

LAFAYETTE STREET TRAFFIC STUDY

Montgomery County, Pennsylvania



Prepared for
Pennsylvania Department of Transportation
By



Delaware Valley Regional Planning Commission

March 2004

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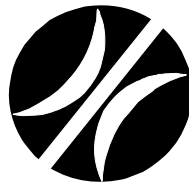
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Philadelphia, PA 19106-2582

March 2004

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



Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

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

On the cover: Lafayette Street looking eastbound at DeKalb Street (US 202 N) Intersection.

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EXECUTIVE SUMMARY

This report presents a summary of the current traffic volumes, projections of opening year 2010 and design year 2030 traffic forecasts for three alternatives for the Lafayette Street corridor. These three alternatives are the no-build, build without Development surcharge, and build with Development surcharge conditions. The surcharge forecasts include additional traffic anticipated from the proposed Norristown Riverfront Redevelopment plan within the Lafayette Street corridor. This traffic study was necessary to provide design volumes that reflect anticipated growth in the area due to planned residential and commercial developments and changes to the roadway configurations between the no-build and build design scenarios.

The Lafayette Street corridor covers a distance of about one-and-a-half miles. The corridor traverses Norristown Borough in an east-west direction and provides access to the Norristown Transportation Center, which links the area to SEPTA's bus routes and regional rail services. The Lafayette Street build alternatives assume that Lafayette Street will be extended east as a four lane arterial to Conshohocken Road where a full slip ramp interchange with the Pennsylvania Turnpike is proposed. To the west, Lafayette Street will be linked to the Dannehower Bridge via a partial interchange. Outside of the Lafayette Street corridor study area, it is assumed that the Henderson Road/I-76 Westbound Ramps, SR 23 UMT Improvements, and the Valley Forge Area improvements outlined in those studies will not be implemented.

The Delaware Valley Regional Planning Commission's (DVPRC) traffic simulation model was used to predict 2010 and 2030 no-build and build traffic volumes based on the proposed roadway improvements and DVPRC board adopted demographic and employment forecasts as updated by local land use development proposals within the corridor. Detailed capacity/level-of-service analysis was then performed for various links and intersections along the Lafayette Street corridor. This analyses evaluated the congestion differences between the no-build and build roadway configurations, as well as to determine the roadway improvements required at various major intersections to accommodate future development within the area and changes to local traffic patterns.

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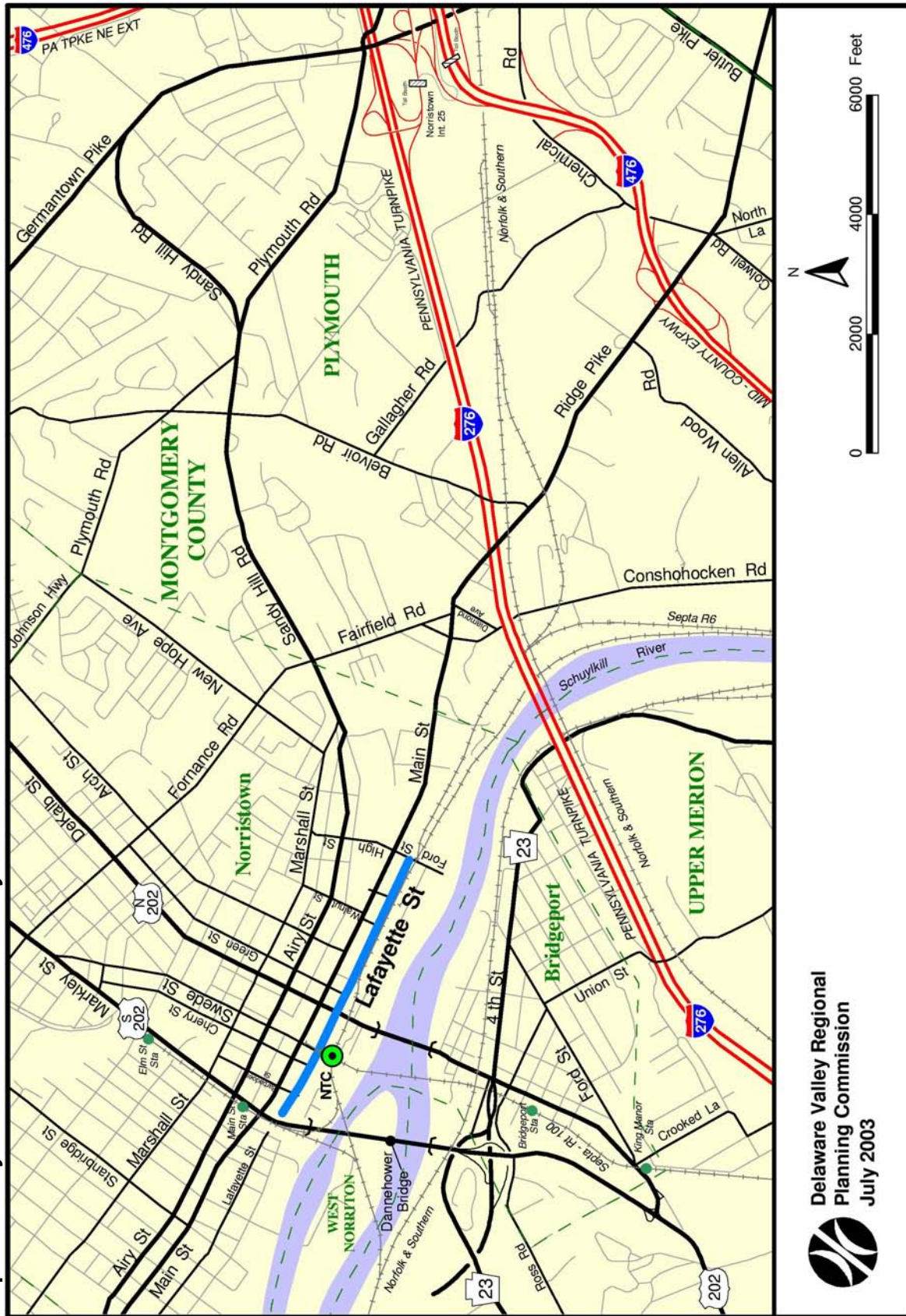
I. INTRODUCTION

This report presents a summary of the current traffic volumes and forecasts for opening year 2010 and design year 2030 No-Build, Build without Development Surcharge, and Build with Development Surcharge alternatives for the Lafayette Street corridor. The Lafayette Street corridor covers a distance of about one-and-one-half miles. The corridor traverses Norristown Borough in an east-west direction and provides access to the Norristown Transportation Center, which provides an important link to the SEPTA's bus routes and regional rail lines that service Norristown. **Map I-1** provides an overview of the Traffic study area surrounding the Lafayette Street corridor, as well as the limits of the corridor.

This traffic study was necessary to provide design volumes that reflect anticipated growth in the area due to possible developments, including those in the Norristown Riverfront Redevelopment Plan, and proposed changes to the roadway network. The Lafayette Street build alternatives assume that Lafayette Street will be extended east as a four lane arterial to Conshohocken Road where a full slip ramp interchange with the Pennsylvania Turnpike is proposed. To the west, Lafayette Street will be linked to the Dannehower Bridge via a partial interchange. Outside of the Lafayette Street corridor study area, it is assumed that the Henderson Road/I-76 Westbound Ramps, SR 23 Section UMT Improvements, and the Valley Forge Area improvements outlined in those studies will not be implemented.

The report has been sub-divided into five chapters. Chapter II provides a description of the Lafayette Street corridor, including current highway facilities, land uses, and traffic volumes. The travel forecasting procedures used in the study are described in Chapter III. Highway traffic volume forecasts are presented and analyzed in Chapter IV for the no-build and build alternatives both with and without the Development Surcharge for the proposed Norristown Riverfront Redevelopment Plan. Chapter V presents Congestion Management System (CMS) analysis for the Lafayette Street corridor.

Map I-1. Lafayette Street Traffic Study Area



II. DESCRIPTION OF THE LAFAYETTE STREET CORRIDOR

The Lafayette Street corridor is located in Norristown Borough and adjacent Plymouth Township, Montgomery County, Pennsylvania. The corridor spans a one-mile section from Markley Street (US 202 South) to Ford Street in Norristown and another half-mile eastward to Conshohocken Road near the Pennsylvania Turnpike overpass. Currently, a direct connection is not provided to Markley Street (US 202 South) or the Dannehower Bridge. Rather, Barbadoes, Cherry, and Swede Streets are utilized. Lafayette Street currently serves a limited number of residential homes along with a mixture of commercial and industrial sites.

A. Existing Facilities and Land Use

Lafayette Street traverses Norristown Borough in an east-west direction. The one-mile span of Lafayette Street within Norristown Borough provides access to a limited number of residences located to the east of DeKalb Street, as well as a mixture of office, commercial, and industrial developments. Currently, Lafayette Street provides indirect access to other key roadways in the area. In fact, the only major highway in the area with a direct connection to Lafayette Street is DeKalb Street (US 202 North). Other major roadways including Markley Street (US 202 South), the Pennsylvania Turnpike (I-276), and the Mid-County Expressway (I-476) can only be accessed via the Ridge Pike corridor.

Lafayette Street provides a single lane per direction with additional turn lanes provided at DeKalb Street (US 202). Lafayette Street has a posted speed limit of 25 miles per hour. Although Lafayette Street is not a high volume roadway, it does provide direct access to the Norristown Transportation Center located at the intersection of Lafayette Street and Swede Street. The Norristown Transportation Center serves SEPTA's regional rail, the light rail or trolley system, and seven different bus routes. A brief description of each of the SEPTA routes available at the Norristown Transportation Center is provided below:

- **Regional Rail R6** – Norristown to Central Philadelphia;
- **Trolley Route 100** – Norristown to the 69th Street Terminal;
- **Bus Route 91** – Norristown to Eagleville (Saturday services only);
- **Bus Route 93** – Norristown to Pottstown via Collegeville;
- **Bus Route 96** – Norristown to Telford via Montgomery County Community College, Montgomery Mall, and Lansdale;
- **Bus Route 97** – Penn Square to Spring Mill via Norristown and Conshohocken;
- **Bus Route 98** – Norristown to Plymouth Meeting Mall and Willow Grove via Blue Bell and Ambler;
- **Bus Route 99** – Norristown to Pottstown via King of Prussia, Phoenixville, and Royersford; and
- **Bus Route 131** – Norristown to Valley Forge Corporate Center.

B. Existing Traffic Volumes

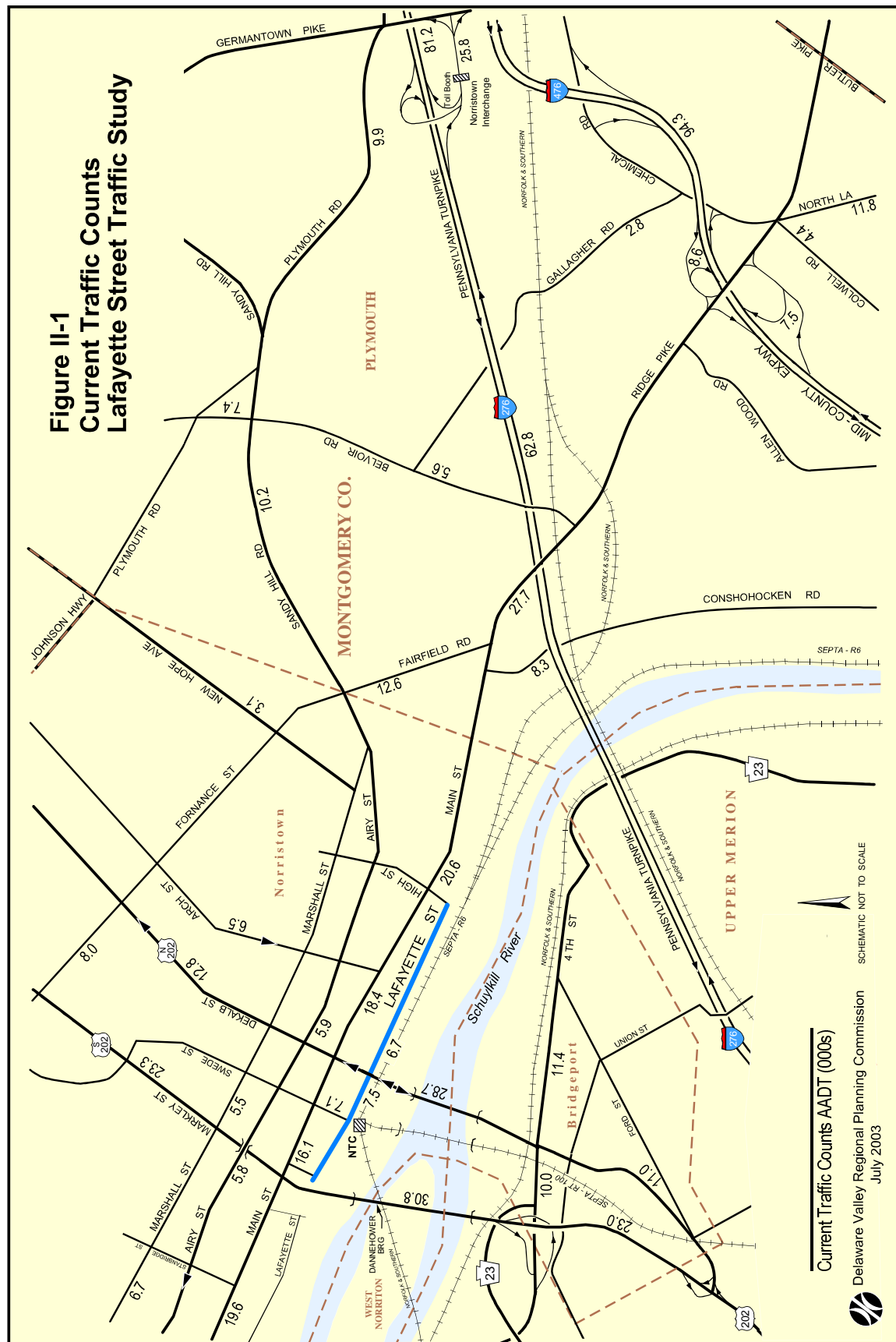
DVRPC and the traffic consultant collected existing traffic counts in the study area, including Automatic Traffic Recorder (ATR) counts and Manual Turning Movement counts. The ATR count locations were counted utilizing inductive loop and pneumatic tubes. The resultant annual average daily two-way traffic volumes (AADT) are displayed in **Figure II-1**. Detailed hourly traffic counts corresponding to the AADT information for the study area are included in **Appendix A**.

Current two-way AADT traffic counts on Lafayette Street are 6,700 and 7,500 vehicles per day (vpd). As can be seen in Figure II-1, the higher traffic volumes (7,500 vpd) occur to the west of DeKalb Street (US 202 North) while the lower traffic volumes (6,700 vpd) occur to the east of DeKalb Street (US 202 North). This is the maximum load point and current volumes elsewhere on Lafayette Street are lower.

Parallel routes to Lafayette Street include Main Street/Ridge Pike, Airy Street, Sandy Hill Road, Marshall Street, and PA 23. With the exception of Main Street/Ridge Pike, the parallel routes carry between 5,500 to 11,500 vpd, while Main Street/Ridge Pike carries between 16,000 to 27,700 vpd. Main Street/Ridge Pike is a principal east-west arterial in Norristown. Through the downtown section of Main Street there are approximately 20,000 vpd utilizing this roadway while to the west near the Ridge Pike/Mid-County Expressway (I-476) interchange ramps the traffic volumes are significantly higher (27,000 vpd).

Roadways intersecting Lafayette Street include Markley Street (US 202 South), Barbadoes, Cherry, Swede Streets and DeKalb Street (US 202 North), as well as Green, Walnut, Franklin, Markley and Ford/High Streets. The Lafayette Street Build Alternatives may also impact roadways intersecting Main Street/Ridge Pike including Arch Street, Fairfield Road/Fornance Street, Conshohocken Road, Belvoir Road, Colwell Road, and North Lane. Of these major intersecting routes only DeKalb Street (US 202 North) provides a direct link to Lafayette Street. The Dannehower and DeKalb Street Bridges provide the only direct connections over the Schuylkill River between Norristown and Bridgeport boroughs. These two links carry approximately 28,700 vpd (DeKalb Street) and 30,800 vpd (Dannehower Bridge) in both directions of travel. With the exception of DeKalb and Markley Streets (US 202), which carry approximately 30,000 vpd, the other major intersecting routes within the Lafayette Street corridor carry less than 12,600 vpd. Within Norristown, Swede Street serves about 7,100 vpd.

Other facilities within the Lafayette Street corridor include the Pennsylvania Turnpike (I-276) and the Mid-County Expressway (I-476). The Pennsylvania Turnpike carries approximately 62,800 vpd (total both directions) to the west of the Norristown Interchange and approximately 81,200 vpd to the east of the interchange. And approximately 25,800 vpd utilize the Norristown Interchange to enter/exit the Pennsylvania Turnpike via Germantown Pike. The Mid-County Expressway (I-476) carries approximately 94,300 vpd to the north of Ridge Pike with approximately 7,500 vpd coming from Ridge Pike and approximately 8,600 vpd traveling to Ridge Pike from the north.

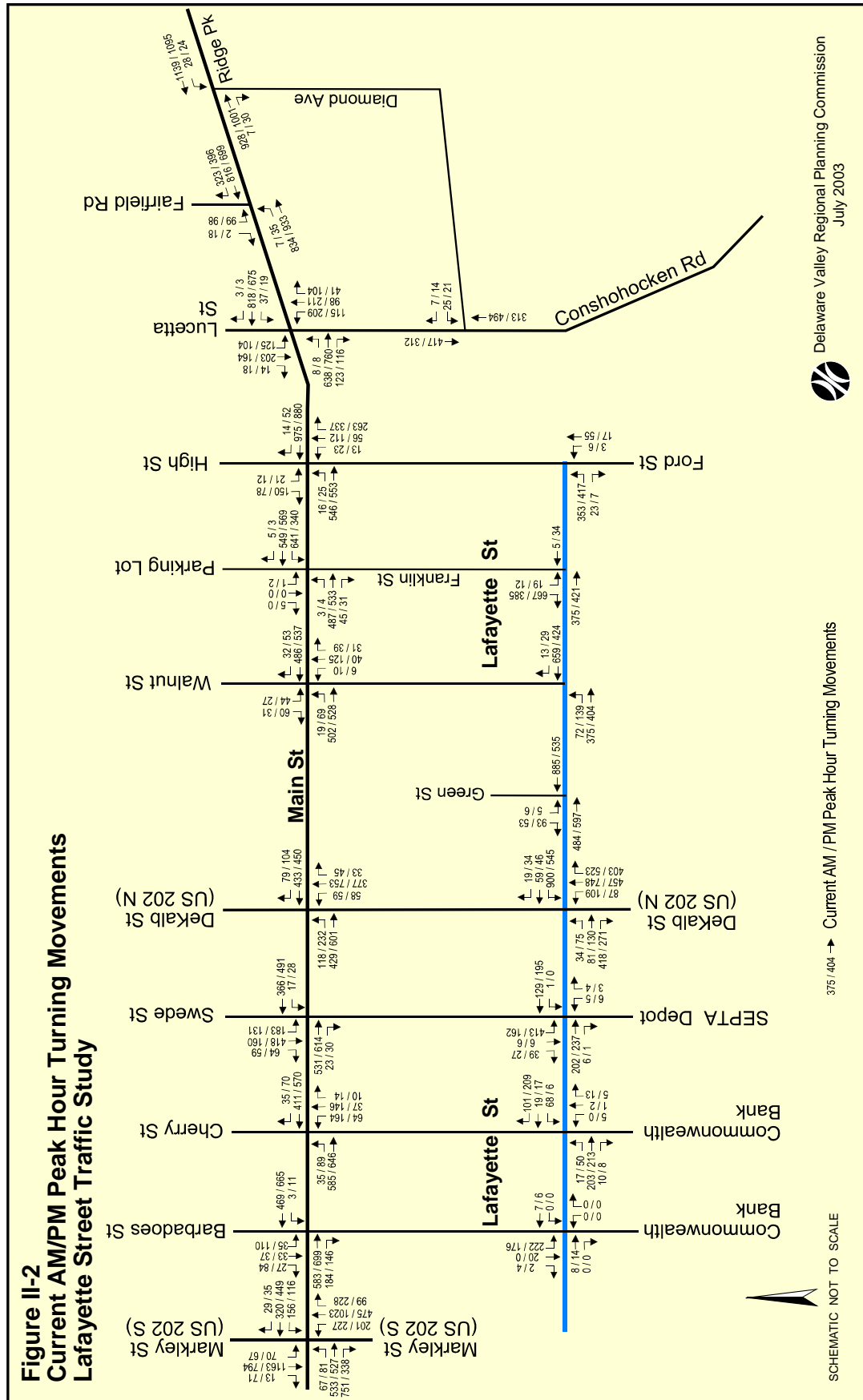


C. Current Turning Volumes

Manual turning movement counts were collected within the study area as part of this effort at the major study area intersections. **Figure II-2** displays the Manual Turning Movement (MTM) count data, which were collected at the following intersection locations during the weekday morning period (7:00 A.M. – 9:00 A.M.) and weekday afternoon period (4:00 P.M. – 6:00 P.M.) peak hours:

- Lafayette Street and Barbadoes Street
- Lafayette Street and Cherry Street
- Lafayette Street and Swede Street
- Lafayette Street and DeKalb Street (US 202 North)
- Lafayette Street and Green Street
- Lafayette Street and Walnut Street
- Lafayette Street and Franklin Street
- Lafayette Street and Ford Street
- Main Street and Markley Street (US 202 South)
- Main Street and Barbadoes Street
- Main Street and Cherry Street
- Main Street and Swede Street
- Main Street and DeKalb Street (US 202 North)
- Main Street and Walnut Street
- Main Street and Franklin Street
- Main Street and High Street
- Ridge Pike and Lucetta Street/Conshohocken Road
- Ridge Pike and Fairfield Road
- Ridge Pike and Diamond Avenue
- Conshohocken Road and Diamond Avenue

The detailed traffic MTM data counts at the study area intersections are included in **Appendix B**.



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III. TRAVEL FORECASTING PROCEDURES

A. Socioeconomic Projections

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

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

1. Population Forecasting

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

2. Employment Forecasting

Employment is influenced by local, national, and global political and socio-economic factors. The Bureau of Economic Analysis provides the most complete and consistent time series data on county employment by sector, and serves as DVRPC's primary data source for employment forecasting. Employment sectors include mining, agriculture, construction, manufacturing, transportation, retail, wholesale, finance/insurance, service industries, government, and military. Other supplemental sources of data include the U.S. Census, Dun & Bradstreet, Bureau of Labor Statistics, Occupational Privilege tax data, and other public and private sector forecasts. The OBERS shift-share model in combination with the

Woods and Poole Economics' sectoral forecasts provides the basis for DVRPC's employment forecasts. As in the population forecasts, county level total employment is used as a control total for sector distribution and municipal level forecasts. Forecasts are then reviewed by member counties for final adjustments based on local knowledge.

3. Lafayette Street Study Area Population and Employment Forecasts

DVRPC's long-range population and employment forecasts to year 2025 were developed prior to the release of the 2000 Census. At the time the Lafayette Street traffic study was initiated, 2000 municipal-level Census population data was unavailable. 2000 Census employment data is scheduled for release in 2003.

As part of the Lafayette Street traffic study, DVRPC staff reviewed its most recent current population and employment estimates (1997), its 2025 long-range population and employment forecasts, and all proposed land-use developments in the study area. Based on this review, DVRPC updated the 2025 municipal- and traffic zone population and employment forecasts for use as inputs to the traffic simulation models.

Table III-1 summarizes the population forecasts and **Table III-2** summarizes the employment forecasts used in the Lafayette Street Traffic Study. In these tables the "DVRPC" 2025 column refers to the local adopted numbers and the "Forecast 2025" column refers to the updated estimate used in the study.

