	0.505
Drexel Ave	Steel Rd	Tr 1	10310	45	16	0.395
Burmont Rd	State Rd	Woodland Ave	9704	45	16	0.431
Valley Brook Rd	Wawa Rd	Ivy Mill Rd	9036	45	16	0.496
Dutton Mill Rd	Preston Rd	Greenwood St	9022	45	16	0.390
Tr 491	Pyle Rd	Shavertown Rd	7790	45	16	0.414
State Rd	Dora Dr	Valleyview Rd	7726	45	16	0.535
Springfield Rd	Elm Ave	Providence Rd	7368	45	16	0.415
Chichester Ave	Sommers La	Fury Rd	7307	45	16	0.749
Bryn Mawr Ave	Brookside Ave	Tr 3	7128	45	16	0.429
Meetinghouse Rd	Rodgers Ave	Locust St	6772	45	16	0.471
Tr 320	Clyde Rd	Larchwood La	6676	45	16	0.406
Concord Rd	Thorton Rd	Scott Rd	5936	45	16	0.686
Tr 491	Larkin Rd	Bridge Rd	6228	45	16	0.428
Darby Rd	Tr 320	476 Overpass	6211	45	16	0.551
Tr 261	Zebley Rd	Delaware State L	7450	45	16	0.506
Cheyney Rd	Patricia La	Glenview Rd	4159	45	16	0.399
Aston Mills Rd	Chester Creek Rd	Crozerville Rd	3885	45	16	0.530
Brooke Rd	Church Rd	Conestoga Rd	2031	45	16	0.309
Brookhaven Rd	Rose Valley Rd	Moore Rd	11959	45	17	0.712
Clifton Ave	Rively Ave	McDade Blvd	9012	45	17	0.626
Goshen Rd	Earles La	Hansell Rd	5842	45	17	0.671
Carpenter Rd	Naamans Creek Rd	New Castle Co Ln	5686	45	17	0.763
Knowlton Rd	Linville Rd	Chester Creek Rd	4670	45	17	0.721
Bethel Rd	Mill Rd	Peach St	4136	45	17	0.688
Eagle Rd	King Of Prussia	Paul Rd	4806	45	17	0.645
Brinton Lake Rd	Baltimore Pike	Mill Rd	4000	45	17	0.383
Lenni Rd	Tr 452 (Pennel R	Highland Ave	4214	45	17	0.369

					FUNCT.	
LOCATION	FROM	TO	AADT	COUNTY	and the second state of th	DISTANCE
Naamans Creek Rd	Tr 95	New Castle Co Li	4079	45	17	0.568
Oakland Rd	Webb Rd	Brintons Bridge	3795	45	17	0.568
Smith Bridge Rd	Tr 202	Sunset View Dr	3727	45	17	0.453
Barren Rd	Painter Rd	Timber Run Rd	3613	45	17	0.744
Gradyville Rd	Tr 352	Delchester Rd	3720	45	17	0.746
Glenn Riddle Rd	Springhouse La	Brandywine Dr	3230	45	17	0.516
Beatty Rd	Creek Rd	Minshall Rd	3133	45	17	0.544
Valley Rd	Tr 1 (Baltimore	Darlington Rd	1286	45	17	0.710
Concord Rd	Glenn Mills Rd	Lovelee La	1246	45	17	0.445
Creek Rd	Locksley Rd	Station Dr	1169	45	17	0.379
Spring Valley Rd	Brinton Lake Rd	Tr 322	1163	45	17	0.758
Bethel Rd	Tr 261	Garnet Mine Rd	1118	45	17	0.658
Kirk Rd	Tr 261	Garnet Mine Rd	1059	45	17	1.040
Darlington Rd	Tr 1	New Darlington R	832	45	17	0.736
Loraine St	Rosemont Ave	Bryn Mawr Ave	2860	45	19	0.114
Albert Rd	Bridgewater Rd	Powell Rd	2372	45	19	0.217
Cleveland Ave	Printz Ave	Elmwood Ave	1954	45	19	0.218
Sycamore Ave	Glenwood Ave	Arch St	1818	45	19	0.152
Mount Alverno Rd	Hidden Hills Rd	Willow Gate La	1771	45	19	0.151
Tilghman St	11Th St	12Th St	1684	45	19	0.075
Ridge Rd	Olive St	Tr 252	1615	45	19	0.094
Highland Ave	Hearth Rd	Media Line Rd	1353	45	19	0.265
Walnut Ave	Oak La	Radnor Rd	1399	45	19	0.322
6th St	Pine St	Walnut St	987	45	19	0.189
Michell St	Park St	Ridley Ave	772	45	19	0.094
Crescent Dr.	Park Dr.	Stratford Rd.	801	45	19	0.189
New Darlington Rd	Valley Rd	Darlington Rd	656	45	19	0.757
Possum Hollow Rd	Fox La	Locus La	611	45	19	0.189
White Ave	Summit Ave	Simpson St	588	45	19	0.208
Elder Ave	Wycombe Ave	Union Ave	579	45	19	0.142
Strathaven Ave	Rutgers Ave	School La	644	45	19	0.170
Unity Terrace	Rutledge Ave	President Ave	365	45	19	0.142
Stackhouse Mill Rd	Valley Rd	Beverly La	265	45	19	0.416
Charmont Ave	Ridgeway Ave	Warwick Ave	273	45	19	0.265
Tr 9–Pa Tpk. Ext	Tr 276 Junction	Interchange 31	40900	91	2	9.896
Tr 422	Township Line Rd.	Lewis Rd.	40,000	91		1.374
Tr 422	Yost Rd.	Tr 724	34685	91		0.646

					FUNCT.	