For the traffic forecasts under the Build with Development Surcharge Alternative, the proposed residential and commercial developments included in the recently adopted Norristown Riverfront Development Plan were included in the traffic projections. This development plan is centered in the Lafayette Street Study Area. The proposed dwelling units and square footage in the commercial buildings were converted to equivalent totals of households and employment and allocated to traffic zones based on the site plan.

In total, the Riverfront Redevelopment Project is assumed to contain 364 housing units, 936,000 square feet of office, 637,000 square feet of retail, 383 hotel rooms, and about 500,000 square feet of restaurant/entertainment development. Some 364 households and almost 5,200 employees are associated with this development plan. Travel estimates resulting from this socio-economic surcharge were prepared through DVRPC's trip generation model and added to the 2030 DVRPC Board Adopted traffic zone trip production and attraction forecasts input into the DVRPC model.

**Table III-1
Municipal Population Forecasts for the Lafayette Street Traffic Study**

<u>Municipality</u>	<u>DVRPC 1997</u>	<u>Census 2000</u>	<u>DVRPC 2025</u>	<u>Forecast 2025</u>	<u>Difference between 1997 and 2025 Forecast</u>	
					<u>Diff.</u>	<u>% Diff.</u>
Bridgeport	4,193	4,371	4,270	4,380	187	4.5%
Conshohocken	8,252	7,589	7,800	8,000	-252	-3.1%
Lower Providence	20,815	22,390	27,790	28,740	7,925	38.1%
Norristown	30,008	31,282	29,860	31,380	1,372	4.6%
Plymouth	16,028	16,045	15,170	16,590	562	3.5%
Upper Merion	26,289	26,863	28,300	28,510	2,221	8.4%
West Conshohocken	1,325	1,446	1,500	1,450	125	9.4%
West Norriton	14,963	14,901	14,830	16,560	1,597	10.7%
Montgomery County	121,873	124,887	129,520	135,610	13,737	11.3%
Schuylkill	6,155	6,960	8,310	11,503	5,348	86.9%
Tredyffrin	29,703	29,062	31,510	32,550	2,847	9.6%
Chester County	35,858	36,022	39,820	44,053	8,195	22.9%
TOTAL	157,731	160,909	169,340	179,663	21,932	13.9%

**Table III-2
Municipal Employment Forecasts for the Lafayette Street Traffic Study**

<u>Municipality</u>	<u>DVRPC 1997</u>	<u>DVRPC 2025</u>	<u>Forecast 2025</u>	<u>Difference between 1997 and 2025 Forecast</u>	
				<u>Diff.</u>	<u>% Diff.</u>
Bridgeport	1,526	1,300	1,570	44	2.9%
Conshohocken	5,655	10,500	9,450	3,795	67.1%
Lower Providence	10,503	13,000	15,140	4,637	44.1%
Norristown	15,923	14,500	16,400	477	3.0%
Plymouth	22,399	32,000	28,810	6,411	28.6%
Upper Merion	49,737	60,250	60,250	10,513	21.1%
West Conshohocken	2,408	3,450	3,110	702	29.2%
West Norriton	6,925	7,750	9,250	2,325	33.6%
Montgomery County	115,076	142,750	143,980	28,904	25.1%
Schuylkill	2,893	2,800	3,200	307	10.6%
Tredyffrin	28,626	35,000	36,017	7,391	25.8%
Chester County	31,519	37,800	39,217	7,698	24.4%
TOTAL	146,595	180,550	183,197	36,602	25.0%

B. Travel Forecasting Methods

DVRPC's traffic simulation models were used in conjunction with the 2025 population and employment forecasts to develop 2025 traffic volumes and patterns. Projection of travel demand for the Lafayette Street Build case was accomplished in two phases. First a 2025 projection of roadway traffic volumes was made based on the updated DVRPC board adopted 2025 socioeconomic forecast and the facility improvements included in the transportation alternative under study. In a second step, 2010 link volumes were estimated by interpolating between current estimates and year 2030 forecasts were prepared by extrapolating from 2025.

1. Focused Simulation Process

The regional travel assignments do not give the detailed forecasts of AM and PM peak hour link volumes and turns required for corridor level design studies. In addition, local streets not included in the regional highway network are often of great interest to local planners and engineers. In order to improve the forecasting levels provided and to accommodate these special needs, an enhanced assignment technique focused on a detailed study area is used to produce corridor level highway and transit forecasts. This focused simulation process allows the use of DVRPC regional simulation models and increases the accuracy and detail of the travel forecasts within the detailed study area. At the same time, all existing and proposed highways throughout the region and their impact on both regional and interregional travel patterns become an integral part of the simulation process.

A focused approach was used to estimate traffic volumes based on the highway service levels provided by the Lafayette Street alternatives. The focused simulation process involved adding missing local streets to the network. Simulation zones inside the study area were subdivided so that traffic from existing and proposed land use developments could be loaded directly onto the network.

2. Traffic Assignment Validation and Future Trip Table Preparation

The final step in the preparation of the focused simulation process is the validation of the simulated highway assignment outputs using current traffic counts taken on roadways serving the study area. The focused simulation model was executed with inputs reflective of 1997 conditions and the results compared with recent traffic counts collected by DVRPC. Based on this analysis, the focused model produced reasonable daily traffic volumes.

To establish the current travel demand for the area under influence of the proposed roadway access improvements, DVRPC gathered information from a traffic counting effort conducted by field personnel. Automatic Traffic Recorder equipment was set at selected locations. These traffic counts were then tabulated on a peak period and daily basis and factored to represent annual average daily traffic (AADT). These daily traffic counts form the basis for the validation of the travel simulation model. In addition, the peak hour distributions

of traffic at the count locations provide guidance for the estimation of AM and PM peak hour traffic forecasts under the No-Build and Build alternatives.

For this study, the focused 2025 trip table was prepared by disaggregating the socio-economic inputs to the DVRPC trip generation model and surcharging these data to reflect the additional industrial, commercial, and residential development in the area not included in the DVRPC Board adopted 2025 forecast. Following this, the DVRPC model from trip generation through traffic assignment was executed for both of the improvement alternatives. The resulting travel matrix includes all travel patterns throughout the Delaware Valley Region. Travel to and from all parts of Bucks, Chester, Delaware, and Montgomery counties, Philadelphia, and New Jersey via the Delaware River bridges is included as are trips to/from the remainder of Pennsylvania and the state of Delaware.

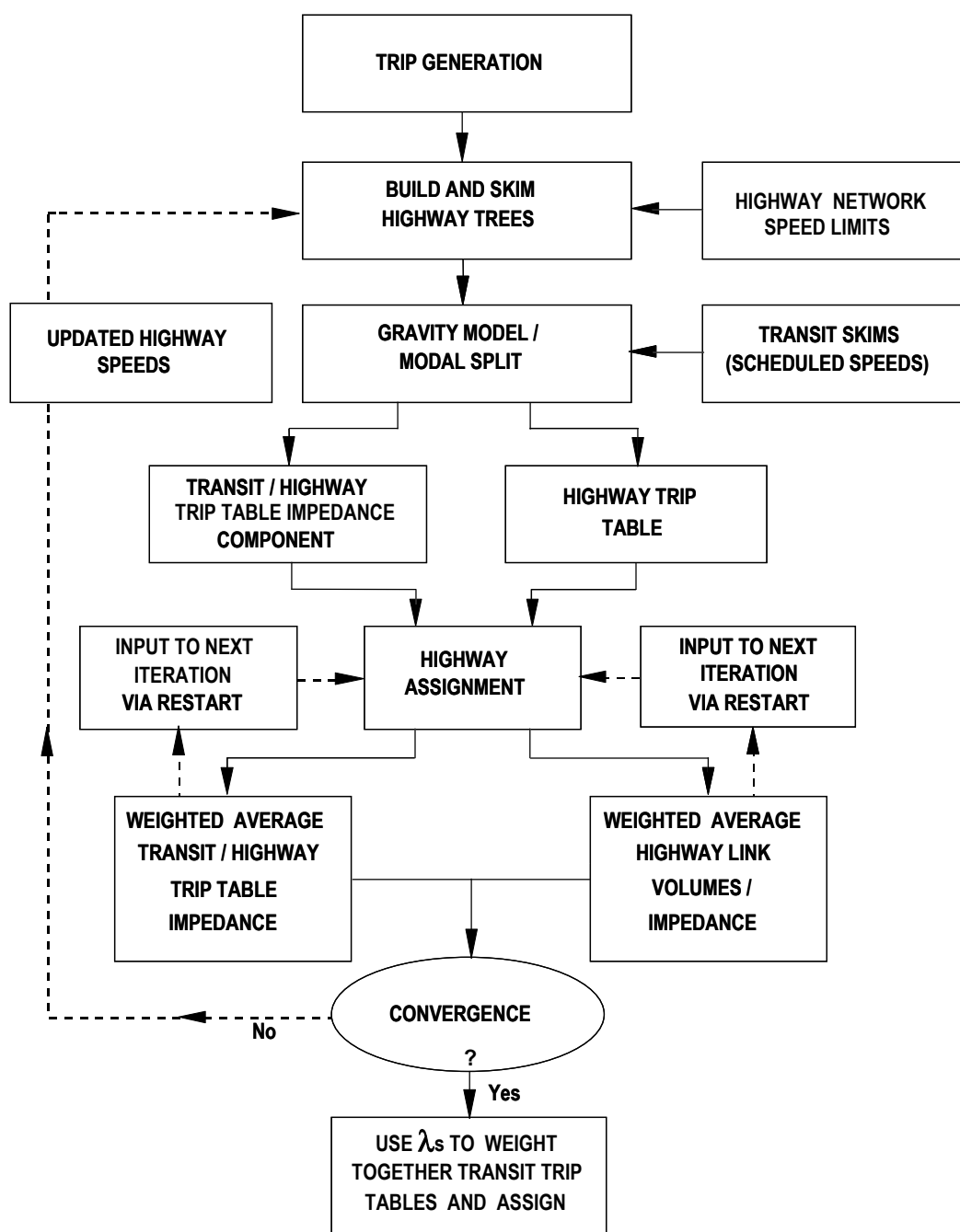
C. Synopsis of the Enhanced DVRPC Travel Simulation Process

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

DVRPC's enhanced travel simulation model is disaggregated into separate peak period, midday, and evening time periods. This disaggregation begins in trip generation where factors are used to separate daily trips into peak and midday travel. Evening travel is then defined as the residual after peak and midday travel are removed from daily travel. The enhanced process utilizes completely separate model chains for peak, midday, and evening travel simulation runs. The peak period (combined AM and PM) is defined as 7:00 A.M. to 9:00 A.M. and 3:00 P.M. to 6:00 P.M.; midday is defined as 9:00 A.M. to 3:00 P.M. and evening as 6:00 P.M. to 7:00 A.M. The separation of the models into three time periods was accomplished with few changes to the basic models or their parameters. Inputs sensitive to time of day such as highway capacities and transit service levels were disaggregated to be reflective of time-period specific conditions.

The enhanced iterative DVRPC model is charted in **Figure III-1**. The first step in the process involves generating the number of trips that are produced by and destined for each traffic zone and cordon station throughout the nine-county region.

Figure III-1: Evans Implementation Using DVRPC's Regional Simulation Model



1. Trip Generation

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

2. Evans Iteration

The iterative portion of the Evans Algorithm involves updating the highway network restrained link travel speeds, rebuilding the minimum time paths through the network, and skimming the inter-zonal travel time for the minimum paths. Then the trip distribution, modal split, and highway assignment models are executed in sequence for each pass through the model chain (see Figure III-1). After convergence is reached, the transit trip tables for each iteration are weighted together and the weighted average table assigned to the transit network. The highway trip tables are loaded onto the network during each Evans iteration. A composite highway trip table is not required to perform the highway assignment - rather the highway link volumes from the assignment are weighted together directly. Seven iterations of the Evans process, for each time period, are performed to ensure that convergence on travel times is reached.

3. Trip Distribution

Trip distribution is the process whereby the zonal trip ends established in the trip generation analysis are linked together to form origin-destination patterns in the trip table format. Peak, midday, and evening trip ends are distributed separately. For each Evans iteration, a series of seven gravity type distribution models are applied at the zonal level for each time period. These models follow the trip purpose and vehicle type stratifications established in trip generation. Documentation of the trip distribution models is included in the commission report entitled, "**1997 Travel Simulation Model for the Delaware Valley Region.**"

4. Modal Split

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

assignment to the highway network. See commission report entitled "**1990 Travel Simulation Model for the Delaware Valley Region**" for a detailed description of the model parameters.

5. Highway Assignment

The final step in the iterative simulation process is the assignment of vehicle trips to the highway network. For peak, midday, and evening travel, this assignment model produces the future traffic volumes for individual highway links that are required for planning analyses. The highway network and trip table underlying the assignment is regional in nature. This allows the diversion of highway vehicular travel into and through the study area to various points of entry and exit in response to the characteristics of the transportation system.

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

Initial estimates of future year intersection turning volumes were determined by scaling current year turning volumes according to growth factors on each intersection leg. These growth factors are the ratio of future year peak hour link volumes to current peak hour volumes. The future year peak hour link volumes for each leg of the intersection were determined by multiplying the forecasted AADT, an output of the DVRPC traffic assignment, by AM and PM "K" factors. Existing "K" factors were calculated from traffic counts as the ratio of the highest morning and evening hourly volumes to the total AADT. Future year "K" factors were based on the existing "K" factors and the AADT growth on each intersection approach. The resulting forecasted turning volumes for the AM and PM peak hours were reviewed for reasonableness and adjusted as necessary to balance traffic flows between adjacent intersections.

6. Transit Assignment

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

IV. HIGHWAY TRAFFIC VOLUME FORECASTS

Projected average daily traffic volumes for selected highway links within the study area are presented and analyzed in this Chapter of the report. Forecasts for two future years are presented; the anticipated opening year (2010) and the design year (2030), which is twenty years beyond the opening year. Traffic volumes for 2010 were developed by applying a formula to the current and 2025 volumes while traffic volumes for 2030 were developed by extrapolating from the 2025 volumes. A discussion of the no-build and build alternatives is included in the following sections along with details regarding analysis results. A comparison of the no-build and build conditions is also included.

A. 2010 and 2030 No-Build Alternatives

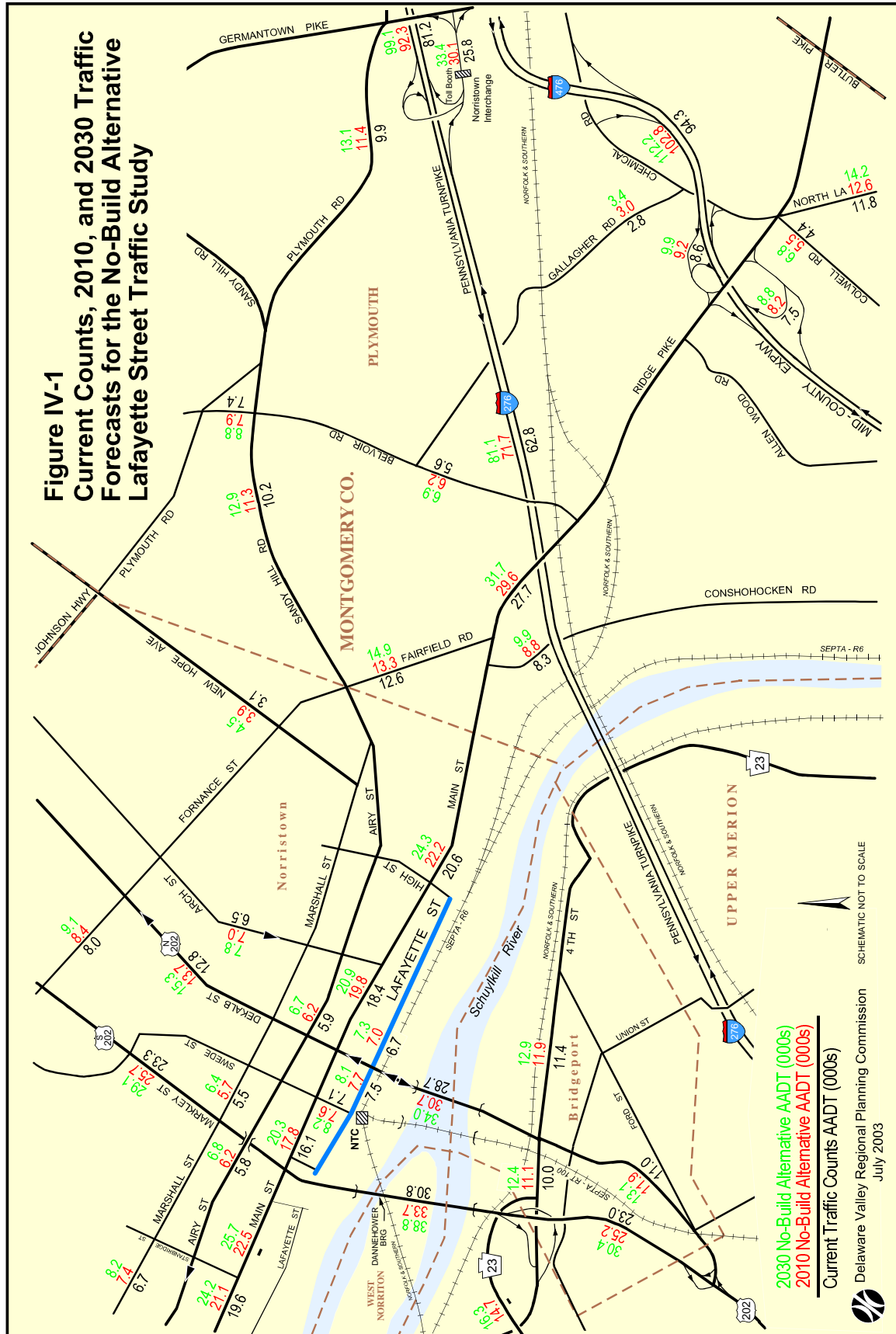
Figure IV-1 compares the current traffic volumes with future 2010 and 2030 No-Build traffic forecasts. **Figure IV-2** provides a summary of the future 2030 no-build weekday morning and weekday afternoon peak hour turning movement volumes at the study area intersections. **Table IV-1** provides a comparison of the current traffic volumes to the 2030 future no-build traffic volumes.

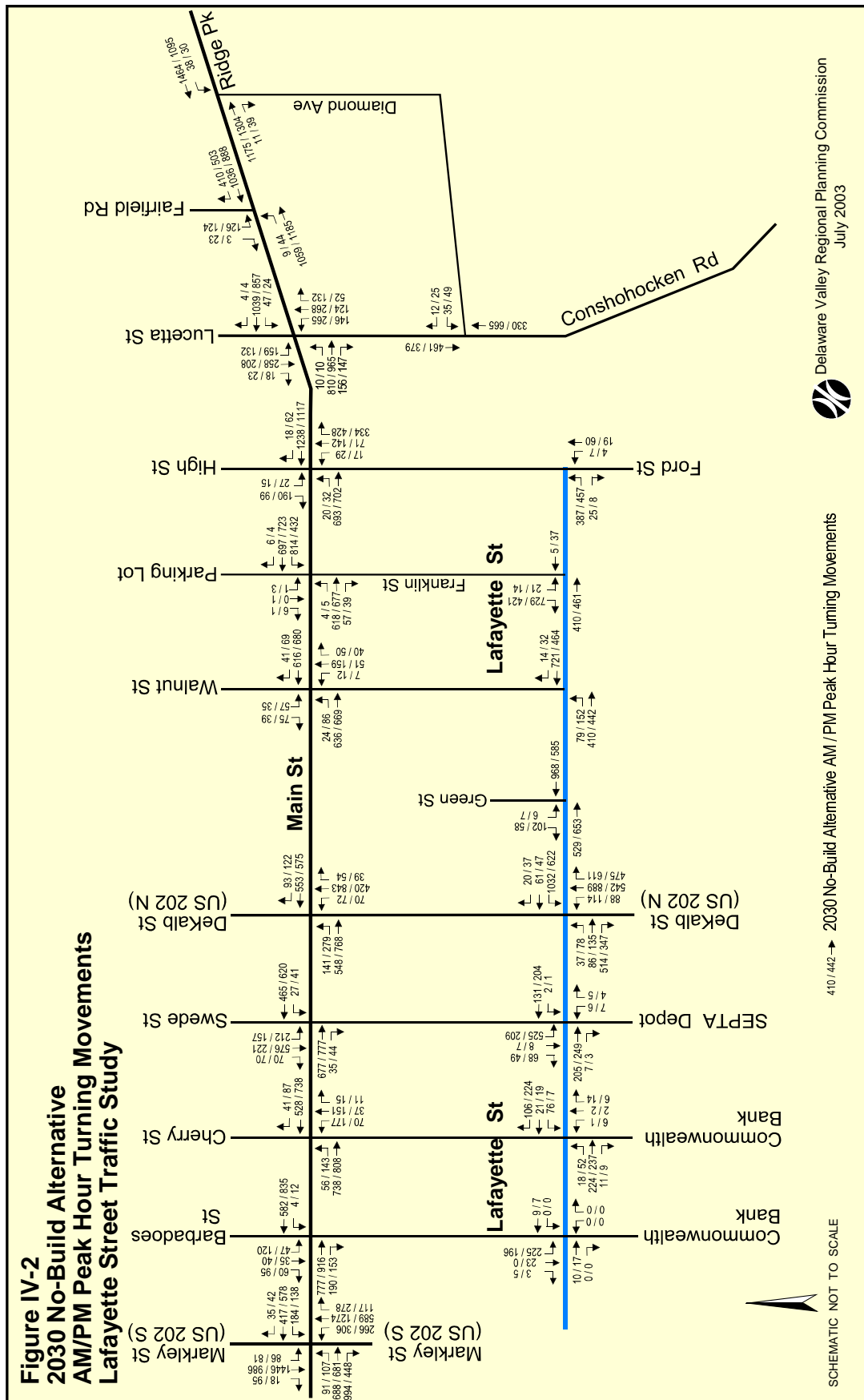
As can be seen from Table IV-1, traffic along the Lafayette Street corridor at DeKalb Street is expected to increase approximately 8 percent to 10 percent by the year 2030 due development trends in the area. While parallel routes, including Ridge Pike, Main Street, Airy Street, Marshall Street, and PA 23 are expected to increase by 14 percent to 26 percent by the year 2030. In absolute terms, these increases range from 768 vpd on Airy Street to 4,566 vpd on Main Street near Stanbridge Street.

The largest percentage growth along US 202 will occur at the Bridgeport Bypass (29 percent northbound and 36 percent southbound) with the percent of the increase in 2030 traffic volumes decreasing along US 202 as the corridor enter Norristown. However, the absolute increase in traffic on US 202 is higher in Norristown – 5,781 versus 3,630 southbound and 7,967 versus 3,810 northbound.

The Pennsylvania Turnpike (I-276) will experience increases in traffic ranging from 22 percent to 29 percent by the year 2030 with traffic at the Norristown Interchange (25) increasing by 21 percent. Similarly, traffic is expected to increase by approximately 19 percent along the Mid-County Expressway (I-476) to the north of Ridge Pike with the northbound on-ramp and the southbound off-ramp experiencing an increase in traffic volumes of about 15 percent. In absolute terms, Turnpike traffic increase by about 18,000 two-way vpd through the study area from the Valley Forge and Norristown interchanges, which experience traffic increases of about 10,800 vpd and 5,500 vpd, respectively.

In general, it can be seen from Table IV-1 that the anticipated traffic increase along the Lafayette Street corridor is significantly lower (8 percent to 10 percent) than the expected traffic increases along the other major parallel (13 percent to 27 percent) and intersecting routes (13 percent to 53 percent) within the study area.





**Table IV-1
Current, 2010 and 2030 No-Build Alternatives
Average Daily Traffic Volumes**

<u>Highway Facility</u>	<u>Location</u>	<u>Current Volume</u>	<u>2010 No-Build Volume</u>	<u>2030 No-Build Volume</u>	<u>2030 No- Build/Current Growth</u>	<u>Percent</u>
Lafayette Street						
Lafayette Street EB Ramp	Dannehower Bridge to Swede Street	0	n/a	n/a	n/a	n/a
Lafayette Street WB Ramp	Swede Street to Dannehower Bridge	0	n/a	n/a	n/a	n/a
Lafayette Street	DeKalb Street (US 202 N) to Swede Street	7,477	7,700	8,100	623	8.3%
Lafayette Street	DeKalb Street (US 202 N) to Ford Street	6,655	7,000	7,300	645	9.7%
Lafayette Street	Ford Street to Proposed PA Turnpike (I-276) Slip Ramp	0	n/a	n/a	n/a	n/a
Proposed Slip Ramps and Pennsylvania Turnpike (I-276)						
Proposed PA Turnpike (I-276 WB) Off-Ramp	Proposed PA Turnpike (I-276 WB) to Lafayette Street	0	n/a	n/a	n/a	n/a
Proposed PA Turnpike (I-276 EB) On-Ramp	Lafayette Street to Proposed PA Turnpike (I-276 EB)	0	n/a	n/a	n/a	n/a
Proposed PA Turnpike (I-276 EB) Off-Ramp	Proposed PA Turnpike (I-276 EB) to Lafayette Street	0	n/a	n/a	n/a	n/a
Proposed PA Turnpike (I-276 WB) On-Ramp	Lafayette Street to Proposed PA Turnpike (I-276 WB)	0	n/a	n/a	n/a	n/a
PA Turnpike (I-276)	Mid-County Expressway (I-476) (25A) to Norristown (25)	81,200	92,300	99,100	17,900	22.0%
PA Turnpike (I-276)	Norristown (25) to Proposed Slip Ramps	62,800	71,700	81,100	18,300	29.1%
PA Turnpike (I-276)	Proposed Slip Ramps to Valley Forge (24)	62,800	71,700	81,100	18,300	29.1%
Norristown Interchange (25)	PA Turnpike (I-276) to Germantown Pike	25,846	30,100	33,400	3,300	10.9%
Valley Forge Interchange (24)	PA Turnpike (I-276) to Schuylkill Expressway (I-76)	50,344	55,500	61,100	10,756	21.4%
Intersecting Routes						
Colwell Road	Near 19th Avenue	4,446	5,500	6,800	2,354	52.9%
North Lane	Butler Pike to Ridge Pike	11,790	12,600	14,200	2,410	20.4%
Conshohocken Road	PA Turnpike (I-276) to Mid-County Expressway (I-476)	8,338	8,800	9,900	1,562	18.7%
Conshohocken Road	Ridge Pike to PA Turnpike (I-276)	8,338	8,800	9,900	1,562	18.7%
Fairfield Road	Ridge Pike to Sandy Hill Road	12,648	13,300	14,900	2,252	17.8%
Fornance Street	US 202 North to US 202 South	8,031	8,400	9,100	1,069	13.3%
Belvoir Road	Plymouth Road to Sandy Hill Road	7,441	7,900	8,800	1,359	18.3%
Arch Street	Marshall Street to Fornance Street	6,519	7,000	7,800	1,281	19.7%
US 202 North (DeKalb Street)	Marshall Street to Fornance Street	12,810	13,700	15,300	2,490	19.4%
US 202 North (DeKalb Street)	PA 23 to Main Street	28,666	30,700	34,000	5,334	18.6%
US 202 North (DeKalb Street)	Ford Street to Main Street	11,019	11,900	13,100	2,081	18.9%

**Table IV-1
Current, 2010 and 2030 No-Build Alternatives
Average Daily Traffic Volumes (Continued)**

<u>Highway Facility</u>	<u>Location</u>	<u>Current Volume</u>	<u>2010 No-Build Volume</u>	<u>2030 No-Build Volume</u>	<u>2030 No- Build/Current Growth</u>	<u>Percent</u>
US 202 South (Markley Street)	Swede Street to Marshall Street	23,319	25,700	29,100	5,781	24.8%
US 202 South (Dannehower Bridge)	Main Street to PA 23	30,833	33,700	38,800	7,967	25.8%
US 202 (Bridgeport Bypass SB)	PA 23 to DeKalb Street (US 202 North)	12,470	13,600	16,100	3,630	29.1%
US 202 (Bridgeport Bypass NB)	PA 23 to DeKalb Street (US 202 North)	10,490	11,600	14,300	3,810	36.3%
Parallel Routes						
Gallagher Road	Belvoir Road to Chemical Road	2,755	3,000	3,400	645	23.4%
Sandy Hill Road	Fornance Street to Belvoir Road	10,176	11,300	12,900	2,724	26.8%
Marshall Street	US 202 North to US 202 South	5,477	5,700	6,400	923	16.9%
Marshall Street	US 202 South to Forrest Street	6,710	7,400	8,200	1,490	22.2%
Airy Street	Main Street to Stanbridge Street	5,783	6,200	6,800	1,017	17.6%
Airy Street	US 202 North to US 202 South	5,934	6,200	6,700	766	12.9%
Ridge Pike	Conshohocken Road to Belvoir Road	27,729	29,600	31,700	3,971	14.3%
Main Street	High Street to Conshohocken Road	20,597	22,200	24,300	3,703	18.0%
Main Street	Markley Street (US 202 S) to DeKalb Street (US 202 N)	16,059	17,800	20,300	4,241	26.4%
Main Street	Airy Street/Forrest Street to Stanbridge Street	19,634	21,100	24,200	4,566	23.3%
PA 23	US 202 North to Ford Street	11,410	11,900	12,900	1,490	13.1%
PA 23	US 202 North to US 202 South	10,000	11,100	12,400	2,400	24.0%
PA 23	Anderson Road to Meyers Road	0	14,700	16,300	n/a	n/a
Mid-County Expressway (I-476)	Ridge Pike to Germantown Pike	94,265	102,800	112,200	17,935	19.0%
Mid-County Expressway (I-476 SB) Off-Ramp	Mid-County Expressway (I-476 SB) to Ridge Pike	8,574	9,200	9,900	1,326	15.5%
Mid-County Expressway (I-476 NB) On-Ramp	Ridge Pike to Mid-County Expressway (I-476 NB)	7,528	8,200	8,800	1,272	16.9%
Additional Links						
Plymouth Road	Sandy Hill Road to Germantown Pike	9,922	11,400	13,100	3,178	32.0%
Belvoir Road	Gallagher Road to Ridge Pike	5,613	6,200	6,900	1,287	22.9%
New Hope Avenue	Johnson Highway to Fornance Street	3,061	3,900	4,500	1,439	47.0%
Main Street	DeKalb Street (US 202 N) to Arch Street	18,352	19,800	20,900	2,548	13.9%
Main Street	Markley Street (US 202 S) to Stanbridge St	0	22,500	25,700	n/a	n/a
Swede/Barbadoes/Cherry	Lafayette Street to Main Street	7,124	7,600	8,200	1,076	15.1%

B. 2010 and 2030 Build without Development Surcharge Alternatives

Figure IV-3 summarizes the 2010 and 2030 no-build and build alternatives without Development Surcharge traffic forecasts. **Figure IV-4** provides a summary of the 2030 future build without Development Surcharge weekday morning and weekday afternoon peak hour turning movement volumes at the study area intersections. **Table IV-2** provides a comparison of the current traffic volumes to the 2030 future build without Development Surcharge traffic volumes. It should be noted that the term “without Development Surcharge” implies that no additional development traffic has resulting from the Norristown Riverfront Redevelopment Project has been assumed for the 2030 design year.

Under the build without development surcharge alternative, Lafayette Street will be extended in both the east and west directions of travel. To the east, Lafayette Street will be extended as a four-lane arterial that will tie into Conshohocken Road directly opposite of a new full slip ramp interchange with the Pennsylvania Turnpike (I-276). While to the west, Lafayette Street will be extended to connect to a new partial interchange with the Dannehower Bridge. The interchange will provide direct access to Lafayette Street for vehicles traveling north on the Dannehower Bridge and from Lafayette Street to the Dannehower Bridge for vehicles traveling southbound. Additionally, it has been assumed that outside of the Lafayette Street study area, the no-build configurations for Henderson Road/I-76 Westbound Ramps, SR 23 Section UMT Improvements, and the Valley Forge Area traffic studies are included in this alternative.

With the build without development surcharge alternative improvements, the Lafayette Street corridor experiences an increase in traffic growth of 50 percent to 125 percent over the 2030 no-build alternative (4,000 vpd to 9,100 vpd). The Norristown Interchange with the Pennsylvania Turnpike experiences a decrease in traffic volumes by approximately 21 percent (7,100 vpd) as a result of the new Turnpike slip ramps. The new Turnpike slip ramps servicing traffic to/from the east will handle about 5,400 to 5,800 vpd while the slip ramps servicing traffic to/from the west will handle about 2,500 to 2,700 vpd. The new partial interchange ramps linking Lafayette Street to the Dannehower Bridge will carry approximately 3,000 vpd from Lafayette Street to the south over the bridge and approximately 3,200 vpd traveling north on the bridge to Lafayette Street.

The other major parallel and intersecting routes to the Lafayette Street corridor also experience some levels of traffic relief under the build without development surcharge alternative compared to the no-build alternative. For example, Main Street/Ridge Pike experiences a decrease in traffic volumes (1,200 to 6,800 vpd) while the Mid-County Expressway (I-476) southbound off-ramp and the Mid-County Expressway (I-476) northbound on-ramp along Ridge Pike experience up to a 5 percent decrease in their traffic volumes (300 to 500 vpd) compared to the 2030 no-build alternative.

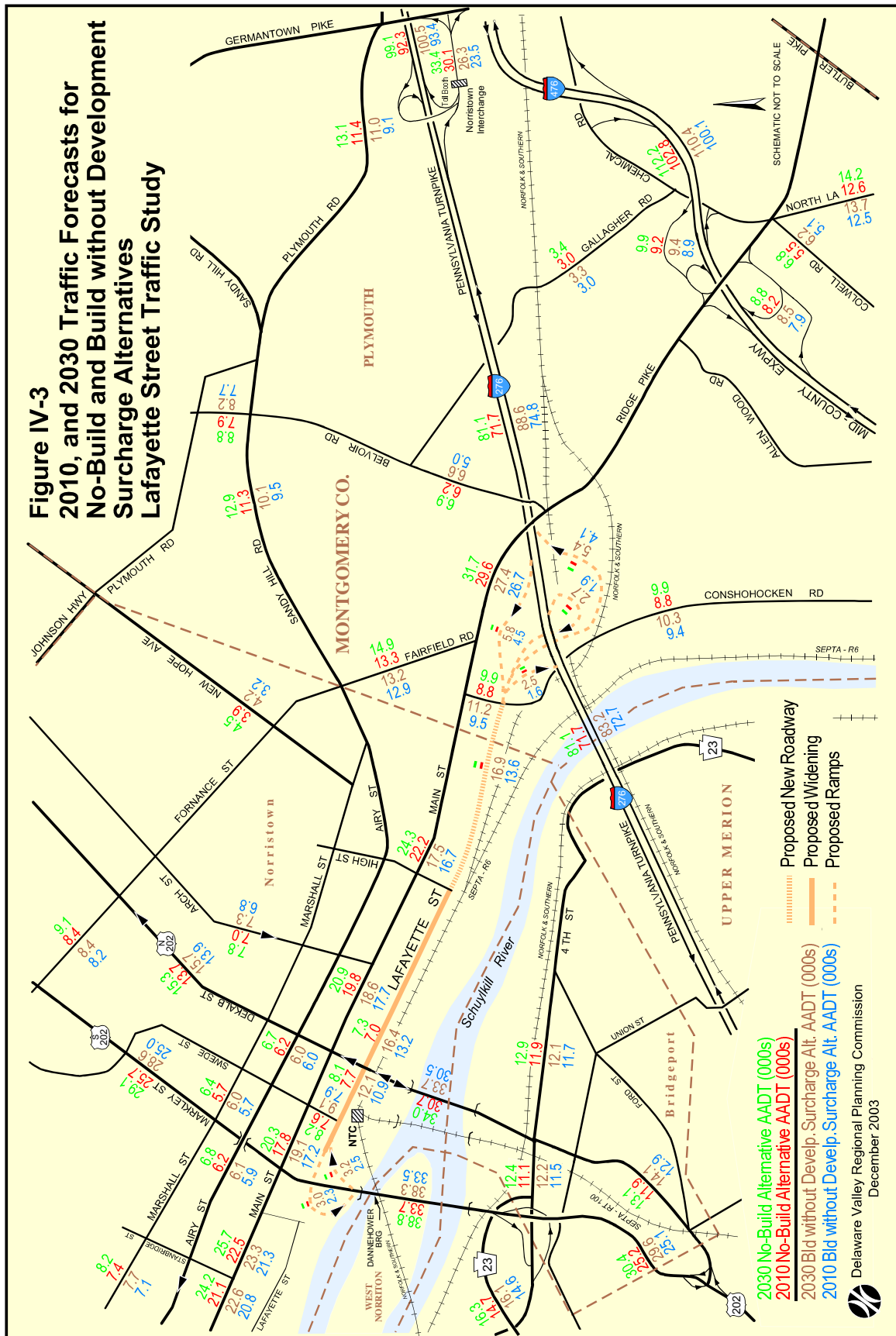


Table IV-2
Current, 2010 and 2030 Build without Development Surcharge Alternatives
Average Daily Traffic Volumes

<u>Highway Facility</u>	<u>Location</u>	<u>Current Volume</u>	<u>2010 Build w-o Surcharge Volume</u>	<u>2030 Build w-o Surcharge Volume</u>	<u>2030 Build w-o Surcharge/Current Growth</u>	<u>Percent</u>
Lafayette Street						
Lafayette Street EB Ramp	Dannehower Bridge to Swede Street	0	2,500	3,200	3,200	n/a
Lafayette Street WB Ramp	Swede Street to Dannehower Bridge	0	2,300	3,000	3,000	n/a
Lafayette Street	DeKalb Street (US 202 N) to Swede Street	7,477	10,900	12,100	4,623	61.8%
Lafayette Street	DeKalb Street (US 202 N) to Ford Street	6,655	13,200	16,400	9,745	146.4%
Lafayette Street	Ford Street to Proposed PA Turnpike (I-276) Slip Ramp	0	13,600	16,900	16,900	n/a
Proposed Slip Ramps and Pennsylvania Turnpike (I-276)						
Proposed PA Turnpike (I-276 WB) Off-Ramp	PA Turnpike (I-276 WB) to Lafayette Street	0	4,500	5,800	5,800	n/a
Proposed PA Turnpike (I-276 EB) On-Ramp	Lafayette Street to PA Turnpike (I-276 EB)	0	4,100	5,400	5,400	n/a
Proposed PA Turnpike (I-276 EB) Off-Ramp	PA Turnpike (I-276 EB) to Lafayette Street	0	1,900	2,700	2,700	n/a
Proposed PA Turnpike (I-276 WB) On-Ramp	Lafayette Street to PA Turnpike (I-276 WB)	0	1,600	2,500	2,500	n/a
PA Turnpike (I-276)	Mid-County Expressway (I-476) (25A) to Norristown (25)	81,200	93,500	101,200	20,000	24.6%
PA Turnpike (I-276)	Norristown (25) to Proposed Slip Ramps	62,800	74,800	88,600	25,800	41.1%
PA Turnpike (I-276)	Proposed Slip Ramps to Valley Forge (24)	62,800	72,700	82,300	19,500	31.1%
Norristown Interchange (25)	PA Turnpike (I-276) to Germantown Pike	25,846	23,500	26,300	2,800	10.8%
Valley Forge Interchange (24)	PA Turnpike (I-276) to Schuylkill Expressway (I-76)	50,344	53,500	58,500	8,200	16.2%
Intersecting Routes						
Colwell Road	Near 19th Avenue	4,446	5,100	6,200	1,754	39.5%
North Lane	Butler Pike to Ridge Pike	11,790	12,500	13,700	1,910	16.2%
Conshohocken Road	PA Turnpike (I-276) to Mid-County Expressway (I-476)	8,338	9,400	10,300	1,962	23.5%
Conshohocken Road	Ridge Pike to PA Turnpike (I-276)	8,338	9,500	11,200	2,862	34.3%
Fairfield Road	Ridge Pike to Sandy Hill Road	12,648	12,900	13,200	552	4.4%
Fornance Street	US 202 North to US 202 South	8,031	8,200	8,400	369	4.6%
Belvoir Road	Plymouth Road to Sandy Hill Road	7,441	7,700	8,200	759	10.2%
Arch Street	Marshall Street to Fornance Street	6,519	6,800	7,300	781	12.0%
US 202 North (DeKalb Street)	Marshall Street to Fornance Street	12,810	13,900	15,700	2,890	22.6%
US 202 North (DeKalb Street)	PA 23 to Main Street	28,666	30,500	33,700	5,034	17.6%
US 202 North (DeKalb Street)	Ford Street to Main Street	11,019	12,900	14,100	3,081	28.0%

**Table IV-2
Current, 2010 and 2030 Build without Development Surcharge Alternatives
Average Daily Traffic Volumes (Continued)**

<u>Highway Facility</u>	<u>Location</u>	<u>Current Volume</u>	<u>2010 Build w-o Surcharge Volume</u>	<u>2030 Build w-o Surcharge Volume</u>	<u>2030 Build w-o Surcharge/Current Growth</u>	<u>Percent</u>
US 202 South (Markley Street)	Swede Street to Marshall Street	23,319	25,000	28,600	5,281	22.6%
US 202 South (Dannehower Bridge)	Main Street to PA 23	30,833	33,500	38,300	7,467	24.2%
US 202 (Bridgeport Bypass SB)	PA 23 to DeKalb Street (US 202 North)	12,470	13,500	15,700	3,230	25.9%
US 202 (Bridgeport Bypass NB)	PA 23 to DeKalb Street (US 202 North)	10,490	11,600	13,900	3,410	32.5%
Parallel Routes						
Gallagher Road	Belvoir Road to Chemical Road	2,755	3,000	3,300	545	19.8%
Sandy Hill Road	Fornance Street to Belvoir Road	10,176	9,500	10,100	-76	-0.7%
Marshall Street	US 202 North to US 202 South	5,477	5,700	6,000	523	9.5%
Marshall Street	US 202 South to Forrest Street	6,710	7,100	7,700	990	14.8%
Airy Street	Main Street to Stanbridge Street	5,783	5,900	6,100	317	5.5%
Airy Street	US 202 North to US 202 South	5,934	6,000	6,000	66	1.1%
Ridge Pike	Conshohocken Road to Belvoir Road	27,729	26,700	27,400	-329	-1.2%
Main Street	High Street to Conshohocken Road	20,597	16,700	17,500	-3,097	-15.0%
Main Street	Markley Street (US 202 S) to DeKalb Street (US 202 N)	16,059	17,200	19,100	3,041	18.9%
Main Street	Airy Street/Forrest Street to Stanbridge Street	19,634	20,800	22,600	2,966	15.1%
PA 23	US 202 North to Ford Street	11,410	11,700	12,100	690	6.0%
PA 23	US 202 North to US 202 South	10,000	11,500	12,200	2,200	22.0%
PA 23	Anderson Road to Meyers Road	0	14,600	16,100	16,100	n/a
Mid-County Expressway (I-476)	Ridge Pike to Germantown Pike	94,265	100,100	110,400	16,135	17.1%
Mid-County Expressway (I-476 SB) Off-Ramp	Mid-County Expressway (I-476 SB) to Ridge Pike	8,574	8,900	9,400	826	9.6%
Mid-County Expressway (I-476) NB On-Ramp	Ridge Pike to Mid-County Expressway (I-476 NB)	7,528	7,900	8,500	972	12.9%
Additional Links						
Plymouth Road	Sandy Hill Road to Germantown Pike	9,922	9,100	11,000	1,078	10.9%
Belvoir Road	Gallagher Road to Ridge Pike	5,613	5,000	6,600	987	17.6%
New Hope Avenue	Johnson Highway to Fornance Street	3,061	3,200	4,200	1,139	37.2%
Main Street	DeKalb Street (US 202 N) to Arch Street	18,352	17,700	18,600	248	1.4%
Main Street	Markley Street(US 202 S) to Stanbridge St	0	21,300	23,300	23,300	n/a
Swede/Barbados/Cherry	Lafayette Street to Main Street	7,124	7,900	9,100	1,976	27.7%

C. 2010 and 2030 Build with Development Surcharge Alternatives

Figure IV-5 summarizes the 2010 and 2030 no-build and build alternatives with Development Surcharge traffic forecasts. **Figure IV-6** provides a summary of the 2030 future build alternative with Development Surcharge weekday morning and weekday afternoon peak hour turning movement volumes at the study area intersections. **Table IV-3** provides a comparison of the current traffic volumes to the 2030 future build alternative with Development Surcharge traffic volumes.

The same highway improvements will be implemented with the build alternative with development surcharge as with the build alternative without development surcharge. Therefore, the changes in the traffic volume increases and decreases compared to the no-build alternative are similar to those reported in the without development surcharge section. With the additional traffic from the surcharge developments, the Lafayette Street corridor experiences an additional 20 percent to 30 percent increase in overall traffic volumes (about 3,500 vpd) over the without development surcharge volume forecasts.

The major roadways within the study area, such as Main, Markley, and DeKalb Streets, experience up to a 10 percent increase over the build alternative without development surcharge traffic volumes. Traffic volumes along Airy Street and Marshall Street increase by 16 percent to 18 percent over the 2030 build without development surcharge traffic volumes, but the absolute increases (1,100 to 1,200 vpd) are relatively small. In general, increases in highway volumes follow the pattern of new development in the Norristown Riverfront Redevelopment Plan.

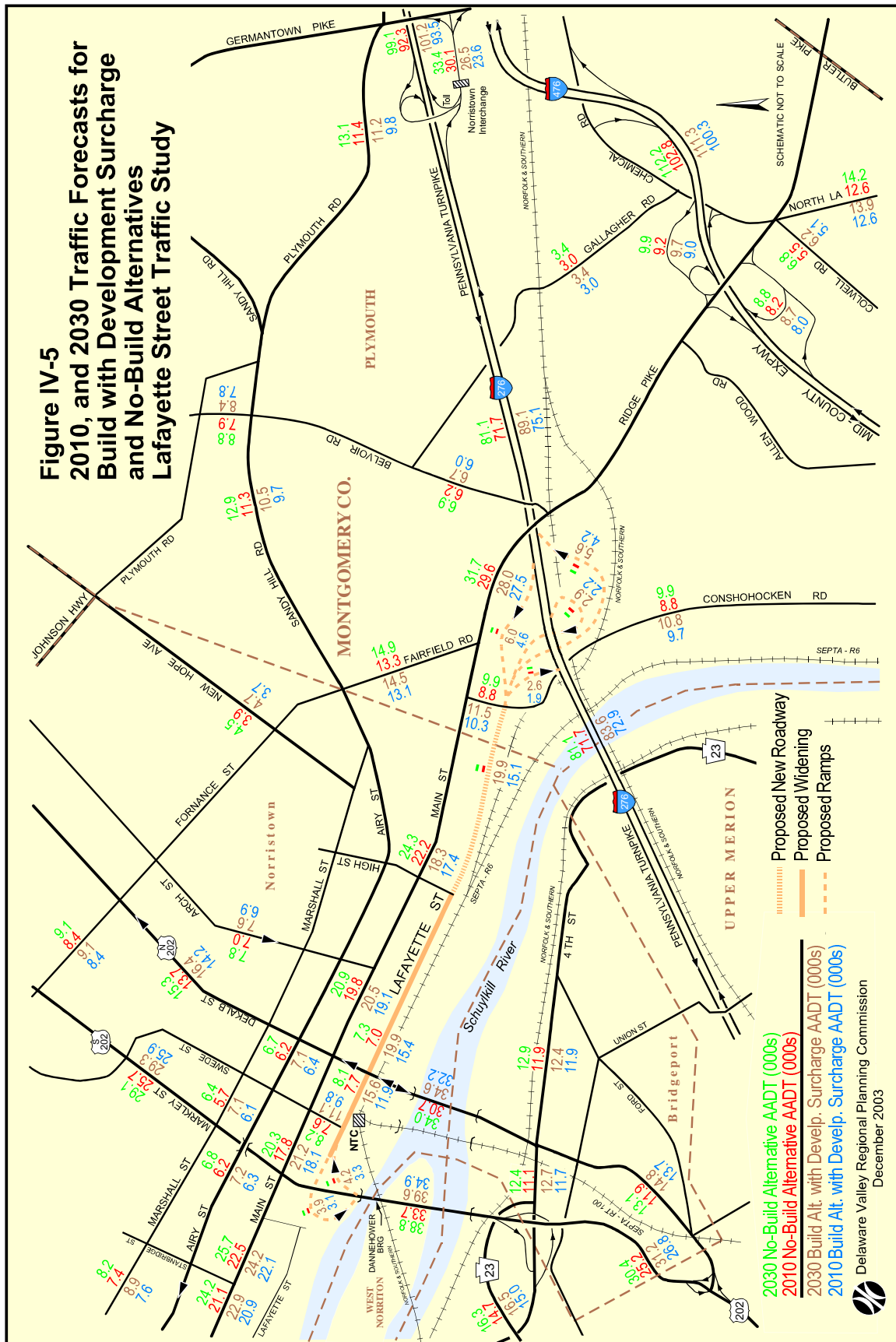
D. Comparison of 2030 Build Alternatives with and without Development Surcharge and 2030 No-Build Alternative

Table IV-4 compares the 2030 Build Without Development Surcharge versus the 2030 No-Build traffic volumes for highway links affected by the proposed Lafayette Street Extension and the proposed Pennsylvania Turnpike slip ramps. Table IV-4 also contains the corresponding comparison between the 2030 Build with Development Surcharge and 2030 No-Build traffic projections.