LOCATION	FROM	TO	AADT	COUNTY		DISTANCE
Tr 422	W Pottsgrove Ram	Berks Co Line	26952	91	2	0.549
Tr 100	High St	Manatawny Creek	23773	91	2	0.669
Tr 100	Farmington Rd	State Rd	22499	91	2	0.718
Tr 73	Tr 100	Montgomery Ave	20047	91	2	0.235
Tr 100	Tr 73	County Line Rd	18096	91	2	0.604
Tr 363	Tr 73	Steelman Rd	17309	91	2	0.331
Tr 663	Quakertown Pike	Otts Rd	12228	91	2	0.219
Tr 363	Township Line Rd	Woodlyn Ave	17190	91	2	0.344
Tr 73	Store Rd	Evansburg Rd	16595	91	2	0.533
Tr 73	Berks Rd	WeberRd	15003	91	2	0.532
Ridge Pk	Sanatoga Rd	Township Line Rd	14219	91	2	0.286
Ridge Pike	Township Line Rd	Royersford Rd	14130	91	2	0.295
Tr 29	Tr 73	Salford Station Rd	6879	91	2	0.569
Tr 63	Morwood Rd	Shelly Rd	13726	91	2	0.716
Tr 29	Pottstown Ave	11Th St	11678	91	2	0.668
Ridge Pike	Township Line Rd	Kline Rd	11333	91	2	0.600
Tr 29	Palm Hill Rd	Stauffer Rd	10825	91	2	0.269
Ridge Pk.	Neiffer Rd	Kugler Rd	10824	91	2	0.429
Tr 29	Walters Rd	Knight Rd	9652	91	2	0.482
Tr 73	Middle Creek Rd	Layfield Rd	9543	91	2	0.494
Tr 63	Barndt Rd	Ridge Rd	11494	91	2	0.703
Tr 663	Moyer Rd	Mock Rd	8277	91	2	0.552
Tr 663	Kings Rd	Hill Rd	6362	91	2	0.398
Tr 29/73 Gravel Pike	Old Gravel Rd	Zieglerville Rd	13819	91	2	0.508
Tr 73	Colonial Rd	New Hanover Sq R	6387	91	2	0.708
Tr 663	Little Rd	Deep Creek Rd	7596	91	2	0.374
Tr 663	Jefferson Ave	East St	7333	91	2	0.677
Tr 73	Neiffer Rd	Krause Rd	6681	91	2	0.684
Tr 663	Dotter Rd	Tr 73	5539	91	2	0.704
Tr 29	Main St	Green St	5403	91	2	0.211
High St	Grosstown Rd	Berks Co Line	12827	91	6	0.400
Tr 113	Morris Rd	Landis Rd	10037	91	6	0.512
Swamp Pike	Wagner Rd	Sanatoga Rd	9396	91	6	0.909
Industrial Hwy	Franklin St.	Hanover St.	8832	91	6	0.379
Township Line Rd	Buckwalter Rd	Souder Rd	9042	91	6	0.639
Allentown Rd.	Delp Rd.	Lower Rd.	8613	91	6	0.673
Tr 113	Cross Rd	Sharon Ln	7836	91	6	0.512
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LOCATION	FROM		AADT			0.426
Township Line Rd	Ridge Pike	Hefner Rd	7503	91	6	
Tr 113	Tr 73	Cressman Rd	7281	91	6	0.443
Whitehall Rd	Tr 73	BeanRd	4947	91	6	0.695
Tr 563	Morwood Rd	King Rd	4625	91	6	0.680
Stump Hall Rd	Tr 363	Hollow Rd	3175	91	6	0.636
State Game Farm Rd	Delphi Rd	Meng Rd	2442	91	6	0.383
Allentown Rd.	Tr 563	Clump Rd.	2204	91	6	0.586
Hoffmansville Rd	Sterner/Renninge	Berks Co Ln	2113	91	6	0.758
Phila/kutztown Rd	County Line Rd	Township Woods R	795	91	6	0.710
Buchert Rd	Klepler Rd	Valley Rd	4846	91	7	0.508
Farmington Rd	Evans Rd	Tr 100	4612	91	7	0.557
Adams St	Jackson St	Prospect St	4285	91	7	0.170
Old Forty Foot Rd	Bridge Rd	Township Line Rd	3207	91	7	0.714
Manatawny St	Grosstown Rd	Pottstown Boro Line	2375	91	7	0.361
James Rd	6Th St	Geryville Pike	2258	91	7	0.719
Evansburg Rd	Arcola Rd	Visitation Rd	2071	91	7	0.730
Pleasant View Rd	Bleim Rd	Groff Rd	2005	91	7	0.476
Stump Hall Rd	Cedars Rd	Skippack Rd	1954	91	7	0.599
BleimRd	New Hanover Sq Rd	Yerger Rd	1941	91	7	0.643