Generally, the proposed Lafayette Street improvements and proposed turnpike slip ramps, under the without development surcharge land use assumption, increase traffic levels on the roadway segments directly connected to the proposed facilities - existing Lafayette Street, Conshohocken Road, and the Pennsylvania Turnpike between the Norristown and Valley Forge interchanges. Almost all other roadway segments in the study area and the Norristown and Valley Forge turnpike interchanges experience traffic volume relief as a result of the proposed roadway improvements.

As one might expect, the build with land use development surcharge alternative results in larger increases in traffic volumes versus the No-build on links directly connected to the improvement. Other roadway segments in the study area, however, now are projected to have smaller decreases or even increases in traffic

volumes vis-a vis the No-Build alternative. It is important to note that these reductions in traffic relief or increased volumes resulted from the proposed Norristown Riverfront Redevelopment Plan and are not directly a consequence of the proposed Lafayette Street Extension or the proposed Pennsylvania Turnpike Conshohocken Road Slip Ramps.



**Table IV-3
Current, 2010 and 2030 Build with Development Surcharge Alternatives
Average Daily Traffic Volumes**

<u>Highway Facility</u>	<u>Location</u>	<u>Current Volume</u>	<u>2010 Build with Surcharge Volume</u>	<u>2030 Build with Surcharge Volume</u>	<u>2030 Build with Surcharge/Current Growth</u>	<u>Percent</u>
Lafayette Street						
Lafayette Street EB Ramp	Dannehower Bridge to Swede Street	0	3,300	4,200	4,200	n/a
Lafayette Street WB Ramp	Swede Street to Dannehower Bridge	0	3,100	3,900	3,900	n/a
Lafayette Street	DeKalb Street (US 202 N) to Swede Street	7,477	11,900	15,600	8,123	108.6%
Lafayette Street	DeKalb Street (US 202 N) to Ford Street	6,655	15,400	19,900	13,245	199.0%
Lafayette Street	Ford Street to Proposed PA Turnpike (I-276) Slip Ramp	0	15,100	19,900	19,900	n/a
Proposed Slip Ramps and Pennsylvania Turnpike (I-276)						
Proposed PA Turnpike (I-276 WB) Off-Ramp	Proposed PA Turnpike (I-276 WB) Off-Ramp to Lafayette Street	0	4,600	6,000	6,000	n/a
Proposed PA Turnpike (I-276 EB) On-Ramp	Lafayette Street to Proposed PA Turnpike (I-276 EB) On-Ramp	0	4,200	5,600	5,600	n/a
Proposed PA Turnpike (I-276 EB) Off-Ramp	Proposed PA Turnpike (I-276 EB) Off-Ramp to Lafayette Street	0	2,200	2,900	2,900	n/a
Proposed PA Turnpike (I-276 WB) On-Ramp	Lafayette Street to Proposed PA Turnpike (I-276 WB) On-Ramp	0	1,900	2,600	2,600	n/a
PA Turnpike (I-276)	Mid-County Expressway (I-476) (25A) to Norristown (25)	81,200	93,500	101,200	20,000	24.6%
PA Turnpike (I-276)	Norristown (25) to Proposed Slip Ramps	62,800	75,100	89,100	26,300	41.9%
PA Turnpike (I-276)	Proposed Slip Ramps to Valley Forge (24)	62,800	72,900	83,600	20,800	33.2%
Norristown Interchange (25)	PA Turnpike (I-276) to Germantown Pike	25,846	23,600	26,500	654	2.5%
Valley Forge Interchange (24)	PA Turnpike (I-276) to Schuylkill Expressway (I-76)	50,344	53,600	58,700	8,356	16.6%
Intersecting Routes						
Colwell Road	Near 19th Avenue	4,446	5,100	6,200	1,754	39.5%
North Lane	Butler Pike to Ridge Pike	11,790	12,600	13,900	2,110	17.9%
Conshohocken Road	PA Turnpike (I-276) to Mid-County Expressway (I-476)	8,338	9,700	10,800	2,462	29.5%
Conshohocken Road	Ridge Pike to PA Turnpike (I-276)	8,338	10,300	11,500	3,162	37.9%
Fairfield Road	Ridge Pike to Sandy Hill Road	12,648	13,100	14,500	1,852	14.6%
Fornance Street	US 202 North to US 202 South	8,031	8,400	9,100	1,069	13.3%
Belvoir Road	Plymouth Road to Sandy Hill Road	7,441	7,800	8,400	959	12.9%
Arch Street	Marshall Street to Fornance Street	6,519	6,900	7,600	1,081	16.6%
US 202 North (DeKalb Street)	Marshall Street to Fornance Street	12,810	14,200	16,400	3,590	28.0%
US 202 North (DeKalb Street)	PA 23 to Main Street	28,666	32,200	34,600	5,934	20.7%
US 202 North (DeKalb Street)	Ford Street to Main Street	11,019	13,700	14,800	3,781	34.3%

**Table IV-3
Current, 2010 and 2030 Build with Development Surcharge Alternatives
Average Daily Traffic Volumes (Continued)**

<u>Highway Facility</u>	<u>Location</u>	<u>Current Volume</u>	<u>2010 Build with Surcharge Volume</u>	<u>2030 Build with Surcharge Volume</u>	<u>2030 Build with Surcharge/Current Growth</u>	<u>Percent</u>
US 202 South (Markley Street)	Swede Street to Marshall Street	23,319	25,900	29,300	5,981	25.6%
US 202 South (Dannehower Bridge)	Main Street to PA 23	30,833	34,900	39,600	8,767	28.4%
US 202 (Bridgeport Bypass SB)	PA 23 to DeKalb Street (US 202 North)	12,470	14,400	16,600	4,130	33.1%
US 202 (Bridgeport Bypass NB)	PA 23 to DeKalb Street (US 202 North)	10,490	12,400	14,600	4,110	39.2%
Parallel Routes						
Gallagher Road	Belvoir Road to Chemical Road	2,755	3,000	3,400	645	23.4%
Sandy Hill Road	Fornance Street to Belvoir Road	10,176	9,700	10,500	324	3.2%
Marshall Street	US 202 North to US 202 South	5,477	6,100	7,100	1,623	29.6%
Marshall Street	US 202 South to Forrest Street	6,710	7,600	8,900	2,190	32.6%
Airy Street	Main Street to Stanbridge Street	5,783	6,300	7,200	1,417	24.5%
Airy Street	US 202 North to US 202 South	5,934	6,400	7,100	1,166	19.6%
Ridge Pike	Conshohocken Road to Belvoir Road	27,729	27,500	28,000	271	1.0%
Main Street	High Street to Conshohocken Road	20,597	17,400	18,300	-2,297	-11.2%
Main Street	Markley Street (US 202 S) to DeKalb Street (US 202 N)	16,059	18,100	21,200	5,141	32.0%
Main Street	Airy Street/Forrest Street to Stanbridge Street	19,634	20,900	22,900	3,266	16.6%
PA 23	US 202 North to Ford Street	11,410	11,900	12,400	990	8.7%
PA 23	US 202 North to US 202 South	10,000	11,700	12,700	2,700	27.0%
PA 23	Brownlie Road to DeKalb Street	0	15,000	16,500	16,500	n/a
Mid-County Expressway (I-476)	Ridge Pike to Germantown Pike	94,265	100,300	111,300	17,035	18.1%
Mid-County Expressway (I-476 SB) Off-Ramp	Mid-County Expressway (I-476 SB) to Ridge Pike	8,574	9,000	9,700	1,126	13.1%
Mid-County Expressway (I-476 NB) On-Ramp	Ridge Pike to Mid-County Expressway (I-476 NB)	7,528	8,000	8,700	1,172	15.6%
Additional Links						
Plymouth Road	Sandy Hill Road to Germantown Pike	9,922	9,800	11,200	1,278	12.9%
Belvoir Road	Gallagher Road to Ridge Pike	5,613	6,000	6,700	1,087	19.4%
New Hope Avenue	Johnson Highway to Fornance Street	3,061	3,700	4,700	1,639	53.5%
Main Street	DeKalb Street (US 202 N) to Arch Street	18,352	19,100	20,500	2,148	11.7%
Main Street	Markley Street (US 202 S) to Stanbridge St	0	22,100	24,200	24,200	n/a
Swede/Barbadoes/Cherry	Lafayette Street to Main Street	7,124	9,800	11,100	3,976	55.8%

Table IV-4
Current, 2030 Build Alternatives with and without Development Surcharge Versus 2030 No-Build Alternative
Average Daily Traffic Volumes

Highway Facility	Location	Current Volume	2030 No-Build Volume	2030 Build w/o Surcharge Volume	2030 Build with Surcharge Volume	2030 Build without Surcharge/No-Build		2030 Build with Surcharge/No-Build	
						Growth	Percent	Growth	Percent
Lafayette Street									
Lafayette Street EB Ramp	Dannehower Bridge to Swede Street	0	n/a	3,200	4,200	-	-	-	-
Lafayette Street WB Ramp	Swede Street to Dannehower Bridge	0	n/a	3,000	3,900	-	-	-	-
Lafayette Street	Dekalb Street to Swede Street	7,477	8,100	12,100	15,600	4,000	49.4%	7,500	92.6%
Lafayette Street	Dekalb Street to Ford Street	6,655	7,300	16,400	19,900	9,100	124.7%	12,600	172.6%
Lafayette Street	Ford Street to PA Turnpike Slip Ramp	0	n/a	16,900	19,900	-	-	-	-
Proposed Slip Ramps and Pennsylvania Turnpike (I-276)									
Proposed PA Turnpike (I-276 WB) Off-Ramp	Proposed PA Turnpike (I-276 WB) Off-Ramp to Lafayette Street	0	n/a	5,800	6,000	-	-	-	-
Proposed PA Turnpike (I-276 EB) On-Ramp	Lafayette Street to Proposed PA Turnpike (I-276 EB) On-Ramp	0	n/a	5,400	5,600	-	-	-	-
Proposed PA Turnpike (I-276 EB) Off-Ramp	Proposed PA Turnpike (I-276 EB) Off-Ramp to Lafayette Street	0	n/a	2,700	2,900	-	-	-	-
Proposed PA Turnpike (I-276 WB) On-Ramp	Lafayette Street to Proposed PA Turnpike (I-276 WB) On-Ramp	0	n/a	2,500	2,600	-	-	-	-
PA Turnpike (I-276)	Mid-County Expressway (I-476) (25A) to Norristown (25)	81,200	99,100	101,200	101,200	2,100	2.1%	2,100	2.1%
PA Turnpike (I-276)	Norristown (25) to Proposed Slip Ramps	62,800	81,100	88,600	89,100	7,500	9.2%	8,000	9.9%
PA Turnpike (I-276)	Proposed Slip Ramps to Valley Forge (24)	62,800	81,100	82,300	83,600	1,200	1.5%	2,500	3.1%
Norristown Interchange (25)	PA Turnpike (I-276) to Germantown Pike	25,846	33,400	26,300	26,500	-7,100	-21.3%	-6,900	-20.7%
Valley Forge Interchange (24)	PA Turnpike (I-276) to Schuylkill Expressway (I-76)	50,344	61,100	58,500	58,700	-2,600	-4.3%	-2,400	-3.9%
Intersecting Routes									
Colwell Road	Near 19th Avenue	4,446	6,800	6,200	6,200	-600	-8.8%	-600	-8.8%
North Lane	Butler Pike to Ridge Pike	11,790	14,200	13,700	13,900	-500	-3.5%	-300	-2.1%
Conshohocken Road	PA Turnpike (I-276) to Mid-County Expressway (I-476)	8,338	9,900	10,300	10,800	400	4.0%	900	9.1%
Conshohocken Road	Ridge Pike to PA Turnpike (I-276)	8,338	9,900	11,200	11,500	1,300	13.1%	1,600	16.2%
Fairfield Road	Ridge Pike to Sandy Hill Road	12,648	14,900	13,200	14,500	-1,700	-11.4%	-400	-2.7%
Fornance Street	US 202 North to US 202 South	8,031	9,100	8,400	9,100	-700	-7.7%	0	0.0%
Belvoir Road	Plymouth Road to Sandy Hill Road	7,441	8,800	8,200	8,400	-600	-6.8%	-400	-4.5%
Arch Street	Marshall Street to Fornance Street	6,519	7,800	7,300	7,600	-500	-6.4%	-200	-2.6%
US 202 North (Dekalb Street)	Marshall Street to Fornance Street	12,810	15,300	15,700	16,400	400	2.6%	1,100	7.2%
US 202 North (Dekalb Street)	PA 23 to Main Street	28,666	34,000	33,700	34,600	-300	-0.9%	600	1.8%
US 202 North (Dekalb Street)	Ford Street to Main Street	11,019	13,100	14,100	14,800	1,000	7.6%	1,700	13.0%
US 202 South (Markley Street)	Swede Street to Marshall Street	23,319	29,100	28,600	29,300	-500	-1.7%	200	0.7%
US 202 South (Dannehower Bridge)	Main Street to PA 23	30,833	38,800	38,300	39,600	-500	-1.3%	800	2.1%
US 202 (Bridgeport Bypass SB)	PA 23 to Dekalb Street (US 202 North)	12,470	16,100	15,700	16,600	-400	-2.5%	500	3.1%
US 202 (Bridgeport Bypass NB)	PA 23 to Dekalb Street (US 202 North)	10,490	14,300	13,900	14,600	-400	-2.8%	300	2.1%

Table IV-4
Current, 2030 Build Alternatives with and without Development Surcharge Versus 2030 No-Build Alternative
Average Daily Traffic Volumes (Continued)

Highway Facility	Location	Current Volume	2030 No-Build Volume	2030 Build w/o Surcharge Volume	2030 Build with Surcharge Volume	2030 Build without		2030 Build with	
						Surcharge/No-Build Growth	Percent	Surcharge/No-Build Growth	Percent
Parallel Routes									
Gallagher Road	Belvoir Road to Chemical Road	2,755	3,400	3,300	3,400	-100	-2.9%	0	0.0%
Sandy Hill Road	Fornance Street to Belvoir Road	10,176	12,900	10,100	10,500	-2,800	-21.7%	-2,400	-18.6%
Marshall Street	US 202 North to US 202 South	5,477	6,400	6,000	7,100	-400	-6.3%	700	10.9%
Marshall Street	US 202 South to Forrest Street	6,710	8,200	7,700	8,900	-500	-6.1%	700	8.5%
Airy Street	Main Street to Stanbridge Street	5,783	6,800	6,100	7,200	-700	-10.3%	400	5.9%
Airy Street	US 202 North to US 202 South	5,934	6,700	6,000	7,100	-700	-10.4%	400	6.0%
Ridge Pike	Conshohocken Road to Belvoir Road	27,729	31,700	27,400	28,000	-4,300	-13.6%	-3,700	-11.7%
Main Street	High Street to Conshohocken Road	20,597	24,300	17,500	18,300	-6,800	-28.0%	-6,000	-24.7%
Main Street	Markley Street to Dekalb Street	16,059	20,300	19,100	21,200	-1,200	-5.9%	900	4.4%
Main Street	Airy Street/Forrest St to Stanbridge St	19,634	24,200	22,600	22,900	-1,600	-6.6%	-1,300	-5.4%
PA 23	US 202 North to Ford Street	11,410	12,900	12,100	12,400	-800	-6.2%	-500	-3.9%
PA 23	US 202 North to US 202 South	10,000	12,400	12,200	12,700	-200	-1.6%	300	2.4%
PA 23	Brownlie Road to Dekalb Pike	0	16,300	16,100	16,500	-200	-1.2%	200	1.2%
Mid-County Expressway (I-476)	Ridge Pike to Germantown Pike	94,265	112,200	110,400	111,300	-1,800	-1.6%	-900	-0.8%
	Mid-County Expressway (I-476 SB) Off-Ramp	8,574	9,900	9,400	9,700	-500	-5.1%	-200	-2.0%
	Mid-County Expressway (I-476 NB) On-Ramp	7,528	8,800	8,500	8,700	-300	-3.4%	-100	-1.1%
Additional Links									
Plymouth Road	Sandy Hill Road to Germantown Pike	9,922	13,100	11,000	11,200	-2,100	-16.0%	-1,900	-14.5%
Belvoir Road	Gallagher Road to Ridge Pike	5,613	6,900	6,600	6,700	-300	-4.3%	-200	-2.9%
New Hope Avenue	Johnson Highway to Fornance Street	3,061	4,500	4,200	4,700	-300	-6.7%	200	4.4%
Main Street	Dekalb Street to Arch Street	18,352	20,900	18,600	20,500	-2,300	-11.0%	-400	-1.9%
Main Street	Markley Street to Stanbridge Street	0	25,700	23,300	24,200	-2,400	-9.3%	-1,500	-5.8%
Swede/Barbodoes/Cherry	Lafayette Street to Main Street	7,124	8,200	9,100	11,100	900	11.0%	2,900	35.4%

V. CONGESTION MANAGEMENT SYSTEM ANALYSIS

A. INTRODUCTION

Proposed improvements to the Lafayette Street Study Area include an extension of existing Lafayette Street eastward as a four lane principal arterial to Conshohocken Road where a full slip ramp interchange with the Pennsylvania Turnpike is to be constructed. On the west end, Lafayette Street will connect with the Dannehower Bridge, via a partial interchange. This interchange will provide direct access to Lafayette Street for vehicles traveling north on Dannehower Bridge and from Lafayette Street to the Dannehower Bridge southbound. The following sections describe the federal requirements that mandate a CMS analysis, the development and findings of the regional operational CMS, the requirements of a project-level CMS, and the results of the Lafayette Street CMS analysis.

B. FEDERAL REQUIREMENTS

The Congestion Management System was established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to aid decision makers in gauging system performance and needs, and selecting cost-efficient strategies and actions to improve and protect the investment in the nation's infrastructure. The Congestion Management System is defined in the federal regulations as a "systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods." The federal guidance states that the CMS should evaluate and include strategies to reduce single-occupant vehicle travel and improve the efficiency of the existing transportation infrastructure.

As of October 1, 1997, federal funds may not be programmed for any project that will result in a significant increase in carrying capacity of single-occupant vehicles unless the project comes from a fully operational Congestion Management System. A project needs to be considered for inclusion in the CMS if it receives federal funds, is located in an air quality nonattainment area (the entire DVRPC region is designated a severe ozone nonattainment area under the 1-hour standard) and results in the equivalent of one or more general purpose lanes in carrying capacity for single-occupant vehicles. The federal guidance did not define what constitutes a significant capacity increase. However, DVRPC has adopted a policy of excluding projects that comprise either non-significant capacity increases or spot improvements from the CMS.

Non-significant capacity increases are projects that do not primarily provide through capacity but instead are a consequence of improvements such as acceleration/deceleration lanes, center turning lanes, climbing lanes, and arterial signal systems. Spot improvements are projects that may increase capacity but are applied to a localized section of the transportation network such as isolated intersection improvements, ramp revisions at existing interchanges that do not permit additional movements between facilities, and limited at-grade circle cut-throughs. In addition, the federal guidance specifically excludes safety improvements and bottleneck elimination projects from the CMS. The ***Pennsylvania Congestion Management System Phase 2 Report***, published by DVRPC in July 1997, serves as the operational CMS for the Pennsylvania portion of the DVRPC region.

C. THE DVRPC CONGESTION MANAGEMENT SYSTEM FOR PENNSYLVANIA

DVRPC, in conjunction with its planning partners, developed the Congestion Management System for the Pennsylvania portion of the region in two phases. The first phase consisted of the cataloging of existing data and other information-gathering activities, identifying current and future congested facilities, and developing the CMS network. Phase 1 established a CMS network composed of major highways and a passenger rail network. With over 13,000 miles of roads in the Pennsylvania portion of the region, a smaller network was required to focus attention and resources on the most critical transportation facilities for moving people and goods. The highway portion of the CMS network is based upon the following facility types:

- National Highway System (NHS) routes
- Congested principal arterials not on the NHS
- Streets with significant bus activity (200+ buses per day)
- Roads connecting the NHS with major passenger intermodal facilities and major freight intermodal facilities
- Roads impacted by special event generators (i.e., the sports complex or shore traffic)

The passenger rail network includes the following facilities:

- SEPTA's Regional Rail network
- SEPTA's Broad Street Subway, Market-Frankford Subway-Elevated, Norristown High Speed, and Media/Sharon Hill Light Rail lines
- PATCO High Speed Line
- NJ Transit and Amtrak rail lines

Traffic congestion at the systems level (as opposed to location-specific "spot" congestion) for 1996 and 2005 was identified by a number of quantitative and qualitative methods including:

- Volume to capacity (V/C) ratios from DVRPC's travel demand simulation model
- Development trends by assessing 1996-2005 trip growth
- Discussions with county planning officials, PennDOT District 6-0 personnel, state police, traffic reporting services, DVRPC's Goods Movement Task Force and Regional Citizens Committee (RCC)

The second phase identified causes of congestion and reviewed strategies to relieve congestion at the corridor level. The CMS corridors were based on the corridors first established in DVRPC's **Year 2020 Long Range Plan**. Each CMS corridor is typically organized around a major highway and parallel roads. Even though a corridor contains many other roads, and the CMS recommendations apply to the entire corridor, the primary focus is on the major highway(s). A total of eighteen corridors were evaluated. To be more reflective of the transportation network, land use, and trip-making patterns, corridors were divided into sub-corridors. In each sub-corridor, the location and severity of traffic congestion in the CMS network were evaluated along with the primary and secondary causes of congestion. Similarly, for the passenger rail network, all stations in the sub-corridor were identified along with information on service frequency, parking availability, and connecting rail and feeder buses. This information is documented on individual corridor fact sheets and maps.

Over fifty improvement strategies were identified from a number of sources including the federal CMS regulations and PennDOT's guidance on single-occupant vehicle capacity-adding (SOVCAP) projects. The strategies attempt to meet the three goals of the CMS: (1) easing traffic congestion through the reduction of single occupant vehicles; (2) optimizing the efficiency of existing transportation systems; and (3) improving access to and proficiency of the transportation network to relieve congestion and improve the mobility of goods and people. Conceptually, the strategies range from low cost alternatives to driving, to moderate improvements to the transit and highway systems, and ultimately to significant SOV capacity improvements.