Old Skippack Rd	Shelley Rd	Freeman School Rd	1962	91	7	0.685
Geryville Pike	Magazine Rd	Upper Ridge Rd	1950	91	7	0.720
Perkiomenville Rd	Deep Creek Rd	Goezel Rd	1510	91	7	0.506
Upper Ridge Rd	Tr 63	Geryville Rd	1303	91	7	0.688
Constitution Ave	Grosstown Ave	Berks County Lin	1127	91	7	0.227
Upper Ridge Rd	Tr 63	Perkiomenville R	1577	91	7	0.342
Neiffer Rd	Big Rd	Keyser Rd	600	91	7	0.671
Cross Rd	Tr 113	Bergeys Mill Rd	2879	91	8	0.458
Limerick Rd	Ridge Pike	Graterford Rd	1288	91	8	0.694
Schoolhouse Rd	Lower Rd	Forman Rd	1780	91	8	0.590
Niantic Rd	Co Line Rd	Miller Rd	1558	91	8	0.284
Lower Rd	Schoolhouse Rd	Forman Rd	1206	91	8	0.713
Forrest Rd	County Line Rd	Cowpath Rd	1303	91	8	0.748
Linfield Rd	Township Line Rd	Royersford Rd	1131	91	8	0.579
Limerick Center Rd	Airport Rd	Sanatoga Rd	1142	91	8	0.594
Fagleysville Rd	Big Red (Tr 73)	Keyser Rd	888	91	8	0.613
Green Hill Rd	Hoffmansville Rd	Hoffman Rd	865	91	8	0.549
Lederach Rd	Schwenksville Rd	Larson Rd	693	91	8	0.530

					FUNCT.	
LOCATION	FROM	ТО		COUNTY		DISTANCE
Mill Rd	Indian Creek Dr	Hunsicker Rd	596	91	8	
Buck Rd	Frey Rd	Geryville Pike	1817	91	9	
Franklin St	Diamond St	West St	1623	91	9	
Collegeville Rd	Township Line Rd	Mill Rd	1463	91	9	
Bergey Rd	Morwood Rd	Indian Creek Rd	806	91	9	
Sunset Rd	GreaterfordRd	Limerick Rd	833	91	9	
Snyders Rd	Gilbertsville Rd	Detweiler Rd	423	91	9	
HeffentragerDr	Geryville Pike	Upper Ridge Rd	277	91	9	
Brinkman Rd	Geryville Pike	Finland Rd	213	91	9	1.136
Rittenhouse Rd	Hess Rd	Township Line Rd	212	91	9	0.947
Tr 76	Fayette St.	Hollow Rd.	96100	91	11	4.104
Tr 476	Tr 76	Delaware Co. Line	75016	91	11	0.775
Tr 76	Tr 202	Tr 320	82032	91	11	2.600
Tr 476	Germantown Pike	Ridge Pike	70800	91	11	0.894
Tr 276	Interchange 24	Interchange 25	46500	91	11	6.800
Tr 309	Tr 276	Highland Ave	50744	91	12	0.758
Tr 309	Church Rd.	Pennsylvania Ave	50714	91	12	0.970
Tr 309	Butler Pike	Norristown Rd.	46545	91	12	0.808
Tr 422	Tr 363	Egypt Rd.	42259	91	12	3.089
Tr 422	Walnut St	Tr 29	39323	91	12	3.487
Tr 202	Towncenter Rd	Brandywine Lane	41968	91	14	0.535
	Us 30	Lancaster Rd/54T	37840	91	14	0.435
Tr 309	Hartman Rd	Park Dr	35697	91	14	0.509
Tr 63	Detweiler Rd	Sumneytown Pike	19199	91	14	0.552
Tr 1 / City Line Ave	Rolling Rd.	Haverford Rd.	32197	91	14	0.436
Germantown Pike	Walton Rd	Hickory Rd	32585	91	14	0.322
Tr 611	Susquehanna Rd	Edgehill Rd	31481	91	14	0.283
Tr 611	Meetinghouse Rd.	Horsham Rd.	26142	91	14	0.689
Tr 309 Ogontz Ave	Easton Rd	Cheltenham Ave	25771	91	14	0.357
Tr 611	Asbourne Rd	Stratford Rd	20676	91	14	0.537
Tr 202	Tr 73	Cherry Lane	23150	91	14	0.463
Tr 232	Blake Ave	Robbins Ave	22646	91	14	0.566
Tr 202	Airy St	Oak St	11788	91	14	0.692
Tr 422	Township Line Rd	Yost Rd	40227	91	2	2.141
Tr 73	Tr 202	Cathcart Rd	21153	91		0.410
Tr 63	Easton Rd	Fitzwatertown Rd	20843	91	14	0.410
Tr 30 / Lancaster Ave						
1r 30 / Lancaster Ave	City Line Ave	Remington Rd.	12176	91	14	0.485

					FUNCT.	
LOCATION	FROM	ТО		COUNTY		DISTANCE
Germantown Pike	Swede Rd.	Stanbridge St.	19566	1	14	0.492
Egypt Rd	Park Ave	Perkiomen Creek	18462	91	14	0.381
Easton Rd	Cheltenham Ave	Tr 309	17844	91	14	0.557
Germantown Pike	Sandra Ln.	Burnside Ave	17621	91	14	0.606
Germantown Pike	Chemical Rd	Butler Pike	17567	91	14	0.227
Tr 363	Snyder Rd	Sumneytown Pike	17034	91	14	0.519
Tr 263	Tr 611	Terwood Rd	16830	91	14	
Sumneytown Pike	Broad St.	Tr 363	16669	91	14	0.805
Ridge Pike	Tr 113	5Th Ave	16560	91	14	0.458
Butler Pike	Tr 73	Farm Dr	16549	91	14	0.284
Ridge Pike	Tr 363	Egypt Rd.	16524	91	14	0.262
Tr 63	Tr 202	N Wales Rd	16134	91	14	0.688
Cheltenham Ave	Easton Rd	Ogontz Ave	14703	91	14	0.616
Tr 202	Tr 63	Knapp Rd	14591	91	14	0.322
Tr 73	Forrest Ave	Foxcroft Rd	13455	91	14	0.706
Germantown Pike	Markley Ave	Plumlyn Ave	13173	91	14	0.114
Ridge Pike	Cross Keys Rd	Germantown Pike	11570	91	14	0.465
Butler Pike	Ridge Pike	Germantown Pike	11213	91	14	0.549
Tr 63	Tennis Ave	Mckean Rd	11134	91	14	0.426
Tr 29	Tr 113	Washington St	11050	91	14	0.607
Tr 73	Tr 113	Cressman Rd	10655	91	14	0.700
Tr 29	Tr 422	Memonite Rd	15622	91	14	0.674
Tr 73	Bethlehem Pike	E Valley Green R	9869	91	14	0.666
Tr 152	Tr 463	Chestnut Lane	9664	91	14	0.286
Tr 29 (bridge St)	Macdade Rd	Egypt Rd	9147	91	14	0.473
Tr 29	Lexington Rd	Plank Rd	8860	91	14	0.490
Butler Pike	Morris Rd.	Maple St.	14901	91	14	0.098
Butler Pike	Stenton Ave	Township Line Rd	8288	91	14	0.360
Montgomery Ave	Sebine Ave	Meetinghouse Ln	20402	91	16	0.426
Tr 232	Byberry	Warfield	18112	91	16	1 1
Tr 232	Red Lion Rd	Alden Rd	18086	91	16	0.620
S Broad St	Whites Rd	Allentown Rd	11883	91	16	0.568
Morris Rd	Tr 202	Cathcart Rd	10579	91	16	0.601
Tr 320	Tr 76	Upper Gulph Rd	16473	91	16	0.643
Tr 463	Hartman Rd	Stump Rd	16139	91	16	0.541
S. Broad St.	Vine St.	Hancock St.	16015	91	16	0.644
Davisville Rd	Pennypack Cr	Turnpike Dr	15614	91	16	0.448

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LOCATION	FROM	то	a here a state that a state of the state of	COUNTY		DISTANCE	
Bethlehem Pike	Church Rd	Valley Green Rd	15606	91	16	0.571	
Tr 463 / Forty Foot Rd.	Funks Rd.	Koeffel Rd.	14507	91	16	0.620	
Township Line Rd	Arch St	Tr 202	14396	91	16	0.630	
Norristown Rd	Tr 63	Heman Rd	14235	91	16	0.632	
Byberry Rd	Warminster Rd	Orangeman'S Rd	14197	91	16	0.586	
Davisvile Rd	Byberry Rd	County Line Rd	15447	91	16	0.300	
Bethlehem Pike	Butler Pike	Highland Ave	15018	91	16	0.436	
Susquehanna Rd	Tr 152	Mundock Rd	13459	91	16	0.522	
Joshua Rd	Ridge Pike	Germantown Pike	13437	91	16	0.555	
Tr 23	Gulph Rd	Quarry Rd	13349	91	16	0.463	
Morris Rd	Schultz Rd	West Point Pike	13162	91	16	0.533	
Byberry Rd	Pine Rd	Philmont Ave	13129	91	16	0.469	
Tr 113	Tr 63	Gruber Rd	12767	91	16	0.39	
Blair Mill Rd	Crestview Rd	County Line Rd	12331	91	16	0.422	
Whitehall Rd	Marshall St	Sterigere St	12216	91	16	0.726	
Blair Mill Rd	Welsh Rd	Commerce Ave	12102	91	16	0.689	
Pennsylvania Ave	Belmont Ave	Twining Rd	13891	91	16	0.613	
Tr 23	City Ave	Union Ave	11847	91	16	0.688	
Allentown Rd	Tr 63	Keeler Rd	11561	91	16	0.565	
Park Ave	Ridge Pike	Oakdale Ave	10550	91	16	0.226	
Broad St	Park Rd	Sullivan Dr	10389	91	16	0.463	
Bethlehem Pike	Tr 309	Norristown Rd	9608	91	16	0.393	
Cannon Ave	Main St	7Th St	9478	91	16	0.644	
Cheltenham Ave	Paper Mill Rd	Willow Grove Ave	9199	91	16	1.042	
Sandy Hill Rd	Belvar Rd	Hallowell Rd	8652	91	16	0.609	
Pine Rd	Tr 63	Byberry Rd	8117	91	16	0.375	