For each sub-corridor, strategies were reviewed for applicability and effectiveness based upon the characteristics of the transportation network; the extent and cause of traffic congestion; and population, employment, and other characteristics inventoried in the Long Range Plan corridor analyses. A standard strategy matrix was developed that rated each strategy as either *very practical*, *practical* or *not practical* within a sub-corridor. The criteria for evaluating practicality is shown below. After DVRPC's initial analysis, members of the Pennsylvania Subcommittee of the Regional Transportation Committee (RTC) and a subcommittee of the RCC made extensive modifications based upon their knowledge of, and familiarity with, the sub-corridors.

CRITERIA FOR STRATEGY MATRIX EVALUATION

Very Practical

- Widely applicable
- Very effective
- Can be implemented by an appropriate agency with minimal difficulty

Practical

- Not widely applicable
- May not be fully effective for the subcorridor (i.e., employer-based ridesharing in an area that is primarily residential)
- Highly desirable yet entail some implementation obstacles

Not Practical

- Not applicable or effective
- Not feasible in terms of implementation

The detailed fact sheets and strategy matrices provide a comprehensive macro-level overview of the location and causes of congestion and improvement strategies. The corridor overviews summarize the existing transportation facilities in the subcorridors, the level of congestion and key causes, and presents a brief overview of the primary and secondary strategies to manage congestion. The *Pennsylvania Congestion Management System Phase 2 Report* is considered a systems-level analysis because it examines generalized highway links and evaluates strategies that are applicable to larger areas. In the project development process the opposite is true; the focus is on a small study area. DVRPC revises the regional CMS by conducting corridor and project-level studies using performance measures to examine congestion levels and the effectiveness of improvement strategies.

D. PROCEDURES FOR SOV CAPACITY-ADDING PROJECTS

The Pennsylvania Congestion Management System Phase 2 Report serves as the operational CMS for the Pennsylvania portion of the DVRPC region. It functions as a framework for future analysis. CMS analysis for specific locations or projects is performed when applicable using the guidelines set forth in the regional CMS. The *Pennsylvania Congestion Management System Phase 2 Report* provides an initial assessment of the appropriateness of SOV widening within a particular corridor. Further study may be necessary to determine if SOV widening is warranted for a particular facility. Typically, a facility for which a SOV enhancement is proposed will be classified as congested in the *Pennsylvania Congestion Management System Phase 2 Report*. However, there are a couple of conditions that preclude every congested facility from being identified. The CMS network is limited to the facilities described earlier. Therefore, there are many facilities that are not included in the CMS network. Because the *Pennsylvania Congestion Management System Phase 2 Report* is a systems-level analysis, localized or spot congestion may not always be documented. Also, development is continuously impacting the transportation infrastructure but not all future development is able to be accounted for in the travel demand simulation models. In many cases, DVRPC will perform an operations-level or project-specific analysis on roads for which SOV enhancement is proposed, to determine or verify if that facility is or will be congested.

Generally, a project is said to result from the CMS if SOV widening is identified in the *Pennsylvania Congestion Management System Phase 2 Report* as a very practical or practical strategy for the subcorridor. This serves as a first screening for CMS requirements and DVRPC then makes a determination of whether a more detailed CMS study is required. All regionally significant projects that add a general purpose lane(s) of a mile in length or longer or a new interchange will require further CMS analysis and commitments.

E. LAFAYETTE STREET PROJECT-LEVEL CONGESTION MANAGEMENT SYSTEM STUDY AREA

The CMS study area for the Lafayette Street improvements also encompasses the Henderson Road/I-76 Westbound Ramps and SR 23 Section UMT Improvements traffic study areas. A larger CMS study area provides an expanded set of strategies to be evaluated because there is a larger population and employment base to work with. Henderson Road/I-76 Westbound Ramps and SR 23 Section UMT Improvements will be evaluated separately in terms of project need and ability to reduce congestion. However, all three projects will encompass a single CMS study area and a single set of CMS strategies that will be evaluated for their adequacy to meet future travel demand. For this purpose, the CMS study area corresponds approximately to the study area used for the base-level travel-demand simulation modeling effort for all three projects. Many CMS strategies, like TDM and transit, are corridor or area-based strategies. Consequently, a larger CMS study area is more beneficial when developing and evaluating these types of strategies.

F. FINDINGS OF THE PENNSYLVANIA CONGESTION MANAGEMENT SYSTEM PHASE 2 REPORT

In the *Pennsylvania Congestion Management System Phase 2 Report*, the CMS study area is covered by four different corridors (Corridors 3, 4, 22, and 25). Each corridor is further broken down into sub-corridors based on land use and travel patterns, among other criteria. Because of the drastic change in land use and confluence of travel patterns inherent at the juncture of four major highways, the CMS study area is a break point or boundary for six sub-corridors.

The congested facilities are identical in each (sub)corridor. However, since each corridor has a different focus, the recommended strategies differ from corridor to corridor and sub-corridor to sub-corridor even though they cover the same facilities and geographic area. After reviewing each of the corridors, a primary and secondary sphere of influence was designated for the purpose of the Lafayette Street CMS analysis. These primary and secondary spheres of influence will help guide commitments for this project.

The two primary corridors for the Lafayette Street traffic study area are Corridor 4, Pottstown to King of Prussia, following US 422 and Ridge Pike/Germantown Pike, and Corridor 25, King of Prussia to Doylestown. Corridor 25 addresses travel between King of Prussia and Doylestown, with the most direct route being US 202, which is a full access facility. Within Corridor 4, two sub-corridors extend into the study area's area of influence: 4B and 4C, with sub-corridor 4C being the primary sub-corridor. Within Corridor 25, two sub-corridors extend into the study area's area of influence: 25A and 25B, with sub-corridor 25B being the primary sub-corridor.

One secondary corridor for the study area is Corridor 22, King of Prussia to New Jersey, which focuses on the Pennsylvania Turnpike (I-276), the most direct route between these two locations. The focus of this corridor is reducing congestion on a limited-access expressway and on the small number of access points/interchanges. The other secondary corridor is Corridor 3, Coatesville to Center City, which generally follows US Route 30 between Coatesville and Center City, and also encompasses the Schuylkill Expressway (I-76). Within this corridor, two overlapping sub-corridors, 3C and 3D, cover the study area. Within Corridor 22, only sub-corridor 22A extends into this study area.

Lafayette Street is not included in the CMS network that was analyzed in the *Pennsylvania Congestion Management System Phase 2 Report*. It is currently classified as a local road. However, proposed improvements, including direct connections to I-276 and US 202 merit its inclusion in the CMS network. Ridge Pike (Main Street) and US 202 are both severely congested.

Due to the large number of overlapping sub-corridors, a composite strategy matrix was developed for the study area based on the individual strategy matrixes from each of the six sub-corridors that cover the CMS study area. Priority was given to the two primary corridors. The six sub-corridors actually had similar prioritization of the majority of screened strategies. In many other cases the prioritization only varied slightly, between

very practical and practical, or practical and not practical. In the cases where the prioritization varied greatly (between very practical and not practical), the majority determined the composite, with emphasis being given to the two primary corridors. Every subcorridor listed SOV roadway widening as a practical strategy. This means that the proposed projects did meet the first criteria of being part of an operational CMS.

The recommended strategies from the *Pennsylvania Congestion Management System Phase 2 Report* place a heavy emphasis on mode shift, transportation demand management, incident management, traffic operation improvements, and alternate work hours. There is a dual goal of removing vehicles/trips from the system and improving the flow on the network. The profusion of expressways in the vicinity (I-76, I-276, I-476, US 202, and US 422) naturally lends itself to incident management and ITS strategies that improve the traffic flow on freeways. The number and density of commercial and office employment destinations lend themselves to mode shift strategies such as carpooling, transit marketing, and associated strategies such as ridematching and other services provided by transportation management associations. In addition, traffic operation improvements, such as a coordinating and upgrading traffic signals, are particularly appropriate along heavily congested corridors.

G. PROJECT-LEVEL CMS ANALYSIS

Even though SOV roadway widening is identified as an appropriate strategy in each of the six sub-corridors that cover the CMS study area, additional CMS analysis is necessary because the proposed Lafayette Street improvements include a new full and a new partial interchange and a significant increase in single occupant vehicle (SOV) capacity. Additionally, Lafayette Street was not part of the *Pennsylvania Congestion Management System Phase 2 Report* network. The project-level CMS analysis builds upon the results of the systems-level *Pennsylvania Congestion Management System Phase 2 Report*. The project-level CMS analysis addresses three questions: is the facility congested currently or in the future; can CMS strategies meet future travel demand; and does the proposed improvements reduce congestion? Also analyzed is the ability of a proposed project to eliminate congestion on other facilities in the area.

Future no-build and build volumes are generated using the DVRPC travel-demand simulation model. The level-of-service (LOS) is then derived from the link volumes for current conditions as well as future scenarios. The first step in the project-level analysis is to determine if congestion exists on the facility, either now or in the future, based on level-of-service. Additionally, future scenario link volumes and intersection level-of-service are compared to current volumes and LOS to determine if congestion improves or worsens in the future. An adequacy test is conducted to determine if future demand can be met by means other than increasing SOV capacity, such as implementing Transportation Control Measures (TCM) or Transportation Demand Management (TDM) strategies. Finally, level-of-service results are analyzed to determine if the proposed project (build scenario) improves LOS compared to the future no-build scenario. This determines whether the proposed improvements are a legitimate congestion mitigation strategy.

If warranted, a set of CMS strategies may be selected and endorsed as project commitments to help reduce SOV travel, improve the efficiency of the existing transportation network and prolong the usefulness of capacity increases.

H. RESULTS

Two design year alternatives, a no-build and a build scenario, were analyzed using the travel demand simulation model. The build alternative was further broken into two scenarios: build with development surcharge and build without development surcharge. Results were forecast for a design year of 2030. The design year reflects a twenty year planning horizon based on a completion date of 2010 for the proposed improvements. The no-build scenario includes regionally significant projects to be completed by 2025. The projects are part of DVRPC's Year 2025 Long Range Plan and FY 2003 Transportation Improvement Program (TIP). The build scenario assumes Lafayette Street will be extended east as a four lane arterial to Conshohocken Road where a full slip ramp interchange with the Pennsylvania Turnpike is proposed. To the west, Lafayette Street will be linked to the Dannehower Bridge via a partial interchange. The Build with Development Surcharge assumes a higher degree of development within the study area with an associated volume of traffic.

Traffic volumes from the current and no-build scenarios were compared to determine the extent of congestion in the future. Level-of-service under the no-build and build scenarios were also contrasted to determine if the proposed roadway project improved or worsened future conditions. **Table V-1** shows the percentage increase in the future no-build peak-hour traffic volumes over current volumes along Lafayette Street and selected adjacent cross streets.

Analysis of the model runs reveals that by 2030, average annual daily traffic (AADT) on Lafayette Street and surrounding vicinity will increase by 8.3 percent to 26.4 percent in the no-build scenario over current levels. Intersection level-of-service analysis, shown in **Table V-2**, reveals that level-of-service generally deteriorates or remains constant at several intersections in 2030 under no-build conditions. The analysis shows that congestion worsens in the future no-build scenario compared to current levels and the proposed improvements (build scenario) generally help alleviate congestion in the future. The Build scenarios show mixed results but with the overall benefits outweighing any decrease in LOS. At three intersections, LOS F conditions have been eliminated with the result being LOS D or better under no surcharge conditions. A set of Traffic Operations strategies should be analyzed to determine if they can improve LOS at these locations. If so, the improvements should be forwarded as part of the CMS commitments.

Table V-1. Percent Increase in Traffic Volumes Under No-Build Conditions

ROAD	(LIMITS)	% INCREASE No-BUILD/CURRENT
Lafayette St.	DeKalb St. to Swede St.	8.3%
Lafayette St.	DeKalb St. to Ford St.	9.7%
Ridge Pike	Conshohocken Rd. to Belvoir Rd.	14.3%
Main St.	High St. to Conshohocken Rd.	18.0%
Main St.	Markley St. To DeKalb Pike	26.4%
Main St.	Airy St. (Forest) to Stanbridge St.	23.3%
SR 23	US 202 N. to Ford St.	13.1%
SR 23	US 202 N. to US 202 S.	24.0%
Main St.	DeKalb Pike to Arch St.	13.9%
Lafayette Street Study Area Average:		16.8%

Table V-2. Comparison of Signalized Intersection Peak Hour Level of Service

INTERSECTION	PEAK HOUR LEVEL OF SERVICE AM (PM)
	2003 BASE 2030 No-BUILD 2030 BUILD WO/DEVELP. SURCHARGE 2030 BUILD W/DEVELP. SURCHARGE
Main Street & Markley Street (US 202 SB)	F (E) F (F) F (F) F (F)
Main Street & Barbadoes Street	A (A) A (B) A (B) A (B)
Main Street & Cherry Street	A (B) A (B) A (B) A (B)
Main Street & Swede Street	D (B) F (B) C (B) C (B)

INTERSECTION	PEAK HOUR LEVEL OF SERVICE AM (PM)
	2003 BASE 2030 No-BUILD 2030 BUILD WO/DEVELP. SURCHARGE 2030 BUILD W/DEVELP. SURCHARGE
Main Street & DeKalb Pike (US 202 NB)	A (C) A (D) B (D) B (E)
Main Street & Walnut Street	B (B) B (D) B (B) B (C)
Main Street & Franklin Street	Not Signalized Not Signalized B (A) D (A)
Main Street & Ford Street	C (D) F (F) D (F) D (F)
Main Street & Lucetta Street	C (C) E (F) F (F) F (F)
Main Street & Fairfield	Not Signalized Not Signalized D (D) D (D)
Lafayette Street & Swede Street	B (B) B (A) C (B) D (B)
Lafayette Street & DeKalb Pike (US 202 NB)	F (F) F (F) D (D) E (D)
Lafayette Street & Green Street	Not Signalized Not Signalized A (A) B (A)
Lafayette Street & Franklin Street	Not Signalized Not Signalized B (B) C (C)
Lafayette Street & Ford Street	Not Signalized Not Signalized B (B) D (C)

INTERSECTION	PEAK HOUR LEVEL OF SERVICE AM (PM)
	2003 BASE 2030 No-BUILD 2030 BUILD WO/DEVELP. SURCHARGE 2030 BUILD W/DEVELP. SURCHARGE
Lafayette Street & Conshohocken Road	Not Signalized Not Signalized C (E) D (F)

1. CMS Strategy Adequacy Test

An appropriate set of Transportation Control Measures (TCM) and Transportation Demand Management (TDM) strategies was reviewed to determine if they met the travel demand of the study area and would thereby eliminate the need for roadway widening. The analysis, performed by DVRPC staff, focused on all the strategies ranked *very practical* in the *Pennsylvania Congestion Management System Phase 2 Report*. Additional *practical* and *not very practical* strategies were evaluated to determine the maximum potential for alternatives to increasing SOV capacity.

The CMS study area has a large set of CMS commitments and strategies in place. There are two transportation centers, over twenty transit routes including two rail lines and three shuttle services, two Transportation Management Associations, a network of multi use trails with connections to major destinations, Intelligent Transportation System components on the numerous expressways that intersect in the study area, and several area wide traffic signal closed-loop systems. However, even with all the CMS-type strategies currently in place, traffic congestion is forecast to worsen in the future. Even the addition of several SOV capacity-enhancing projects, which are currently under construction or are planned for the area, will not eliminate congestion according to future traffic modeling simulations.

Table V-3 outlines the CMS strategies being currently implemented or committed to within the CMS study area. The abundance of CMS-type strategies has had a discernable impact on the adequacy test. The achievable impact of the analyzed strategies has been downgraded because many of the strategies are already accounted for in the existing conditions and any additional benefit will be incremental, at best.

Table V-4 presents the results of the adequacy assessment portion of the CMS analysis, including the practicality ranking of the strategy in the *Pennsylvania Congestion Management System Phase 2 Report*. Each of the twelve selected categories of strategies was reviewed for its ability to independently meet the project needs, the opportunity to implement the strategy within the corridor, the maximum potential of a full implementation of the strategy, and the estimated potential in the study area. Generally, the maximum potential reflects the extreme upper limit of success that each strategy has achieved in nationwide case studies. The estimated achievable reduction, which is used for the adequacy analysis, is based on local circumstances such as the presence of complementary and supplementary strategies within the study area and the magnitude of the proposed strategies.

The potential reduction in vehicle miles traveled was based primarily upon data reported in ***Transportation Control Measures: An Analysis of Potential Transportation Control Measures for Implementation in the Pennsylvania Portion of the DVRPC Region*** (May 1994) performed by COMSIS Corporation for DVRPC. Strategies not analyzed in that report were evaluated using case studies from ***Costs and Effectiveness of Transportation Control Measures: A Review and Analysis of the Literature*** (January 1994) prepared by Apogee Research for the National Association of Regional Councils. Data from these sources was supplemented by professional judgment and knowledge of local conditions.

Table V-3. Existing CMS Programs and Commitments Within the CMS Study Area

STRATEGY	PREVIOUSLY INITIATED OR ALREADY COMPLETED PROJECTS AND PROGRAMS	COMMITTED AREAWIDE PROJECTS AND PROGRAMS ASSOCIATED WITH CORRIDOR
New Transit Service		<p>A Major Investment Study/ Draft Environmental Impact Statement has been completed for the Schuylkill Valley Metro rail line between Philadelphia and Wyomissing, Berks County. The project is now in the Preliminary Engineering and Final Environmental Impact Statement phase.</p> <p>SEPTA is currently conducting an alternatives analysis of extending service on the Route 100 Norristown High Speed Line to King of Prussia</p>
Demand Responsive/ Shuttle Transit Service	<p>The Cruise Line Corporate Shuttle provides connections from transportation centers directly to a work site. This is an employer-based subscription service.</p> <p>The Rambler residential shuttle service operates in Upper Merion Township and West Conshohocken, Conshohocken and Bridgeport boroughs. Service is provided Monday through Saturday. Stops include the King of Prussia Transportation Center and SEPTA's Gulph Mills Station (Route 100).</p> <p>The Suburban Link connects King of Prussia to Collegeville via the Phoenixville area. Connections are made at SEPTA's Gulph Mills Station (Route 100) and King of Prussia Transportation Center. Three runs are made during the morning peak period and three runs are made during the afternoon peak period.</p>	
Parking Management	GVFTMA has a "Share-a-Lot" program which seeks to maximize the availability of parking by sharing underutilized facilities.	
Transportation Management Associations (TMAs)	Greater Valley Forge TMA and the TMA of Chester County are both active within the study area. They coordinate shuttle services (with a guaranteed ride home program), promote transit, carpooling and ridesharing, telecommuting, parking management programs and flexible and staggered work schedules/hours to area employers.	

STRATEGY	PREVIOUSLY INITIATED OR ALREADY COMPLETED PROJECTS AND PROGRAMS	COMMITTED AREAWIDE PROJECTS AND PROGRAMS ASSOCIATED WITH CORRIDOR
Park and Ride	<p>Park-and-ride lots have been constructed or expanded at the following locations: Matsonford Rd. at I-76/I-476 interchange (60 spaces) Lewis Rd. at US 422 (50 spaces) Matthews Rd. at US 202/PA 29 (100 spaces) US 30 at US 202 (125 spaces) Paoli Pike at US 202 (60 spaces) PA 113 east of PA 100 (37 spaces)</p> <p>Intermodal connections can be made at the following lots: PA 100 at US 30 (Exton Bypass) next to the SEPTA R5 station (116 spaces) US 202 and South Gulph Rd. (120 spaces)</p>	
Traffic Operations Improvements		<p>The I-76 Corridor Traffic Management Program will provide for the interconnection of signals along the I-76 corridor to be used when incidents detour traffic from I-76 to local roads.</p> <p>Upper Merion Township and Bridgeport Borough will install a closed loop traffic signal system.</p> <p>Norristown will institute a signal coordination and interconnection project.</p> <p>Realign and provide a left turn lane at PA 23 and Balligomingo Rd. intersection.</p> <p>Reconstruct and add a center turn lane on Ridge Pike between the Norristown Borough line and Butler Pike.</p> <p>Add a left turn lane and a traffic signal and upgrade existing signal at PA 23 and Old Betzwood Bridge intersection.</p>
Bicycle/Pedestrian Improvements	<p>The Allendale Road Bridge over the Pennsylvania Turnpike was recently replaced and a separate bike and pedestrian lane constructed as part of the project.</p> <p>As part of the US 202 Section 400 project, the new Chester Valley Trail Bridge over I-76 was completed in 2003.</p> <p>The Schuylkill River Trail between Valley Forge park and Oaks was opened in 2002.</p> <p>The Park and Ride lot on US 202 and S. Gulph Road includes bicycle facilities and access to the future Chester Valley Trail.</p>	<p>The Chester Valley multi-use trail will be constructed from Norristown to Downingtown. This trail will connect to the existing Schuylkill River Trail between Valley Forge National Historical Park and Center City Philadelphia and the planned Cross County Trail to the Willow Grove area.</p> <p>The Cross-County Trail will be a nine mile paved commuter and recreational trail that will connect the Schuylkill Trail in Conshohocken to the Willow Grove area.</p> <p>The Schuylkill Trail from the Perkiomen Creek in Oaks to PA 29 in Lower and Upper Providence Townships will be constructed. This will extend the Schuylkill River Trail from its current terminus in Oaks.</p> <p>The Old Betzwood Bridge will be replaced and space and connections provided for a bicycle/pedestrian trail.</p> <p>Bike racks will be installed at the King of Prussia Transportation Center, Gulph Mills (Route 100), and Paoli (R5) stations.</p>

STRATEGY	PREVIOUSLY INITIATED OR ALREADY COMPLETED PROJECTS AND PROGRAMS	COMMITTED AREA-WIDE PROJECTS AND PROGRAMS ASSOCIATED WITH CORRIDOR
Intelligent Transportation System (ITS)	ITS components (including vehicle detection system, Closed Circuit Television Cameras, Variable Message Signs, Highway Advisory Radio, and EZ Pass) installed on I-76, I-476, US 202, US 422, and the Pennsylvania Turnpike.	
Transit Service Enhancements	<p>In 1989, SEPTA opened the Norristown Transportation Center, which consolidated the R6 commuter rail line, the Route 100 Norristown High Speed Line and seven bus routes at one location. A park and ride lot was also provided at this location. During the past decade, the King of Prussia Transportation Center was upgraded and amenities added. The King of Prussia Transportation Center serves six bus routes in addition to the Rambler and Suburban Link shuttles and facilitates connections and travel to the King of Prussia mall. While not offering the same amenities as the Norristown and King of Prussia Transportation Centers, the Route 100 Gulph Mills station also has timed connections with three bus routes as well as the Rambler and Suburban Link shuttles.</p> <p>Parking facilities at the Thorndale (450 spaces), Malvern (70 spaces), and Whitford (130 spaces) stations on the SEPTA R5 rail line were recently constructed or expanded.</p> <p>An additional 50 parking spaces were added at the R6 Elm Street Station.</p> <p>Additional service has been added on SEPTA's R5 rail line during midday and peak periods.</p> <p>There has been an addition of an early morning train from Philadelphia to Thorndale on SEPTA's R5 rail line to serve reverse commuters.</p> <p>Provide ½ hour service during the peak period on Route 133 between King of Prussia and the Paoli rail station.</p> <p>Headways were decreased to ½ hour during the off-peak period on SEPTA Routes 124 and 125 to employment centers.</p>	<p>A 500 space parking garage will be constructed at the Norristown Transportation Center. This will help alleviate the demand for parking at the Transportation Center, which currently exceeds capacity.</p> <p>A new intermodal center will be constructed at Paoli.</p> <p>Provision of additional midday and early evening service on SEPTA Route 206 between Great Valley and Center City Philadelphia via Paoli.</p> <p>As part of its Automatic Vehicle Locator project, SEPTA will install four kiosks that will provide real-time arrival information for Routes 124 and 125.</p>
Land Use Planning	All planning and zoning ordinances are the responsibility of local municipalities. Each municipality within the study area has adopted a comprehensive land use plan and zoning ordinance.	
SOV and Mobility Enhancements	US 202 Section 400 and I-76/US 422 interchange	US 202 Section 300 US 202 Section 500 US 422/PA 363 Interchange Old Betzwood Bridge replacement US 422 Study

The categories of strategies analyzed for the adequacy test are more inclusive than in either the *Pennsylvania Congestion Management System Phase 2 Report* or the review of commitments. For instance, for the adequacy test, the “Transit Service/Operations Improvements” category includes a broad array of transit-related strategies ranging from new transit route(s) to better transit coordination. However, for purposes of the *Pennsylvania Congestion Management System Phase 2 Report* and the commitments review, each of these strategies was considered separately. This consolidation of strategies was necessary because many of the nationwide case studies applied in this assessment, are predicated upon broader, more inclusive categories of improvement types.