Allentown Rd	S Broad St	Sumneytown Pike	7926	91	16	0.454	
Susquehanna Rd	Tr 232	Meetinghouse Rd	7470	91	16	0.519	
Pawlings Rd	Audobon Rd	Chapel View Rd	7320	91	16	0.761	
Tr 152	Norristown Rd	Fort Washington	9254	91	16	0.409	
Gulph Rd	Spring Mill Rd	Mt Moro Rd	6304	91	16	0.402	
Swede St	Markley St	Oak St	6164	91	16	0.500	
Tr 113	Bechter Rd	Tr 29	5893	91	16	0.473	
Tr 113 (trappe Rd)	North Mennonite	Hopwood Rd	5292	91	16	0.540	
Joshua Rd	Stenton Ave	Hill Rd	5270	91	16	0.538	
Spring Mill Rd	Morris Ave	Gulph Rd	5554	91	16	0.522	
Swedeland Rd	Tr 320	S Gulph Rd	2643	91	16	0.324	

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LOCATION	FROM			COUNTY		DISTANCE
Welsh Rd	Easton Rd	Fitzwater Rd	12644	91	17	0.226
Flourtown Rd	Thomas Rd	Joshua Rd	10870	91	17	0.637
West Point Pike	Morris Rd	Oak St	9719	91	17	0.320
Cedar Rd	Fox Chase Rd	Shelmire St	9271	91	17	0.416
Highland Ave	Pine Tree Rd	Susquehanna Rd	8775	91	17	0.900
Marshall St	Burnside Ave	Whitehall Rd	7755	91	17	0.586
Croton Rd	Radnor Hill Rd	Warren Rd	6378	91	17	0.329
Koeffel Rd	Pennfield Dr	Winston St	5591	91	17	0.265
Ashbourne Rd	Mill Rd	Oaklane Rd	5855	91	17	0.421
TerwoodRd	Fairnay Valley R	Welsh Rd	5737	91	17	0.538
Burnside Ave	Germantown Pike	Oakland Dr	5609	91	17	0.383
Eagleville Rd	Arcola Rd	Visitation Rd	4826	91	17	0.590
Old Arch Rd	Johnson Hwy	New Hope St	4839	91	17	0.413
Lower State Rd	Goodwin Ln	Limekiln Pike	4315	91	17	0.945
North Wales Rd	Tr 73	Morris Rd	4137	91	17	1.288
Tennis Ave	Welsh Rd	Norristown Rd	3991	91	17	0.602
Lansdale Ave	Horsham Rd	Vilsmeier Rd	4433	91	17	0.530
Flint Hill Rd	B St	Mc Coys Ln	3616	91	17	0.653
Upper Gulph Rd	Montgomery Ave	County Line Rd	3579	91	17	0.348
Penllyn Blue Bell Pike	Deaver Dr	Stenton Ave	3441	91	17	0.265
E Vine St	Hatfield Valley	Maple Ave	3205	91	17	0.284
Pinetown Rd	Egypt Rd	Featherbed Ln	3132	91	17	0.758
Brook Rd	Tr 476 Overpass	Coldwell Ln	2083	91	17	0.227
Orangemans Rd	Byberry Rd	Pioneer Rd	2042	91	17	0.663
Township Line Rd	Butler Pike	Narcissa Rd	2039	91	17	0.644
Park Rd	Broad St	W Point Pike	1895	91	17	0.487
Roberts Rd	Montgomery Ave	Gulph Rd	1456	91	17	0.696
Sterigere St	Harding Blvd	Markley St	584	91	17	0.170
Lewis Ln	Tr 73	Morris Rd	2829	91	19	1.136
Maple St	4Th St	9Th St	2181	91	19	0.379
Tomlinson Rd	Buck Rd	Sycamore Rd	2132	91	19	0.426
Reservoir Ave	Old Welsh Rd	Woodland Ave	1885	91	19	0.758
Ruth Rd	Sumneytown Pike	Clemens Rd	1313	91	19	0.257
College Ave	Greenwood Ave	7Th Ave	680	91	19	0.521
Cathedral Dr	Poplar Rd	Alnwick Rd	615	91	19	1.136
Crosswicks Rd	Mill Rd	Beverly Rd	414	91	19	0.473
Highland Ave	Hunsburger Rd	Washington Ave	325	91	19	0.379

		mo	AADT		FUNCT.	DISTANCE
	FROM		AADT 308	COUNTY 91		DISTANCE 0.237
Towamencin Ave	Pennsylvania Ave	York Ave			19	0.237
Tr 76	Tr 1	Montgomery Dr.	174469	101	11	
Tr 76	Spring Garden St	Tr 676	164542	101	11	0.500
Tr 95	Betsy Ross Bridge		127000	101	11	0.516
Tr 95	Academy Rd.	Woodhaven Rd.	125000	101	11	2.091
Walt Whitman Bridge	Tr 95	Nj State Line	102500	101	11	1.373
Tr 676	Tr 76	22Nd St.	119470	101	11	0.526
Tr 95	Girard Ave Bridge		102000	101	11	0.978
Tr 95	Off Ramp To Cent	On Ramp From Air	100871	101	11	0.500
Tr 95	Broad St.	Front St.	95000	101	11	1.204
Tr 76	University Ave	South St.	108673	101	11	0.495
Ben Franklin Bridge	5Th St.	Nj State Line	88600	101	11	0.710
Tr 95	Callowhill St.	Slide Under Ramps	75000	101	11	0.429
Tr 676	22Nd St.	Broad St.	120826	101	11	0.524
Tr 676	7Th St.	Tr 95	72382	101	11	0.640
Tr 76	Passyunk Ave	Penrose Ave	47941	101	11	0.199
Tr 1	Wissahickon Ave	Roberts Ave	110000	101	12	0.448
Tr 1	Scotts Ln.	Fox St.	100000	101	12	0.688
Tr 1	Broad St. Nb Off-Ramp	Old York Rd. Overpass	75000	101	12	0.487
Tr 63	Thornton Rd	Academy Rd	64273	101	12	0.523
Tr 63	Tr 1	Thornton Rd	58375	101	12	0.339
Tr 63	Academy Rd	Knights Rd	55486	101	12	0.623
Tr 1	5Th St.	Mascher St.	66000	101	14	0.444
Tr 611 (broad St)	Allegheny Ave	Tioga St	48371	101	14	0.320
Penrose Ave	Penrose Ave Bridge	Lanier Ave	44213	101	14	0.242
Tr 1 Inside	Oxford Circle	Devereaux Ave	39127	101	14	0.522
Tr 1 Roosevelt Blvd. (outsi	Woodhaven Rd.	Southampton Rd.	48596	101	14	0.638
Broad St.	Girard Ave	Montgomery Ave	42378	101	14	0.316
Tr 1 Roosevelt Blvd. (insid	Woodward St.	Welsh Rd.	41710	101	14	0.487
Ben Franklin Pkwy.	21St St.	22Nd St	37300	101	14	0.459
Tr 1 Inside	Tr73 Cottman Ave	Borbeck/Ryan Ave	39185	101	14	0.747
Tr 1 Roosevelt Blvd. (outsi	Woodward St.	Welsh Rd.	29817	101	14	0.487
26th St	Penrose Ave	Hartranft	36832	101	14	0.657
Tr 532	Verree Rd	Lawlor St	34429	101	14	0.546
Grant Ave	Ashton Rd	Blue Grass Rd	32631	101	14	0.437
Tr 1 Inside	Conwell Ave	Red Lion Rd	29600	101	14	0.494
Tr 1 Roosevelt Blvd. (outside)	Conwell Ave	Red Lion Rd	30492	101	14	0.494

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LOCATION	FROM	то	AADT	COUNTY	a second and a second s	DISTANCE
Tr 1 Roosevelt Blvd. (inside)	Woodhaven Rd.	Southampton Rd.	30791	101	14	0.636
Tr291 (broad St)	Bainbridge St	South St	29694	101	14	0.455
Ridge Ave	Bells Mill Rd	Northwestern Ave	29351	101	14	0.389
Island Ave	Essington Ave	Lindburgh Blvd	28138	101	14	0.522
Delaware Ave	South St	Bainbridge	33963	101	14	0.624
Tr 73	Duncan Ave	Oxford Ave	27861	101	14	0.578
Bustleton Ave	Tustin St	Benton Ave	25839	101	14	0.448
AcademyRd	Grant Ave	Convent Ave	25292	101	14	0.610
Chestnut St	34Th St	36Th St	42136	101	14	0.612
Henry Ave	Lincoln Dr	Schoolhouse La	23771	101	14	0.562
Broad St	I-9 5	Pattison Ave	23027	101	14	0.440
Market St	37Th	38Th	25236	101	14	0.457
Tr 13	Grant Ave	Knights Rd	22373	101	14	0.605
Callowhill St	Lawrence St	7Th St	20157	101	14	0.230
Henry Ave	Port Royal Ave	Summit Ave	22644	101	14	0.582
Aramingo Ave	Lehigh Ave	Thompson Avelehigh Ave	19072	101	14	0.457
Belmont Ave	Edgley Ave	Winnfield Ave	18426	101	14	0.485
Tr 13	Glenview St	Disston St	18515	101	14	0.505
Delaware Ave	Callowhill St	Willow St	20695	101	14	0.507
Spring Garden	2Nd St	3Rd St	18366	101	14	0.440
Kelly Dr	Poplar Dr	Fairmount St	18174	101	14	0.695
Adams Ave	Rising Sun Ave	Tabor Rd	21816	101	14	0.215
Cobbs Creek Pkwy	Spruce St	Catherine St	17215	101	14	0.326
Rising Sun Ave	Geneva Ave	Adams Ave	18011	101	14	0.652
Market St	3Rd St	4Th St	17145	101	14	0.327
Tr 30	63 St	57 St	16349	101	14	0.655
Levick St	Frankford Ave	Torresdale Ave	16038	101	14	0.407
Stenton Ave	Easton Rd	Washington Lane	11926	101	14	0.527
Oregon Ave	24Th St	20Th St	18472	101	14	0.426
Essington Ave	70Th St	Bartram Ave	14964	101	14	0.506
Girard Ave	Frankford Ave	Cecil B Moore Av	15572	101	14	0.498
Tr13 (33rd St)	Girard Ave	Columbia Ave	17585	101	14	0.465
Walnut La	Henry Ave	Magdalena St	14160	101	14	0.142
5th St	Arch St	Race St	13726	101	14	0.323
Tr 232	Verree Rd	Rhawn St	13838	101	14	0.727
Kensington Ave	Glenwood Ave	Castor Ave	13146	101	14	0.331
Passyunk Ave	24Th St	20Th St	13510	101	14	0.390

					FUNCT.	
LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Easton Rd	Cheltenham Ave	Pickering Ave	13210	101	14	0.492
Olney Ave	Chelten Ave	Church La	13131	101	14	0.715
Frankford Ave	Cheltenham Ave	Harbison Ave	12877	101	14	0.389
Washington La	Cheltenham Ave	Ogontz Ave	12788	101	14	0.253
Castor Ave	Aramingo Ave	Richmond St	12006	101	14	0.467
Germantown Ave	Bethlehem Pike	Mt Airy Ave	10669	101	14	0.492
22nd St	Vine St	Spring Garden St	10103	101	14	0.345
Walnut St	7Th St	8Th St	10153	101	14	0.531
Godfrey Ave	5Th St	Front St	8025	101	14	0.485
Germantown Ave	Chelten Ave	Church La	7258	101	14	0.500
Lehigh Ave	Ridge Ave	Chalmers Ave	5822	101	14	0.487
Chestnut St	7Th St	8Th St	4207	101	14	0.170
34th St	Springarden St	Hamilton St	10387	101	14	0.047
Red Lion Rd	Northeast Ave	Jamison Ave	29383	101	16	0.331
AcademyRd	Red Lion Rd	Glenn St	27907	101	16	0.433
Evans St	Tr 1	Byberry Circle	25604	101	16	0.400
Grays Ferry Ave	47Th St	34Th St	23002	101	16	0.544
Lincoln Dr	Elmen St	Greene St	25338	101	16	0.621
State Rd	Magee St	Unruh St	22809	101	16	0.494
Holme Ave	Holme Circle	Winchester Ave	19004	101	16	0.446
Haverford Ave	City Ave	Overbrook Ave	17195	101	16	0.476
Allegheny Ave	Ella St	Front St	18100	101	16	0.485
Whitaker Ave	Ruscomb St	Louden St	17188	101	16	0.472
Ridge Ave	Port Royal Ave	Summit Ave	16445	101	16	0.355
Allegheny Ave	I −95	Aramingo Ave	15345	101	16	0.468
Castor Ave	Orthodox St	Adams Ave	16177	101	16	0.587
State Rd	Cottman Ave	Bleigh	16281	101	16	0.463
Knights Rd	Fairdale Rd	Chalfont Dr	16018	101	16	0.579
Rhawn St	Oxford Ave	Ridgeway St	15631	101	16	0.369
Ridge Ave	Hermit La	Dawson St	15417	101	16	0.543
Tacony St	Bridge St	Fraley St	15306	101	16	0.261
Verree Rd.	Rhawn St.	Tustin St.	15141	101	16	0.638
Ridge Ave	Hermitage St	Greene La	14682	101	16	0.463
Verree Rd	Red Lion Rd	Bustleton Ave	14305	101	16	0.663
Welsh Rd	Route 1	Dewee St	13691	101	16	0.407
63rd St	Tr 30 (Lancaster	Lebanon Ave	14427	101	16	0.481
Verree Rd	Bloomfield Ave	Marchman Rd	15031	101	16	0.605

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LOCATION	FROM	то		COUNTY		DISTANCE
Bells Mill Rd	Sugar Loaf Rd	Germantown Ave	13874	101	16	0.331
Rhawn St	Tr 1	Revere St	13990	101	16	0.447
Welsh Rd	Verree Rd	Rising Sun Ave	13350	101	16	0.510
61st St	Passyunk Ave	Lindbergh Blvd	13169	101	16	0.805
Castor Ave	Levick St	Magee Ave	13455	101	16	0.531
Grant Ave	Tr 13	Fordham Rd	12851	101	16	0.508
5th St	Allegheny Ave	Erie Ave	12218	101	16	0.549
Allegheny Ave	Hunting Park Ave	29Th St	12201	101	16	0.513
Castor Ave	Rhawn St	Solly Ave	12201	101	16	0.408
Upsal St	Stenton Ave	Lowber Ave	11884	101	16	0.517
State Rd	Linden Ave	Pennypack Ave	11345	101	16	0.666
Rhawn St	Frankford Ave	Torresdale Ave	10893	101	16	0.333
Pattison Ave	7Th St	3Rd St	10356	101	16	0.397
Willits Rd	Convent Ave	Holme Ave	10257	101	16	0.505
70th St	Woodland Ave	Elmwood Ave	10193	101	16	0.331
Frankford Ave	Wheatsheaf St	Butler St	9961	101	16	0.461
Lindbergh Blvd	63Rd St	61St St	9859	101	16	0.370
Frankford Ave	Alleghney Ave	Clearfield St	9486	101	16	0.284
Torresdale Ave	Cheltenham Ave	Comly St	9352	101	16	0.444
Arch St	11Th St	12Th St	8927	101	16	0.642
Pine St	12Th St	10Th St	8557	101	16	0.189
6th St	Callowhill St	Willow Ave	7772	101	16	0.032
6th St	Allegheny Ave	Erie Ave	7301	101	16	0.549
Snyder Ave	Broad St	Hutchinson St	14461	101	16	0.451
Levick St	Castor Ave	Kindred St	6896	101	16	0.274
Haverford Ave	Cobbs Creek Pkwy	62Nd St	6755	101	16	0.462
Frankford Ave	Laurel St	Widley St	6389	101	16	0.144
Queen La	Henry Ave	Fox St	7928	101	16	0.663
5th St.	Callowhill St.	Willow St.	6926	101	16	0.055
Haverford Ave	38Th St	34Th St	2909	101	16	0.303
Windrim Ave	Germantown Ave	Wayne Ave	15573	101	17	0.115
Fairmont Ave	Ridge Ave	25Th St	10866	101	17	0.947
Front St	Oregon Ave	Packer Ave	8999	101	17	0.284
Torresdale Ave	Unruh Ave	Princeton Ave	9810	101	17	0.488
Torresdale Ave	Pennypack St	Academy Rd	9473	101	17	0.283
Parkside Ave	Belmont Ave	Girard Ave	8829	101	17	0.546
Ridge Ave	Ingersoll Ave	Sedgley Ave	9326	101	17	0.538

					FUNCT.	