Table V-4. Adequacy Test of CMS Strategies to Meet Project Needs

STRATEGY	STRATEGY INDEPENDENTLY MEETS PROJECT PURPOSE AND NEED	STRATEGY OPPORTUNITY WITHIN CORRIDOR	APPLICABILITY OF STRATEGY WITHIN CORRIDOR IN <i>PA CMS PHASE 2 REPORT</i>	ESTIMATED POTENTIAL % REDUCTION IN DAILY VMT IN 2030	
				MAXIMUM POTENTIAL	ESTIMATED ACHIEVABLE
Transit Expansion and Enhancements	No	Good	Very Practical	2.6	2.6
Telecommuting, Staggered Work Hours Flexible Work Schedules	No	Moderate	Very Practical	4.0	0.75
Carpooling/Vanpooling, Areawide Ridesharing Programs	No	Good	Very Practical	2.0	0.1
Employer-Based Travel Demand Management (Preferential HOV facilities, Guaranteed Ride Home, Transit Shuttles)	No	Good	Very Practical	2.0	0.1
Transportation Management Associations	No	Excellent	Very Practical	Included with Other Strategies	Included with Other Strategies
Bicycle and Pedestrian Facilities and Programs	No	Moderate	Very Practical	0.2	0.2
Park and Ride	No	Moderate	Very Practical	0.5	0
Operational and Traffic Flow Improvements (TSM)	No	Good	Very Practical	0.1	0.1
ITS, Incident Management	No	Excellent	Very Practical	0.1	0.1
Ramp Metering	No	Limited	Practical	0.1	0.1
Land Use Planning, Activity Centers	No	Limited	Practical	5.2	1.0
High Occupancy Vehicle (HOV) Facilities	No	Very Limited	Not Practical	1.4	0.5

STRATEGY	STRATEGY INDEPENDENTLY MEETS PROJECT PURPOSE AND NEED	STRATEGY OPPORTUNITY WITHIN CORRIDOR	APPLICABILITY OF STRATEGY WITHIN CORRIDOR IN <i>PA CMS PHASE 2 REPORT</i>	ESTIMATED POTENTIAL % REDUCTION IN DAILY VMT IN 2030	
				MAXIMUM POTENTIAL	ESTIMATED ACHIEVABLE
TOTAL				18.2	5.55

The adequacy test determined that none of the analyzed strategies is able to meet the increased travel demand forecast for the study area in the design year of 2030. Furthermore, even cumulatively, the strategies are still not able to meet the increase of 16.8 percent in daily VMT forecast for 2030 for the traffic study area. Accordingly, the adequacy test concludes that CMS-type strategies are not able to meet the additional travel demand in the corridor in the future.

2. Effect of Lafayette Street Improvements

The level-of-service analysis shows that LOS worsens or stays the same at all intersections in the no-build scenario when compared to current conditions. Furthermore, implementing the proposed improvements (build scenario) improves or maintains the level-of-service over future no-build conditions in all but three intersections. In the three instances where Level-of-Service decreases in the Build scenario(s), it decreases by a single grade with none of the intersections going from an uncongested into a congested condition. Therefore, the proposed project has congestion-reducing benefits.

In summary, travel demand simulation modeling has shown that the proposed improvements to Lafayette Street reduces overall congestion in the future within the study area. Additionally, the proposed improvements are included in the DVRPC Long Range Plan and widening within the corridor is included as a practical strategy in the *Pennsylvania Congestion Management System Phase 2 Report*. Therefore, as a result of a project-level CMS analysis, the proposed improvements to Lafayette Street are considered to be a part of an operational Congestion Management System.

3. CMS Commitments

In order to prolong the usefulness of the proposed improvements to Lafayette Street, a set of CMS commitments are being forwarded as part of the project. These enhancements will also insure that bicycle and pedestrian facilities are included in the final project design and existing bicycle and pedestrian facilities will remain available during construction. Additionally, they will analyze traffic operations and make appropriate improvements, where warranted. **Table V-5** includes the additional CMS enhancements associated with the Lafayette Street improvements.

Table V-5. CMS Enhancements to Be Included with Project Design

ENHANCEMENT STRATEGY	DESCRIPTION
Traffic Operations Improvements	Examine alternatives to reduce congestion at the three intersections showing a decline in LOS under the Build Scenarios (Main & DeKalb; Main & Lucetta; and Lafayette & Swede) and implement additional improvements if warranted. Investigate if closing the R6 Main Street station will eliminate grade crossing conflicts without deterring R6 ridership.
Construction Management Techniques	Maintain a continuous Schuylkill River Trail throughout construction and maintain at least one lane per direction on existing portion of Lafayette Street.
Bike Lane/Trail	Construct a new facility for the Schuylkill River Trail. The Trail is currently routed on the viaduct that abuts Lafayette Street. The viaduct will be demolished as part of the proposed project. A new facility to carry the Trail should be incorporated into the final design of the proposed improvements.
Pedestrian Amenities	Construct and/or repair sidewalks along Lafayette Street as part of the proposed extension.
Expand Parking at Rail Stations	Construct the planned parking garage at Norristown Transportation Center and investigate additional parking at Elm Street station when the Markley Street project (MPMS # 16665) gets underway. Expansion of parking at Elm Street station is contingent upon land available as part of the Markley Street project.

APPENDIX A

24-HOUR MACHINE TRAFFIC COUNTS

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*** DVRPC Traffic Counts**

All other roadway segments and ramp traffic counts were taken by the consultant and shown without using DVRPC format.

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Municipality: Norristown, PA

Comments: OK

Weather: Variable, rain

ATR #/ Operator: McM-543/CSM

Street name :Lafayette St Btwn/ Cross street:Swede St & Dekalb St ,

McMahon Associates, Inc.
Transportation Engineers & Planners
425 Commerce Dr, Suite 200
Ft. Washington, PA 19034

Site Code : 000080007103

Start Date: 04/10/2000

File I.D. : LAFAY03

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Begin Time	Mon. 04/17	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	EB	WB	EB	WB	EB	WB	EB	EB	WB
12:00 am	35	16	*	*	*	*	*	35	16
01:00	21	3	*	*	*	*	*	21	3
02:00	13	7	*	*	*	*	*	13	7
03:00	22	4	*	*	*	*	*	22	4
04:00	15	5	*	*	*	*	*	15	5
05:00	97	31	*	*	*	*	*	97	31
06:00	305	74	*	*	*	*	*	305	74
07:00	453	131	*	*	*	*	*	453	131
08:00	419	187	*	*	*	*	*	419	187
09:00	327	135	*	*	*	*	*	327	135
10:00	310	104	*	*	*	*	*	310	104
11:00	354	106	*	*	*	*	*	354	106
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11:00	*	*	*	*	*	*	*	*	*
Totals	2371	803	0	0	0	0	0	2371	803
	3174		0	0	0	0	0	3174	

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 08:00
Volume 453 187

07:00 08:00
453 187

PM Peaks

ADTs

Municipality: Norristown, PA

Comments: OK

Weather: Variable, rain

ATR #/ Operator: McM-543/CSM

Street name :Lafayette St Btwn/ Cross street:Swede St & Dekalb St ,

McMahon Associates, Inc.
Transportation Engineers & Planners
425 Commerce Dr, Suite 200
Ft. Washington, PA 19034

Site Code : 000080007103

Start Date: 04/10/2000

File I.D. : LAFAY03

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Begin Time	Mon. 04/10	Tues. 04/11	Wed. 04/12	Thur. 04/13	Fri. 04/14	Sat. 04/15	Sun. 04/16	Week	Avg.							
	EB	WB	EB	WB	EB	WB	EB	WB	WB							
12:00 am	*	*	*	*	32	15	42	16	31	16	51	19	49	18	41	17
01:00	*	*	*	*	15	8	18	5	13	3	34	13	27	14	21	9
02:00	*	*	*	*	11	1	14	2	11	1	28	9	22	8	17	4
03:00	*	*	*	*	13	6	16	6	16	3	19	11	9	6	15	6
04:00	*	*	*	*	20	4	25	3	22	6	15	14	12	4	19	6
05:00	*	*	*	*	79	27	74	26	76	26	31	19	18	8	56	21
06:00	*	*	*	*	253	84	277	86	266	68	87	34	37	11	184	57
07:00	*	*	*	*	530	149	510	140	483	143	139	41	73	21	347	99
08:00	*	*	*	*	420	174	424	183	409	175	188	70	81	32	304	127
09:00	*	*	*	*	348	124	352	118	315	164	175	72	96	49	257	105
10:00	*	*	*	*	307	123	297	116	322	125	225	86	112	53	253	101
11:00	*	*	*	*	344	129	307	131	347	123	218	104	124	66	268	111
12:00 pm	*	*	319	145	333	148	345	138	390	168	203	101	125	68	286	128
01:00	*	*	327	135	326	144	311	148	349	179	240	95	185	66	290	128
02:00	*	*	334	147	342	148	337	158	348	196	216	97	158	60	289	134
03:00	*	*	364	148	370	159	404	147	402	191	234	86	190	63	327	132
04:00	*	*	482	148	476	164	533	167	568	163	215	59	170	63	407	127
05:00	*	*	450	176	449	183	460	186	462	186	191	91	164	68	363	148
06:00	*	*	273	98	287	121	297	117	302	129	180	70	147	86	248	104
07:00	*	*	191	76	160	87	211	108	208	95	169	65	141	61	180	82
08:00	*	*	134	54	133	65	154	51	155	56	137	44	94	34	134	51
09:00	*	*	90	41	104	45	123	58	117	52	93	38	91	28	103	44
10:00	*	*	73	43	98	27	101	45	113	52	123	44	64	21	95	39
11:00	*	*	58	28	82	29	75	31	84	44	70	33	51	20	70	31
Totals	0	0	3095	1239	5532	2164	5707	2186	5809	2364	3281	1315	2240	928	4574	1811
	0	0		4334		7696		7893		8173		4596		3168		6385
Avg. Day	.0%	.0%	67.6%	68.4%	120.9%	119.4%	124.7%	120.7%	127.0%	130.5%	71.7%	72.6%	48.9%	51.2%		
AM Peaks					07:00	08:00	07:00	08:00	07:00	08:00	10:00	11:00	11:00	11:00	07:00	08:00
Volume					530	174	510	183	483	175	225	104	124	66	347	127
PM Peaks			04:00	05:00	04:00	05:00	04:00	05:00	04:00	02:00	01:00	12:00	03:00	06:00	04:00	05:00
Volume			482	176	476	183	533	186	568	196	240	101	190	86	407	148

DVRPC – Travel Monitoring

DATE: 08/13/2001

ROAD: LAFAYETTE AVE

FROM: DEKALB PK

TO: FRANKLIN ST

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: LOC FC: 19

PROJECT: 142-050-6 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:

STATION ID:

DVRPC FILE #: 30795

COUNTER: 9870

WEATHER: F

Hour Ending	Monday 08/13/01	Tuesday 08/14/01	Wednesday 08/15/01	Thursday 08/16/01	Friday 08/17/01
1 AM		30	28		
2 AM		24	22		
3 AM		22	23		
4 AM		34	38		
5 AM		146	118		
6 AM		376	367		
7 AM		744	756		
8 AM	788	832			
9 AM	572	597			
10 AM	472	453			
11 AM	487	492			
12 PM	572	562			
1 PM	584	500			
2 PM	568	525			
3 PM	714	729			
4 PM	782	788			
5 PM	892	872			
6 PM	670	680			
7 PM	480	466			
8 PM	339	334			
9 PM	226	266			
10 PM	160	166			
11 PM	102	107			
12 AM	66	78			
		9,823			

SEASONAL FACTOR:	.916	AADT: 8,899	AM PEAK %:	8.5	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.989		PM PEAK %:	8.9	HOUR ENDING:	5:00 PM

DVRPC – Travel Monitoring

DATE: 11/17/1998

ROAD: MAIN ST

FROM: FOREST AVE

TO: STANBRIDGE AVE

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: G115/0130/ FC: 14

PROJECT: MON98 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:

STATION ID: 29353

DVRPC FILE #: 4476

COUNTER: 9833

WEATHER: F

Hour Ending	Tuesday 11/17/98	Wednesday 11/18/98	Thursday 11/19/98	Friday 11/20/98	Saturday 11/21/98
1 AM		194	208		
2 AM		110	113		
3 AM		98	110		
4 AM		89	94		
5 AM		160	177		
6 AM		428	430		
7 AM		1,191	1,236		
8 AM		1,467	1,663		
9 AM		1,454			
10 AM	1,224	1,288			
11 AM	1,137	1,071			
12 PM	1,146	1,166			
1 PM	1,229	1,282			
2 PM	1,322	1,216			
3 PM	1,304	1,224			
4 PM	1,443	1,431			
5 PM	1,459	1,528			
6 PM	1,508	1,540			
7 PM	1,274	1,428			
8 PM	1,027	1,116			
9 PM	790	870			
10 PM	730	782			
11 PM	545	611			
12 AM	364	366			
		22,110			

SEASONAL FACTOR:	.925	AADT: 19,634	AM PEAK %:	6.6	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	7.	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 06/26/2000

ROAD: MAIN ST

FROM: DEKALB ST

TO: MARKLEY ST

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: G115/0120/ FC: 14

PROJECT: PAM00 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: 29353

DVRPC FILE #: 27675

COUNTER: 9954

WEATHER: F

Hour Ending	Monday 06/26/00	Tuesday 06/27/00	Wednesday 06/28/00	Thursday 06/29/00	Friday 06/30/00
1 AM		226	196		
2 AM		124	136		
3 AM		118	106		
4 AM		82	72		
5 AM		140	146		
6 AM		372	376		
7 AM		789	745		
8 AM		1,021	1,028		
9 AM		1,068	1,038		
10 AM	1,061	1,012			
11 AM	928	1,058			
12 PM	982	1,034			
1 PM	1,033	1,069			
2 PM	1,065	1,040			
3 PM	1,090	1,082			
4 PM	1,202	1,171			
5 PM	1,268	1,235			
6 PM	1,254	1,312			
7 PM	984	1,126			
8 PM	868	862			
9 PM	740	793			
10 PM	694	730			
11 PM	525	478			
12 AM	338	337			
		18,279			

SEASONAL FACTOR:	.918	AADT: 16,059	AM PEAK %:	5.8	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.957		PM PEAK %:	7.2	HOUR ENDING:	6:00 PM

Municipality: Norristown, PA

Comments: OK

Weather: Variable, rain

ATR #/ Operator: McM-559/3593 CSM

McMahon Associates, Inc.

Transportation Engineers & Planners

425 Commerce Dr, Suite 200

Fort Washington, PA 19034

Site Code : 000080007105

Start Date: 04/10/2000

File I.D. : LAFAY05V

Street name :Main St W/of Cross street:Conshohocken Rd Direction 1

Page : 1

Begin Time	Mon. 04/10	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.							
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 am	*	*	*	*	80	37	92	66	79	48	171	170	154	150	115	94
01:00	*	*	*	*	42	54	45	69	38	67	88	97	72	118	57	81
02:00	*	*	*	*	34	28	34	43	49	47	52	62	61	55	46	47
03:00	*	*	*	*	31	60	44	61	55	73	59	74	40	45	46	63
04:00	*	*	*	*	78	184	78	174	89	173	73	89	42	40	72	132
05:00	*	*	*	*	225	610	225	614	228	585	140	172	73	86	178	413
06:00	*	*	*	*	594	1038	554	980	571	986	253	327	91	140	413	694
07:00	*	*	*	*	721	675	693	893	744	915	343	405	144	180	529	614
08:00	*	*	*	*	714	710	708	750	677	684	463	516	196	325	552	597
09:00	*	*	*	*	660	636	654	649	636	664	510	593	298	341	552	577
10:00	*	*	*	*	624	627	675	667	621	676	587	633	371	473	576	615
11:00	*	*	*	*	679	706	669	747	661	718	662	662	370	537	608	674
12:00 pm	*	*	*	*	713	728	731	725	696	757	629	637	522	571	658	684
01:00	*	*	613	702	706	728	652	793	733	793	606	654	563	554	646	704
02:00	*	*	678	862	668	829	735	831	758	867	629	677	573	505	674	762
03:00	*	*	729	844	620	865	704	865	720	930	605	615	605	518	664	773
04:00	*	*	676	839	593	824	472	870	484	851	617	571	530	516	562	745
05:00	*	*	628	652	576	708	511	675	560	751	588	485	462	440	554	618
06:00	*	*	671	473	729	553	614	535	733	564	535	432	434	372	619	488
07:00	*	*	498	370	577	455	516	416	569	391	500	374	348	301	501	384
08:00	*	*	378	321	436	368	394	324	459	368	437	289	314	255	403	321
09:00	*	*	317	202	343	243	317	288	370	343	355	276	247	194	325	258
10:00	*	*	183	161	231	179	220	182	319	299	315	250	160	139	238	202
11:00	*	*	132	95	148	98	179	96	229	205	265	181	123	94	179	128
Totals	0	0	5503	5521	10822	11943	10516	12313	11078	12755	9482	9241	6793	6949	9767	10668
	0		11024		22765		22829		23833		18723		13742		20435	

Avg. Day .0% .0% 56.3% 51.7% 110.8% 111.9% 107.6% 115.4% 113.4% 119.5% 97.0% 86.6% 69.5% 65.1%

AM Peaks				07:00	06:00	08:00	06:00	07:00	06:00	11:00	11:00	10:00	11:00	11:00	06:00
Volume				721	1038	708	980	744	986	662	662	371	537	608	694
PM Peaks		03:00	02:00	06:00	03:00	02:00	04:00	02:00	03:00	12:00	02:00	03:00	12:00	02:00	03:00
Volume		729	862	729	865	735	870	758	930	629	677	605	571	674	773

Municipality: Norristown, PA

Comments: OK

Weather: Variable, rain

ATR #/ Operator: MCM-559/3593 CSM

McMahon Associates, Inc.

Transportation Engineers & Planners

425 Commerce Dr, Suite 200

Fort Washington, PA 19034

Site Code : 000080007105

Start Date: 04/10/2000

File I.D. : LAFAY05V

Street name :Main St W/of Cross street:Conshohocken Rd Direction 1

Page : 2

Begin Time	Mon. 04/17	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	WB	EB	WB	EB	WB	EB	WB	EB	
12:00 am	67	49	*	*	*	*	*	*	67 49
01:00	54	41	*	*	*	*	*	*	54 41
02:00	39	38	*	*	*	*	*	*	39 38
03:00	35	55	*	*	*	*	*	*	35 55
04:00	63	177	*	*	*	*	*	*	63 177
05:00	213	578	*	*	*	*	*	*	213 578
06:00	617	975	*	*	*	*	*	*	617 975
07:00	742	795	*	*	*	*	*	*	742 795
08:00	669	734	*	*	*	*	*	*	669 734
09:00	640	634	*	*	*	*	*	*	640 634
10:00	624	712	*	*	*	*	*	*	624 712
11:00	574	334	*	*	*	*	*	*	574 334
12:00 pm	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Totals	4337	5122	0	0	0	0	0	0	4337 5122
	9459		0		0		0		9459

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 06:00 07:00 06:00
Volume 742 975 742 975

PM Peaks

ADTs

Municipality: Conshohocken

Comments: None

Weather: Variable

ATR #/ Operator: 543/JB

Street name :Ridge Pike Cross street:btw Belvoir Rd & Fairfield Rd ,

JAMAR Technologies, Inc.

TAS for Windows

Copyright 1999

Site Code : 000080100242

Start Date: 07/09/2001

File I.D. : DVRPC42

Page : 1

Street Name	Ridge	Fix	07/09	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.					
Begin Time	Mon.	07/09	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.						
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	WB					
12:00 am	*	*	140	136	133	119	153	147	140	168	263	269	211	237	173	179
01:00	*	*	75	86	70	82	66	107	95	78	137	205	130	196	96	126
02:00	*	*	74	83	69	75	83	95	73	85	107	157	75	170	80	111
03:00	*	*	68	50	73	51	56	52	66	61	91	98	41	87	66	66
04:00	*	*	96	60	107	70	118	69	164	94	80	82	60	81	104	76
05:00	*	*	328	219	330	254	330	213	297	216	170	122	77	77	255	184
06:00	*	*	785	706	775	702	830	703	880	642	261	240	122	115	609	518
07:00	*	*	1071	1192	1065	1203	1085	1102	971	1067	465	370	246	191	817	854
08:00	*	*	1034	1138	972	1162	999	1119	977	1107	633	495	287	213	817	872
09:00	*	*	844	912	842	927	895	917	916	863	705	585	421	401	770	768
10:00	*	*	824	778	777	786	842	841	820	808	792	617	511	453	761	714
11:00	*	*	846	848	758	792	921	900	879	879	886	780	574	552	811	792
12:00 pm	840	937	879	928	856	893	917	935	987	995	838	849	653	564	853	872
01:00	875	949	913	869	882	922	917	944	965	924	847	804	726	597	875	858
02:00	938	993	900	922	898	938	891	943	1007	962	870	763	733	705	891	889
03:00	1094	1021	1148	1014	1037	995	1094	1043	1169	1112	863	764	703	594	1015	935
04:00	1138	1079	1116	1055	1132	1079	1163	1140	1158	1118	790	728	644	638	1020	977
05:00	1142	1172	1200	1193	1151	1160	1148	1144	1142	1120	715	640	553	557	1007	998
06:00	850	909	869	868	897	855	1018	885	1018	890	682	619	579	649	845	811
07:00	687	703	674	652	708	642	783	660	804	696	619	541	520	511	685	629
08:00	533	653	550	565	659	626	674	655	667	640	561	512	435	489	583	591
09:00	437	541	492	449	562	514	520	529	607	527	548	426	407	404	510	484
10:00	324	364	295	331	368	378	369	367	516	454	501	405	301	325	382	375
11:00	237	265	218	228	226	274	255	280	385	373	384	360	206	243	273	289
Totals	9095	9586	15439	15282	15347	15499	16127	15790	16703	15879	12808	11431	9215	9049	14298	13968
	18681		30721		30846		31917		32582		24239		18264		28266	
Avg. Day	63.6%	68.6%	107.9%	109.4%	107.3%	110.9%	112.7%	113.0%	116.8%	113.6%	89.5%	81.8%	64.4%	64.7%		
AM Peaks			07:00	07:00	07:00	07:00	07:00	08:00	08:00	08:00	11:00	11:00	11:00	11:00	07:00	08:00
Volume			1071	1192	1065	1203	1085	1119	977	1107	886	780	574	552	817	872
PM Peaks	05:00	05:00	05:00	05:00	05:00	05:00	04:00	05:00	03:00	05:00	02:00	12:00	02:00	02:00	04:00	05:00
Volume	1142	1172	1200	1193	1151	1160	1163	1144	1169	1120	870	849	733	705	1020	998

Municipality: Conshohocken
 Comments: None
 Weather: Variable
 ATR #/ Operator: 543/JB
 Street name :Ridge Pike

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 TAS for Windows
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Site Code : 000080100242
 Start Date: 07/09/2001
 File I.D. : DVRPC42
 Page : 2

Cross street:btw Belvoir Rd & Fairfield Rd ,																
Begin	Mon. 07/16		Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week	Avg.
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 am	112	137	*	*	*	*	*	*	*	*	*	*	*	*	112	137
01:00	63	67	*	*	*	*	*	*	*	*	*	*	*	*	63	67
02:00	57	63	*	*	*	*	*	*	*	*	*	*	*	*	57	63
03:00	59	65	*	*	*	*	*	*	*	*	*	*	*	*	59	65
04:00	96	75	*	*	*	*	*	*	*	*	*	*	*	*	96	75
05:00	316	220	*	*	*	*	*	*	*	*	*	*	*	*	316	220
06:00	763	651	*	*	*	*	*	*	*	*	*	*	*	*	763	651
07:00	1061	1061	*	*	*	*	*	*	*	*	*	*	*	*	1061	1061
08:00	1048	1078	*	*	*	*	*	*	*	*	*	*	*	*	1048	1078
09:00	822	888	*	*	*	*	*	*	*	*	*	*	*	*	822	888
10:00	801	737	*	*	*	*	*	*	*	*	*	*	*	*	801	737
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Totals	5198	5042	0	0	0	0	0	0	0	0	0	0	0	0	5198	5042
	10240		0		0		0		0		0		0		10240	
Avg. Day	100.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%		
AM Peaks	07:00	08:00													07:00	08:00
Volume	1061	1078													1061	1078
PM Peaks																
ADTs																

DVRPC – Travel Monitoring

DATE: 07/17/2000

ROAD: TR 202 DEKALB ST

FROM: FORD ST

TO: TR 23

COUNTY: MONTGOMERY MCD: 179 - BRIDGEPORT BOROUGH SR/SEG/OFF: 0202/0100/1500 FC: 14

PROJECT: PAM00 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:

STATION ID: 12850

DVRPC FILE #: 27490

COUNTER: 9834

WEATHER: F

Hour Ending	Monday 07/17/00	Tuesday 07/18/00	Wednesday 07/19/00	Thursday 07/20/00	Friday 07/21/00
1 AM		70	104		
2 AM		39	53		
3 AM		48	43		
4 AM		22	30		
5 AM		62	49		
6 AM		121	126		
7 AM		436	460		
8 AM		870	832		
9 AM		896	845		
10 AM	648	752			
11 AM	622	684			
12 PM	707	730			
1 PM	825	808			
2 PM	870	885			
3 PM	829	864			
4 PM	897	939			
5 PM	986	993			
6 PM	1,013	1,063			
7 PM	759	816			
8 PM	512	536			
9 PM	454	457			
10 PM	370	370			
11 PM	208	235			
12 AM	130	154			
		12,850			

SEASONAL FACTOR:	.896	AADT: 11,019	AM PEAK %:	7.	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.957		PM PEAK %:	8.3	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 09/21/1998

ROAD: TR 202 NB DEKALB ST

FROM: FOURTH ST

TO: LAFAYETTE ST

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: 0202/0120/1500 FC: 14

PROJECT: PAM98 COUNT DIR: NORTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 12851

DVRPC FILE #: 3314

COUNTER: 9776

WEATHER: F

Hour Ending	Monday 09/21/98	Tuesday 09/22/98	Wednesday 09/23/98	Thursday 09/24/98	Friday 09/25/98
1 AM		136	130		
2 AM		54	72		
3 AM		50	41		
4 AM		38	47		
5 AM		52	59		
6 AM		144	140		
7 AM		376	373		
8 AM		648	704		
9 AM		678	702		
10 AM		594	584		
11 AM		598	552		
12 PM		665			
1 PM	740	721			
2 PM	694	704			
3 PM	814	838			
4 PM	1,007	964			
5 PM	1,179	1,256			
6 PM	1,468	1,426			
7 PM	926	1,050			
8 PM	746	818			
9 PM	604	656			
10 PM	530	578			
11 PM	358	343			
12 AM	226	223			
		13,610			

SEASONAL FACTOR:	.909	AADT: 11,877	AM PEAK %:	5.	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	10.5	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 09/21/1998

ROAD: TR 202 SB DEKALB ST

FROM: FOURTH ST

TO: LAFAYETTE ST

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: 0202/0121/1500 FC: 14

PROJECT: PAM98 COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: 45 LOOP OR CLASS:

STATION ID: 12851

DVRPC FILE #: 3315

COUNTER: 9776

WEATHER: F

Hour Ending	Monday 09/21/98	Tuesday 09/22/98	Wednesday 09/23/98	Thursday 09/24/98	Friday 09/25/98
1 AM		84	100		
2 AM		61	51		
3 AM		44	44		
4 AM		63	72		
5 AM		140	128		
6 AM		483	469		
7 AM		1,318	1,354		
8 AM		2,036	2,044		
9 AM		1,711	1,904		
10 AM		1,108	1,044		
11 AM		998	931		
12 PM		989			
1 PM	1,152	1,149			
2 PM	1,003	1,057			
3 PM	1,022	1,080			
4 PM	1,082	1,084			
5 PM	1,164	1,216			
6 PM	1,196	1,229			
7 PM	982	997			
8 PM	851	850			
9 PM	550	568			
10 PM	410	469			
11 PM	286	323			
12 AM	194	182			
		19,239			

SEASONAL FACTOR:	.909	AADT: 16,789	AM PEAK %:	10.6	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	6.4	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 06/07/1999

ROAD: TR 202 NB DEKALB ST

FROM: SPRUCE ST

TO: FORNANCE ST

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: 0202/0140/3500 FC: 14

PROJECT: PAM99 COUNT DIR: NORTH TRAFFIC DIR: NORTH SPEED LIMIT: 35 LOOP OR CLASS:

STATION ID: 12852

DVRPC FILE #: 6720

COUNTER: 9625

WEATHER: F

Hour Ending	Monday 06/07/99	Tuesday 06/08/99	Wednesday 06/09/99	Thursday 06/10/99	Friday 06/11/99
1 AM		76	74		
2 AM		26	50		
3 AM		31	32		
4 AM		25	22		
5 AM		34	36		
6 AM		123	108		
7 AM		272	270		
8 AM		475	470		
9 AM		564	586		
10 AM		552	598		
11 AM		614	625		
12 PM		617			
1 PM	622	696			
2 PM	678	626			
3 PM	630	658			
4 PM	740	676			
5 PM	841	866			
6 PM	900	902			
7 PM	678	689			
8 PM	508	506			
9 PM	415	382			
10 PM	303	296			
11 PM	215	191			
12 AM	116	148			
		10,045			

SEASONAL FACTOR:	.914	AADT: 8,796	AM PEAK %:	6.1	HOUR ENDING:	12:00 PM
AXLE CORR. FACTOR:	.958		PM PEAK %:	9.	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 07/17/2000

ROAD: BRIDGEPORT BYP SB

FROM: TR 202 DEKALB PK

TO: ROSS RD OVP

COUNTY: MONTGOMERY MCD: 179 - BRIDGEPORT BOROUGH SR/SEG/OFF: 3020/0011/0500 FC: 12

PROJECT: PAM00 COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: 50 LOOP OR CLASS:

STATION ID: 3884

DVRPC FILE #: 27608

COUNTER: 9835

WEATHER: F

Hour Ending	Monday 07/17/00	Tuesday 07/18/00	Wednesday 07/19/00	Thursday 07/20/00	Friday 07/21/00
1 AM		92	96		
2 AM		42	36		
3 AM		56	44		
4 AM		38	52		
5 AM		100	100		
6 AM		312	306		
7 AM		918	918		
8 AM		1,471	1,466		
9 AM		1,391	1,340		
10 AM		948	954		
11 AM	724	717			
12 PM	762	724			
1 PM	821	836			
2 PM	831	810			
3 PM	794	763			
4 PM	780	804			
5 PM	896	901			
6 PM	948	964			
7 PM	786	794			
8 PM	627	664			
9 PM	488	564			
10 PM	360	449			
11 PM	258	268			
12 AM	166	180			
		14,806			

SEASONAL FACTOR:	.895	AADT: 12,470	AM PEAK %:	9.9	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.941		PM PEAK %:	6.5	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 07/17/2000

ROAD: BRIDGEPORT BYP NB

FROM: TR 202 DEKALB PK

TO: ROSS RD OVP

COUNTY: MONTGOMERY MCD: 179 - BRIDGEPORT BOROUGH SR/SEG/OFF: 3020/0010/0500 FC: 12

PROJECT: PAM00 COUNT DIR: NORTH TRAFFIC DIR: BOTH SPEED LIMIT: 50 LOOP OR CLASS:

STATION ID: 3884

DVRPC FILE #: 27607

COUNTER: 9766

WEATHER: F

Hour Ending	Monday 07/17/00	Tuesday 07/18/00	Wednesday 07/19/00	Thursday 07/20/00	Friday 07/21/00
1 AM		129	138		
2 AM		61	78		
3 AM		34	46		
4 AM		41	40		
5 AM		62	56		
6 AM		112	130		
7 AM		314	289		
8 AM		546	512		
9 AM		570	572		
10 AM		505	468		
11 AM	494	526			
12 PM	505	552			
1 PM	624	654			
2 PM	637	720			
3 PM	795	790			
4 PM	846	923			
5 PM	1,153	1,152			
6 PM	1,285	1,319			
7 PM	910	940			
8 PM	594	681			
9 PM	585	618			
10 PM	550	623			
11 PM	332	328			
12 AM	265	256			
		12,456			

SEASONAL FACTOR:	.895	AADT: 10,490	AM PEAK %:	4.6	HOUR ENDING:	9:00 AM
AXLE CORR. FACTOR:	.941		PM PEAK %:	10.6	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 07/20/1999

ROAD: DANNENHOWER BR SB

FROM: ROSS RD RAMPS TO: MARKLEY ST RAMPS

COUNTY: MONTGOMERY MCD: 234 - WEST NORRITON TOWNSHIP SR/SEG/OFF: 3020/0031/2000 FC: 12

PROJECT: PAM99 COUNT DIR: SOUTH TRAFFIC DIR: BOTH SPEED LIMIT: 50 LOOP OR CLASS:

STATION ID: 20825

DVRPC FILE #: 6873

COUNTER: 9763

WEATHER: F

Hour Ending	Tuesday 07/20/99	Wednesday 07/21/99	Thursday 07/22/99	Friday 07/23/99	Saturday 07/24/99
1 AM		115	108		
2 AM		87	68		
3 AM		65	61		
4 AM		68	66		
5 AM		160	174		
6 AM		412	400		
7 AM		1,200	1,143		
8 AM		1,884	1,933		
9 AM		1,760	1,738		
10 AM		1,025	990		
11 AM		884	890		
12 PM	894	892			
1 PM	948	967			
2 PM	958	920			
3 PM	948	926			
4 PM	1,023	1,043			
5 PM	1,186	1,122			
6 PM	1,240	1,210			
7 PM	1,007	1,017			
8 PM	923	888			
9 PM	693	660			
10 PM	530	551			
11 PM	400	412			
12 AM	234	240			
		18,508			

SEASONAL FACTOR:	.895	AADT: 15,736	AM PEAK %:	10.2	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.95		PM PEAK %:	6.5	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 09/21/1998

ROAD: MARKLEY ST

FROM: AIRY ST TO: SWEDE RD

COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: G721/0010/ FC: 14

PROJECT: PAM98 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:

STATION ID: 29519

DVRPC FILE #: 3614

COUNTER: 9773

WEATHER: F

Hour Ending	Monday 09/21/98	Tuesday 09/22/98	Wednesday 09/23/98	Thursday 09/24/98	Friday 09/25/98
1 AM		143	108		
2 AM		72	80		
3 AM		58	60		
4 AM		40	44		
5 AM		104	98		
6 AM		304	328		
7 AM		834	896		
8 AM		1,162	1,152		
9 AM		1,099	1,156		
10 AM		1,090	1,044		
11 AM		1,100	1,051		
12 PM		1,154	1,186		
1 PM		1,302			
2 PM	1,132	1,181			
3 PM	1,199	1,247			
4 PM	1,291	1,290			
5 PM	1,468	1,512			
6 PM	1,544	1,527			
7 PM	1,206	1,250			
8 PM	930	1,048			
9 PM	718	718			
10 PM	596	638			
11 PM	413	399			
12 AM	237	231			
		19,503			

SEASONAL FACTOR:	.909	AADT: 17,019	AM PEAK %:	6.	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.96		PM PEAK %:	7.8	HOUR ENDING:	6:00 PM

DVRPC – Travel Monitoring

DATE: 05/25/1999

ROAD: TR 23 4TH ST FROM: MILL RD TO: FORD ST
 COUNTY: MONTGOMERY MCD: 179 - BRIDGEPORT BOROUGH SR/SEG/OFF: 0023/0220/1000 FC: 16
 PROJECT: PAM99 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:
 STATION ID: 11659 DVRPC FILE #: 6646 COUNTER: 9866 WEATHER: F

Hour Ending	Tuesday 05/25/99	Wednesday 05/26/99	Thursday 05/27/99	Friday 05/28/99	Saturday 05/29/99
1 AM		88	87		
2 AM		58	58		
3 AM		34	31		
4 AM		30	22		
5 AM		65	66		
6 AM		161	160		
7 AM		581	576		
8 AM		918	964		
9 AM		1,114	1,031		
10 AM	798	786			
11 AM	616	614			
12 PM	729	693			
1 PM	796	744			
2 PM	691	713			
3 PM	750	730			
4 PM	856	872			
5 PM	986	1,002			
6 PM	1,089	1,068			
7 PM	830	749			
8 PM	605	579			
9 PM	508	440			
10 PM	362	361			
11 PM	248	253			
12 AM	155	143			
		12,796			
<hr/>					
SEASONAL FACTOR:	.925	AADT: 11,410	AM PEAK %:	8.7	HOUR ENDING: 9:00 AM
AXLE CORR. FACTOR:	.964		PM PEAK %:	8.3	HOUR ENDING: 6:00 PM

DVRPC – Travel Monitoring

DATE: 09/15/1997

ROAD: MARSHALL ST FROM: STANBRIDGE ST TO: FORREST ST
COUNTY: MONTGOMERY MCD: 207 - NORRISTOWN BOROUGH SR/SEG/OFF: G356/0020/ FC: 17
PROJECT: PASM97 COUNT DIR: BOTH TRAFFIC DIR: BOTH SPEED LIMIT: 25 LOOP OR CLASS:
STATION ID: 29451 DVRPC FILE #: 1693 COUNTER: WEATHER: F

Hour Ending	Monday 09/15/97	Tuesday 09/16/97	Wednesday 09/17/97	Thursday 09/18/97	Friday 09/19/97
1 AM		43	40		
2 AM		40	30		
3 AM		27	14		
4 AM		19	13		
5 AM		27	34		
6 AM		79	74		
7 AM		274	267		
8 AM		686	667		
9 AM		582	578		
10 AM		403	436		
11 AM		326	346		
12 PM	256	329	366		
1 PM	399	380			
2 PM	380	345			
3 PM	433	394			
4 PM	545	523			
5 PM	626	347			
6 PM	688	739			
7 PM	586	563			
8 PM	438	426			
9 PM	344	310			
10 PM	206	233			
11 PM	182	168			
12 AM	98	94			
		7,357			

SEASONAL FACTOR:	.925	AADT: 6,710	AM PEAK %:	9.3	HOUR ENDING:	8:00 AM
AXLE CORR. FACTOR:	.986		PM PEAK %:	10.	HOUR ENDING:	6:00 PM

Municipality : Norristown Twp
 Comments : None
 Weather : Variable
 ATR #/Operator : 5721/JB

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Site Code : 000080100215
 Start Date: 06/11/2001
 File I.D. : DVRPC15
 Page : 1

Street name : Airy St Cross street:btw Swede Rd & Markley St										
Begin Time	Mon. 06/11	Tues. 06/12	Wed. 06/13	Thur. 06/14	Fri. 06/15	Weekday Avg.	Sat. 06/16	Sun. 06/17	Week Avg.	Each * Equals 25 Vehicles
12:00 am	*	*	60	89	60	70	120	95	85	***
01:00	*	*	35	54	61	50	83	77	62	**
02:00	*	*	29	30	27	29	55	76	43	**
03:00	*	*	23	20	24	22	50	34	30	*
04:00	*	*	32	24	30	29	31	20	27	*
05:00	*	*	70	58	58	62	36	32	51	**
06:00	*	*	206	196	173	192	78	43	139	*****
07:00	*	*	394	333	376	368	112	64	256	*****
08:00	*	*	368	318	373	353	154	85	260	*****
09:00	*	*	287	265	293	282	180	99	225	*****
10:00	*	*	286	276	339	300	245	149	259	*****
11:00	*	*	353	281	345	326	283	179	288	*****
12:00 pm	*	345	327	319	369	340	294	226	313	*****
01:00	*	348	303	327	379	339	268	260	314	*****
02:00	*	389	349	314	422	368	278	264	336	*****
03:00	*	515	494	498	600	527	294	268	445	*****
04:00	*	685	663	625	632	651	256	216	513	*****
05:00	*	748	720	709	680	714	265	232	559	*****
06:00	*	377	433	433	361	401	232	188	337	*****
07:00	*	291	299	272	263	281	180	221	254	*****
08:00	*	259	255	256	237	252	149	211	228	*****
09:00	*	229	189	183	202	201	154	193	192	*****
10:00	*	130	135	148	151	141	133	145	140	*****
11:00	*	91	117	127	124	115	122	95	113	*****
Totals	0	4407	6427	6155	6579	6413	4052	3472	5469	
% Avg. WkDa	.0%	68.7%	100.2%	95.9%	102.5%					
% Avg. Day	.0%	80.5%	117.5%	112.5%	120.3%		74.0%	63.4%		
AM Peak Volume			07:00 394	07:00 333	07:00 376	07:00 368	11:00 283	11:00 179	11:00 288	
PM Peak Volume		05:00 748	05:00 720	05:00 709	05:00 680	05:00 714	12:00 294	03:00 268	05:00 559	

ADTs

Municipality : Norristown Twp

Comments : None

Weather : Variable

ATR #/Operator : 5721/JB

Street name :Airy St Cross street:btw Swede Rd & Markley St

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Site Code : 00008010021

Start Date: 06/11/2001

File I.D. : DVRPC15

Page : 2

Begin Time	Mon. 06/18	Tues. 06/19	Wed. 06/20	Thur. 06/21	Fri. 06/22	Weekday Avg.	Sat. 06/23	Sun. 06/24	Week Avg.	Each * Equals 25 Vehicles
12:00 am	62	*	*	*	*	62	*	*	62	**
01:00	42	*	*	*	*	42	*	*	42	**
02:00	28	*	*	*	*	28	*	*	28	*
03:00	19	*	*	*	*	19	*	*	19	*
04:00	28	*	*	*	*	28	*	*	28	*
05:00	72	*	*	*	*	72	*	*	72	***
06:00	195	*	*	*	*	195	*	*	195	*****
07:00	407	*	*	*	*	407	*	*	407	*****
08:00	365	*	*	*	*	365	*	*	365	*****
09:00	288	*	*	*	*	288	*	*	288	*****
10:00	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*
Totals	1506	0	0	0	0	1506	0	0	1506	
% Avg. WkDa	100.0%	.0%	.0%	.0%	.0%		.0%	.0%		
% Avg. Day	100.0%	.0%	.0%	.0%	.0%					

AM Peak 07:00
Volume 407

07:00
407

07:00
407

PM Peak

ADTs

Municipality : Norristown Twp

Comments : None

Weather : Variable

ATR #/Operator : 4342/JB

Street name :Fornace St Cross street:btw 202 North & 202 South ,

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Site Code : 000080100216

Start Date: 06/11/2001

File I.D. : DVRPC16

Page : 1

Begin Time	Mon.	06/11	Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week	Avg.
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 am	*	*	*	*	39	25	56	40	4	57	14	98	28	69	28	58
01:00	*	*	*	*	12	8	23	12	1	28	2	51	4	50	8	30
02:00	*	*	*	*	17	8	17	6	2	21	8	63	8	30	10	26
03:00	*	*	*	*	7	6	11	5	3	18	4	26	0	27	5	16
04:00	*	*	*	*	11	15	15	23	3	28	0	28	2	11	6	21
05:00	*	*	*	*	36	49	42	54	2	85	1	56	6	28	17	54
06:00	*	*	*	*	157	172	133	193	55	289	0	120	16	76	72	170
07:00	*	*	*	*	262	352	370	302	113	454	34	166	14	109	159	277
08:00	*	*	*	*	270	353	442	262	133	495	57	171	34	100	187	276
09:00	*	*	*	*	240	261	207	272	7	477	228	139	38	115	144	253
10:00	*	*	*	*	199	228	73	383	45	479	218	168	5	227	108	297
11:00	*	*	*	*	227	250	158	296	85	419	79	253	3	248	110	293
12:00 pm	*	*	225	301	236	256	186	305	203	310	142	233	0	288	165	282
01:00	*	*	221	253	240	250	246	338	248	272	116	223	0	331	178	278
02:00	*	*	268	261	239	252	231	388	240	293	47	329	0	347	171	312
03:00	*	*	311	300	295	294	253	396	223	402	73	326	7	333	194	342
04:00	*	*	322	328	334	333	220	433	129	507	24	285	99	226	188	352
05:00	*	*	352	291	349	269	168	461	85	446	35	228	85	245	179	323
06:00	*	*	272	254	221	207	165	341	55	379	39	210	78	217	138	268
07:00	*	*	181	188	162	188	109	266	28	316	51	199	16	232	91	232
08:00	*	*	167	171	130	159	63	216	64	262	44	142	73	226	90	196
09:00	*	*	110	113	111	93	86	188	33	199	40	143	63	174	74	152
10:00	*	*	82	81	92	79	47	158	22	201	26	131	42	121	52	128
11:00	*	*	70	77	73	79	31	136	16	151	22	141	27	108	40	115
Totals	0	0	2581	2618	3959	4186	3352	5474	1799	6588	1304	3929	648	3938	2414	4751
	0	0	5199			8145		8826		8387		5233		4586		7165
Avg. Day	.0%	.0%	106.9%	55.1%	164.0%	88.1%	138.8%	115.2%	74.5%	138.6%	54.0%	82.7%	26.8%	82.8%		
AM Peaks					08:00	08:00	08:00	10:00	08:00	08:00	09:00	11:00	09:00	11:00	08:00	10:00
Volume					270	353	442	383	133	495	228	253	38	248	187	297
PM Peaks			05:00	04:00	05:00	04:00	03:00	05:00	01:00	04:00	12:00	02:00	04:00	02:00	03:00	04:00
Volume			352	328	349	333	253	461	248	507	142	329	99	347	194	352

Municipality : Norristown Twp

JAMAR Technologies, Inc.