LOCATION	FROM	ТО	AADT	COUNTY		DISTANCE
Pine Rd	Rhawn St	Hoffnagel St	8764	1	17	0.379
Bustleton Ave	Van Kirk St	Cheltenham Ave	8862	101	17	0.437
Wissahicken Ave	Sedgwick St	Allens La	7475	101	17	0.438
Rising Sun Ave	Broad St	6Th St	7563	101	17	0.820
19th St	72Nd Ave	Cheltenham Ave	6663	101	17	0.265
Whitby Ave	Cobbs Creek Pkwy	57Th St	6610	101	17	0.749
Ridge Ave	Broad St	Spring Garden St	7372	101	17	0.597
6th St	Bainbridge St	South St	5954	101	17	0.047
Springfield Ave	60Th St	58Th St	6181	101	17	0.208
Allens La	Germantown Ave	Bryan St	5979	101	17	0.439
Cheltenham Ave	Harbison Ave	Cottage Ave	5714	101	17	0.142
20th St	Callowhill St	Noble St	5313	101	17	0.047
5th St	Bainbridge St	South St	5078	101	17	0.047
Willow Grove Ave	St Martins La	Lincoln Dr	4901	101	17	0.237
Buist Ave	70Th St	67Th St	6588	101	17	0.331
10th St	Bainbridge St	South St	4823	101	17	0.047
3rd St	Callowhill St	Noble St	4403	101	17	0.047
Lombard St	2Nd St	Front St	4039	101	17	0.095
Columbia Ave	Ridge Ave	Broad St	5112	101	17	0.371
Front St.	Bainbridge St.	South St.	4292	101	17	0.047
25th St	CollegeAve	Pennsylvania Ave	2876	101	17	0.509
2nd St	Bainbridge St	South St	4005	101	17	0.047
Mt Pleasant Ave	Mitchner Ave	Cheltenham Ave	3630	101	17	0.237
Callowhill St	16Th St	15Th St	4617	101	17	0.047
Morris St	Broad St	Passyunk Ave	3267	101	17	0.189
Tasker Ave	2Nd St	Front St	4762	101	17	0.095
Church La	Olney Ave	Musgrave St	2748	101	17	0.208
Highland Ave	Germantown Ave	Anderson St	2149	101	17	0.189
Greenwood Ave	Michener Ave	Cheltenham Ave	2025	101	17	0.265
Greene St	Sedgwick St	Lincoln Dr	1870	101	17	0.284
Rex Ave	Seminole St	Germantown Ave	520	101	17	0.426
3rd St	Wyoming Ave	Roosevelt Blvd	3991	101	19	0.142
Arrott St	Large St	Oakland St	4221	101	19	0.189
Mifflin St	11Th St	8Th St	3264	101	19	0.284
Outlook Ave	AcademyRd	Kirkwood Rd	2743	101	19	0.237
Manatawna Ave	Ridge Pk	Old Line Rd	2552	101	19	0.114
Cresco Ave	Rhawn Rd	Welsh Rd	2170	101	19	0.331

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LOCATION	FROM	TO	AADT	COUNTY	CLASS	DISTANCE
Chelten Ave	10Th St	6Th St	1977	101	19	0.331
Darien St	Pattison Ave	Packer Ave	1853	101	19	0.208
Dungan Rd	Bleigh Ave	Faunce St	2489	101	19	0.208
Hartranft St.	20Th St.	18Th St.	2549	101	19	0.237
Sanger St	Mulberry St	Cottage St	522	101	19	0.284
21 st st	Ridge Ave	North College Ave	466	101	19	0.331
7th st	Oak Lane	66Th Ave	447	101	19	0.237
8th st	66Th Ave	Chelton Ave	432	101	19	0.284
Brown St	6Th St	Broad St	430	101	19	0.142
Cresson St	School House La	Coulter St	288	101	19	0.331
10th st	Olney Ave	Clarkson St	368	101	19	0.095
Marion St	Queen La	Manheim St	313	101	19	0.208