Comments : None

TAS for Windows

Weather : Variable

Copyright 1999

ATR #/Operator : 4342/JB

Site Code : 000080100216

Start Date: 06/11/2001

File I.D. : DVRPC16

Street name :Fornace St Cross street:btw 202 North & 202 South ,

Page : 2

Begin Time	Mon. 06/18	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	WB	EB	WB	EB	WB	EB	WB	EB	
12:00 am	6	44	*	*	*	*	*	*	6
01:00	7	27	*	*	*	*	*	*	7
02:00	1	22	*	*	*	*	*	*	1
03:00	6	14	*	*	*	*	*	*	6
04:00	4	32	*	*	*	*	*	*	4
05:00	8	95	*	*	*	*	*	*	8
06:00	88	289	*	*	*	*	*	*	88
07:00	121	493	*	*	*	*	*	*	121
08:00	44	559	*	*	*	*	*	*	44
09:00	45	431	*	*	*	*	*	*	45
10:00	117	341	*	*	*	*	*	*	117
11:00	*	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Totals	447	2347	0	0	0	0	0	0	447
	2794		0	0	0	0	0	0	2794

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 08:00 07:00 08:00
Volume 121 559 121 559

PM Peaks

ADTs

Municipality: Plymouth Twp
 Comments: None
 Weather: Variable
 ATR #/ Operator: 585/JB
 Street name :Plymouth Rd Cross street:btw Johnson & Eagle Rd

JAMAR Technologies, Inc.
 TAS for Windows
 Copyright 1999

Site Code : 000080100244
 Start Date: 07/09/2001
 File I.D. : DVRPC44
 Page : 1

Begin Time	Mon. EB	Mon. WB	Tues. EB	Tues. WB	Wed. EB	Wed. WB	Thur. EB	Thur. WB	Fri. EB	Fri. WB	Sat. EB	Sat. WB	Sun. EB	Sun. WB	Week	Avg.
12:00 am	*	*	38	26	25	35	29	42	34	45	25	49	37	78	31	46
01:00	*	*	14	12	16	18	21	23	13	16	29	28	28	50	20	24
02:00	*	*	10	14	18	12	14	15	17	14	19	31	17	28	16	19
03:00	*	*	8	8	5	7	14	9	9	11	10	16	12	19	10	12
04:00	*	*	19	10	21	21	19	11	24	18	21	13	11	13	19	14
05:00	*	*	88	33	101	26	98	36	88	31	45	18	27	15	74	26
06:00	*	*	260	168	232	158	245	165	262	159	91	68	34	49	187	128
07:00	*	*	488	314	503	332	217	574	490	329	148	117	73	67	320	289
08:00	*	*	458	321	511	339	381	427	425	298	148	123	79	63	334	262
09:00	*	*	285	233	280	233	320	210	309	205	190	101	116	72	250	176
10:00	*	*	227	154	229	173	281	181	244	190	195	159	155	97	222	159
11:00	*	*	241	170	242	201	260	221	233	214	229	151	212	138	236	182
12:00 pm	263	229	234	220	268	235	298	249	305	220	248	174	198	188	259	216
01:00	299	236	276	234	296	214	311	220	333	237	227	181	195	145	277	210
02:00	282	226	295	226	313	229	339	262	360	255	245	167	205	167	291	219
03:00	358	265	416	277	392	263	441	251	437	273	245	176	176	170	352	239
04:00	685	326	693	316	686	354	663	339	725	314	224	184	190	153	552	284
05:00	636	334	698	363	666	379	744	348	594	368	231	188	202	184	539	309
06:00	331	294	337	256	395	260	344	289	304	244	160	155	141	141	287	234
07:00	230	203	249	183	238	200	202	177	217	201	141	173	132	155	201	185
08:00	122	148	176	137	185	165	156	142	173	139	140	134	123	142	154	144
09:00	124	129	101	142	137	173	125	128	136	107	136	125	97	109	122	130
10:00	84	95	90	122	71	109	87	110	106	100	95	120	89	101	89	108
11:00	42	63	46	58	61	71	69	65	39	92	71	83	41	70	53	72
Totals	3456	2548	5747	3997	5891	4207	5678	4494	5877	4080	3313	2734	2590	2414	4895	3687
	6004		9744		10098		10172		9957		6047		5004		8582	

Avg. Day 70.6% 69.1% 117.4% 108.4% 120.3% 114.1% 116.0% 121.8% 120.0% 110.6% 67.6% 74.1% 52.9% 65.4%

AM Peaks
 Volume 07:00 08:00 08:00 08:00 08:00 07:00 07:00 07:00 11:00 10:00 11:00 11:00 08:00 07:00
 488 321 511 339 381 574 490 329 229 159 212 138 334 289

PM Peaks
 Volume 04:00 05:00 05:00 05:00 04:00 05:00 05:00 05:00 04:00 05:00 12:00 05:00 02:00 12:00 04:00 05:00
 685 334 698 363 686 379 744 348 725 368 248 188 205 188 552 309

Municipality: Plymouth Twp
 Comments: None
 Weather: Variable
 ATR #/ Operator: 585/JB

JAMAR Technologies, Inc.
 TAS for Windows
 Copyright 1999

Site Code : 000080100244
 Start Date: 07/09/2001
 File I.D. : DVRPC44
 Page : 2

Street name :Plymouth Rd Cross street:btw Johnson & Eagle Rd																	File I.D. : DVAFC		
Begin Time	Mon. 07/16		Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week		Avg.		
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB			
12:00 am	31	39	0	0	*	*	*	*	*	*	*	*	*	*	*	16	20		
01:00	11	18	0	0	*	*	*	*	*	*	*	*	*	*	*	6	9		
02:00	15	8	0	0	*	*	*	*	*	*	*	*	*	*	*	8	4		
03:00	12	9	0	0	*	*	*	*	*	*	*	*	*	*	*	6	4		
04:00	16	17	0	0	*	*	*	*	*	*	*	*	*	*	*	8	8		
05:00	104	26	0	0	*	*	*	*	*	*	*	*	*	*	*	52	13		
06:00	250	176	0	0	*	*	*	*	*	*	*	*	*	*	*	125	88		
07:00	449	350	0	0	*	*	*	*	*	*	*	*	*	*	*	224	175		
08:00	491	298	0	0	*	*	*	*	*	*	*	*	*	*	*	246	149		
09:00	271	208	0	0	*	*	*	*	*	*	*	*	*	*	*	136	104		
10:00	239	189	0	0	*	*	*	*	*	*	*	*	*	*	*	120	94		
11:00	131	98	0	0	*	*	*	*	*	*	*	*	*	*	*	66	49		
12:00 pm	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
01:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
02:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
03:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
04:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
05:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
06:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
07:00	0	1	*	*	*	*	*	*	*	*	*	*	*	*	*	0	1		
08:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
09:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
10:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
11:00	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0		
Totals	2020	1437	0	0	0	0	0	0	0	0	0	0	0	0	0	1013	718		
		3457		0		0		0		0		0		0			1731		
Avg. Day	199.4%	200.1%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%				
AM Peaks	08:00	07:00																08:00	07:00
Volume	491	350																246	175
PM Peaks		07:00																	07:00
Volume		1																	1

Municipality : Norristown Twp

JAMAR Technologies, Inc.

Comments : None

TAS for Windows

Weather: Variable

Copyright 1999

ATR #/Operator : 545/JB

Site Code : 000080100218

Start Date: 06/11/2001

File I.D. : DVRPC18

Street name :Sandy Hill Rd Cross street:btw New Hope Rd & Belvoir Rd ,

Page : 2

Begin Time	Mon. 06/18	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	EB	WB	EB	WB	EB	WB	EB	WB	
12:00 am	30	37	*	*	*	*	*	*	30 37
01:00	9	21	*	*	*	*	*	*	9 21
02:00	7	13	*	*	*	*	*	*	7 13
03:00	5	8	*	*	*	*	*	*	5 8
04:00	19	17	*	*	*	*	*	*	19 17
05:00	64	33	*	*	*	*	*	*	64 33
06:00	204	190	*	*	*	*	*	*	204 190
07:00	405	431	*	*	*	*	*	*	405 431
08:00	378	495	*	*	*	*	*	*	378 495
09:00	268	323	*	*	*	*	*	*	268 323
10:00	259	231	*	*	*	*	*	*	259 231
11:00	234	258	*	*	*	*	*	*	234 258
12:00 pm	283	298	*	*	*	*	*	*	283 298
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Totals	2165	2355	0	0	0	0	0	0	2165 2355
	4520		0	0	0	0	0	0	4520
Avg. Day	100.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
AM Peaks	07:00	08:00							07:00 08:00
Volume	405	495							405 495
PM Peaks	12:00	12:00							12:00 12:00
Volume	283	298							283 298
ADTs									

Municipality : Norristown Twp

Comments : None

Weather: Variable

ATR #/Operator : 545/JB

Street name :Sandy Hill Rd Cross street:btw New Hope Rd & Belvoir Rd ,

JAMAR Technologies, Inc.

TAS for Windows

Copyright 1999

Site Code : 000080100218

Start Date: 06/11/2001

File I.D. : DVRPC18

Page : 1

Page : 1																
Begin Time	Mon. EB	06/11 WB	Tues. EB	WB	Wed. EB	WB	Thur. EB	WB	Fri. EB	WB	Sat. EB	WB	Sun. EB	WB	Week EB	Avg. WB
12:00 am	*	*	*	*	27	37	39	50	21	41	56	66	46	48	38	48
01:00	*	*	*	*	10	18	11	22	16	16	36	35	32	43	21	27
02:00	*	*	*	*	11	10	11	6	9	11	28	23	19	17	16	13
03:00	*	*	*	*	6	6	7	11	14	6	13	18	6	9	9	10
04:00	*	*	*	*	11	9	17	19	13	20	8	19	9	7	12	15
05:00	*	*	*	*	64	25	60	34	60	29	30	20	18	11	46	24
06:00	*	*	*	*	233	206	215	176	215	173	102	46	40	25	161	125
07:00	*	*	*	*	408	493	414	422	402	416	139	95	64	47	285	295
08:00	*	*	*	*	471	542	379	451	399	503	126	116	86	46	292	332
09:00	*	*	*	*	333	356	278	291	355	320	172	132	91	97	242	239
10:00	*	*	*	*	290	259	260	201	355	273	228	186	158	100	254	204
11:00	*	*	*	*	306	240	277	264	326	298	253	217	176	156	268	235
12:00 pm	*	*	*	*	355	282	315	287	384	276	238	242	236	156	306	249
01:00	*	*	*	*	352	320	302	295	393	323	216	234	224	196	297	274
02:00	*	*	283	206	300	266	304	257	364	284	211	219	231	231	282	244
03:00	*	*	410	347	411	313	358	312	397	352	224	231	226	233	338	298
04:00	*	*	573	369	622	427	434	390	498	413	219	220	194	209	423	338
05:00	*	*	590	466	695	470	552	455	571	429	184	228	166	194	460	374
06:00	*	*	314	321	405	310	333	307	383	309	190	186	148	188	296	270
07:00	*	*	207	263	233	269	251	260	264	219	172	134	154	159	214	217
08:00	*	*	194	188	166	214	189	177	194	212	118	128	145	156	168	179
09:00	*	*	121	141	122	134	125	174	126	191	92	143	129	141	119	154
10:00	*	*	94	86	65	95	92	114	107	108	84	81	79	95	87	96
11:00	*	*	35	61	49	61	50	80	55	88	52	62	48	71	48	70
Totals	0	0	2821	2448	5945	5362	5273	5055	5881	5310	3191	3081	2725	2635	4682	4330
	0		5269		11307		10328		11191		6272		5360		9012	

Avg. Day .0% .0% 60.2% 56.5% 126.9% 123.8% 112.6% 116.7% 125.6% 122.6% 68.1% 71.1% 58.2% 60.8%

AM Peaks
Volume 08:00 08:00 07:00 08:00 07:00 08:00 11:00 11:00 11:00 11:00 08:00 08:00
471 542 414 451 402 503 253 217 176 156 292 332

PM Peaks
Volume 05:00 05:00 05:00 05:00 05:00 05:00 12:00 12:00 12:00 03:00 05:00 05:00
590 466 695 470 552 455 571 429 238 242 236 233 460 374

Municipality : Conshohocken, PA

Comments : None

Weather : Clear

ATR #/Operator :

McMahon Associates, Inc.

Transportation Engineers & Planners

425 Commerce Dr, Suite 200

Fort Washington, PA 19034

Site Code : 00008010024

Start Date: 06/25/2001

File I.D. : DVRPC41

Page : 1

Street name :Conshohocken Rd N/of Cross street:Fire Academy Direction 1

Begin	Mon.	06/25	Tues.		Wed.		Thur.		Fri.		Sat.		Sun.		Week	Avg.
Time	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 am	*	*	*	*	57	50	63	40	57	6	89	8	*	*	66	26
01:00	*	*	*	*	38	35	42	25	64	2	53	0	*	*	49	16
02:00	*	*	*	*	37	38	36	26	41	2	74	1	*	*	47	17
03:00	*	*	*	*	32	33	33	20	54	2	*	*	*	*	40	18
04:00	*	*	*	*	39	51	29	49	45	6	*	*	*	*	38	35
05:00	*	*	*	*	78	119	88	130	84	4	*	*	*	*	83	84
06:00	*	*	*	*	212	262	196	230	189	25	*	*	*	*	199	172
07:00	*	*	*	*	247	404	261	409	267	26	*	*	*	*	258	280
08:00	*	*	*	*	283	398	286	346	259	11	*	*	*	*	276	252
09:00	*	*	*	*	257	279	233	254	264	39	*	*	*	*	251	191
10:00	*	*	*	*	197	242	234	211	218	15	*	*	*	*	216	156
11:00	*	*	*	*	249	226	247	243	248	17	*	*	*	*	248	162
12:00 pm	*	*	*	*	286	263	298	243	310	11	*	*	*	*	298	172
01:00	*	*	*	*	302	290	275	267	305	10	*	*	*	*	294	189
02:00	*	*	*	*	319	247	329	226	343	12	*	*	*	*	330	162
03:00	*	*	*	*	353	273	398	18	376	9	*	*	*	*	376	100
04:00	*	*	431	311	392	316	362	6	351	7	*	*	*	*	384	160
05:00	*	*	390	296	401	288	404	3	399	6	*	*	*	*	398	148
06:00	*	*	261	219	268	180	227	3	188	2	*	*	*	*	236	101
07:00	*	*	170	167	172	160	177	6	156	7	*	*	*	*	169	85
08:00	*	*	147	160	143	147	161	6	133	4	*	*	*	*	146	79
09:00	*	*	164	137	123	125	164	3	116	6	*	*	*	*	142	68
10:00	*	*	123	95	118	85	137	2	132	2	*	*	*	*	128	46
11:00	*	*	80	56	87	67	98	4	104	1	*	*	*	*	92	32
Totals	0	0	1766	1441	4690	4578	4778	2770	4703	232	216	9	0	0	4764	2751
	0		3207		9268		7548		4935		225		0		7515	

Avg. Day .0% .0% 37.0% 52.3% 98.4% 166.4% 100.2% 100.6% 98.7% 8.4% 4.5% .3% .0% .0%

AM Peaks 08:00 07:00 08:00 07:00 07:00 09:00 12:00 12:00 08:00 07:00
Volume 283 404 286 409 267 39 89 8 276 280

PM Peaks 04:00 04:00 05:00 04:00 05:00 01:00 05:00 02:00 05:00 01:00
Volume 431 311 401 316 404 267 399 12 398 189

ADTs

Municipality: Plymouth Twp
 Comments: OK
 Weather: Variable, rain
 ATR #/ Operator: McM-9s/CSM
 Street name :Faifield Rd N/of

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034
 Cross street:Jefferson St

Site Code : 000080007107
 Start Date: 04/10/2000
 File I.D. : LAFAY07
 Page : 1

Begin Time	Mon. NB	04/10 SB	Tues. NB	SB	Wed. NB	SB	Thur. NB	SB	Fri. NB	SB	Sat. NB	SB	Sun. NB	SB	Week NB	Avg. SB
12:00 am	*	*	*	*	38	21	44	19	49	21	94	33	75	47	60	28
01:00	*	*	*	*	27	17	24	14	36	16	73	29	95	22	51	20
02:00	*	*	*	*	14	18	14	17	21	22	51	24	44	6	29	17
03:00	*	*	*	*	24	37	26	45	32	45	42	39	31	24	31	38
04:00	*	*	*	*	58	156	61	131	61	108	51	74	30	29	52	100
05:00	*	*	*	*	224	389	213	376	221	402	91	119	64	70	163	271
06:00	*	*	*	*	484	576	491	533	496	535	144	226	78	138	339	402
07:00	*	*	*	*	531	495	513	511	515	490	175	245	85	112	364	371
08:00	*	*	*	*	344	340	297	338	313	304	266	251	173	220	279	291
09:00	*	*	*	*	256	247	297	278	315	256	272	280	255	220	279	256
10:00	*	*	*	*	300	238	346	284	335	313	307	316	265	258	311	282
11:00	*	*	*	*	359	305	364	306	422	314	382	275	296	288	365	298
12:00 pm	*	*	*	*	341	289	400	316	430	343	329	276	332	316	366	308
01:00	*	*	420	335	430	319	455	314	446	376	346	280	387	286	414	318
02:00	*	*	588	386	594	326	595	401	648	408	384	285	338	299	524	351
03:00	*	*	664	431	617	422	700	458	683	511	373	295	336	300	562	403
04:00	*	*	797	411	737	433	783	456	824	475	290	252	352	291	630	386
05:00	*	*	499	313	526	377	511	349	509	353	277	254	253	221	429	311
06:00	*	*	332	263	415	262	343	269	359	320	260	216	232	166	324	249
07:00	*	*	256	189	275	219	217	210	285	260	219	165	220	164	245	201
08:00	*	*	213	171	275	182	234	171	229	195	209	169	167	155	221	174
09:00	*	*	179	106	194	102	191	123	206	176	176	140	140	100	181	124
10:00	*	*	108	84	120	104	142	99	188	125	187	118	146	98	148	105
11:00	*	*	55	33	69	43	81	48	113	82	101	85	60	38	80	55
Totals	0	0	4111	2722	7252	5917	7342	6066	7736	6450	5099	4446	4454	3868	6447	5359
	0		6833		13169		13408		14186		9545		8322		11806	
Avg. Day	.0%	.0%	63.7%	50.7%	112.4%	110.4%	113.8%	113.1%	119.9%	120.3%	79.0%	82.9%	69.0%	72.1%		
AM Peaks Volume					07:00 531	06:00 576	07:00 513	06:00 533	07:00 515	06:00 535	11:00 382	10:00 316	11:00 296	11:00 288	11:00 365	06:00 402
PM Peaks Volume			04:00 797	03:00 431	04:00 737	04:00 433	04:00 783	03:00 458	04:00 824	03:00 511	02:00 384	03:00 295	01:00 387	12:00 316	04:00 630	03:00 403

Municipality: Plymouth Twp

Comments: OK

Weather: Variable, rain

ATR #/ Operator: McM-9s/CSM

Street name :Faifield Rd N/of Cross street:Jefferson St

McMahon Associates, Inc.
Transportation Engineers & Planners
425 Commerce Dr, Suite 200
Ft. Washington, PA 19034

Site Code : 000080007107

Start Date: 04/10/2000

File I.D. : LAFAY07

Page : 2

Begin Time	Mon. 04/17	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	NB	SB	NB	SB	NB	SB	NB	NB	SB
12:00 am	30	29	*	*	*	*	*	*	30
01:00	34	19	*	*	*	*	*	*	34
02:00	17	19	*	*	*	*	*	*	17
03:00	20	35	*	*	*	*	*	*	20
04:00	60	133	*	*	*	*	*	*	60
05:00	203	378	*	*	*	*	*	*	203
06:00	467	554	*	*	*	*	*	*	467
07:00	547	425	*	*	*	*	*	*	547
08:00	301	278	*	*	*	*	*	*	301
09:00	290	204	*	*	*	*	*	*	290
10:00	299	283	*	*	*	*	*	*	299
11:00	348	301	*	*	*	*	*	*	348
12:00 pm	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Totals	2616	2658	0	0	0	0	0	0	2616
	5274		0	0	0	0	0	0	5274

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 06:00 07:00 06:00
Volume 547 554 547 554

PM Peaks

ADTs

Municipality : Upper Merion Twp

Comments : None

Weather : Variable

ATR #/Operator : 3594/JB

Street name :Belvoir Rd Cross street:btw Plymouth Hwy & New Hope Rd ,

JAMAR Technologies, Inc.

TAS for Windows

Copyright 1999

Site Code : 000080100224

Start Date: 06/18/2001

File I.D. : DVRPC24

Page : 1

Begin Time	06/18 Mon.	06/19 Tues.	06/20 Wed.	06/21 Thur.	06/22 Fri.	Weekday Avg.	06/23 Sat.	06/24 Sun.
Total	Total	Total	Total	Total	Total		Total	Total
12:00 am	*	*	56	39	44	46	103	110
01:00	*	*	19	27	24	23	44	53
02:00	*	*	15	24	24	21	43	46
03:00	*	*	12	17	12	14	17	13
04:00	*	*	25	19	26	23	26	8
05:00	*	*	76	77	81	78	35	26
06:00	*	*	240	262	221	241	83	52
07:00	*	*	576	598	521	565	180	89
08:00	*	*	525	518	475	506	249	165
09:00	*	*	406	410	421	412	371	267
10:00	*	423	428	446	460	439	408	353
11:00	*	408	445	436	461	438	509	431
12:00 pm	*	500	451	468	516	484	590	501
01:00	*	491	532	504	567	524	580	539
02:00	*	458	459	478	512	477	562	521
03:00	*	527	507	565	571	542	552	525
04:00	*	586	624	656	676	636	473	439
05:00	*	679	720	751	719	717	457	396
06:00	*	533	632	589	580	584	423	358
07:00	*	474	480	514	469	484	404	323
08:00	*	372	356	361	344	358	304	237
09:00	*	289	268	295	277	282	235	219
10:00	*	139	161	162	162	156	205	113
11:00	*	78	95	85	117	94	132	76
Totals	0	5957	8108	8301	8280	8144	6985	5860
Avg. WkDay	.0%	73.1%	99.5%	101.9%	101.6%		85.7%	71.9%
AM Peaks		10:00	07:00	07:00	07:00	07:00	11:00	11:00
Volume		423	576	598	521	565	509	431
PM Peaks		05:00	05:00	05:00	05:00	05:00	12:00	01:00
Volume		679	720	751	719	717	590	539

Municipality : Upper Merion Twp
 Comments : None
 Weather : Variable
 ATR #/Operator : 3594/JB
 Street name :Belvoir Rd Cross street:btw Plymouth Hwy & New Hope Rd ,

JAMAR Technologies, Inc.
 TAS for Windows
 Copyright 1999

Site Code : 000080100224
 Start Date: 06/18/2001
 File I.D. : DVRPC24
 Page : 2

Begin Time	06/25 Mon. Total	06/26 Tues. Total	06/27 Wed. Total	06/28 Thur. Total	06/29 Fri. Total	Weekday Avg.	06/30 Sat. Total	07/01 Sun. Total
12:00 am	37	*	*	*	*	37	*	*
01:00	23	*	*	*	*	23	*	*
02:00	18	*	*	*	*	18	*	*
03:00	15	*	*	*	*	15	*	*
04:00	23	*	*	*	*	23	*	*
05:00	60	*	*	*	*	60	*	*
06:00	253	*	*	*	*	253	*	*
07:00	569	*	*	*	*	569	*	*
08:00	509	*	*	*	*	509	*	*
09:00	405	*	*	*	*	405	*	*
10:00	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*
Totals	1912	0	0	0	0	1912	0	0
Avg. WkDay	100.0%	.0%	.0%	.0%	.0%		.0%	.0%
AM Peaks	07:00					07:00		
Volume	569					569		
PM Peaks								
ADTs								

Municipality: Plymouth Twp
 Comments: None
 Weather: Variable
 ATR #/ Operator: MCM-555/CSM
 Street name :Gallagher Rd Btwn/ Cross street:RR & Gravers Rd S ,

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034

Site Code : 00008002180
 Start Date: 05/29/2000
 File I.D. : PLYMOUTH1
 Page : 1

Street Name :Gallagher Rd														Cross Street:Park & Gravel Rd S /														Page : 1	
Begin Time	Mon. 05/29	Tues. 05/29	Wed. 05/29	Thur. 05/29	Fri. 05/29	Sat. 05/29	Sun. 05/29	Week	Avg.	Mon. 05/29	Tues. 05/29	Wed. 05/29	Thur. 05/29	Fri. 05/29	Sat. 05/29	Sun. 05/29	Week	Avg.											
	EB	WB	EB	WB	EB	WB	EB	WB		EB	WB	EB	WB	EB	WB	EB	WB												
12:00 am	*	*	*	*	*	*	*	*	3	7	8	18	10	12	7	12	7	12											
01:00	*	*	*	*	*	*	*	*	5	5	4	8	3	7	4	7	4	7											
02:00	*	*	*	*	*	*	*	*	6	1	2	2	2	6	3	3	3	3											
03:00	*	*	*	*	*	*	*	*	1	2	2	1	0	0	1	1	1	1											
04:00	*	*	*	*	*	*	*	*	1	1	2	2	1	3	1	2	1	2											
05:00	*	*	*	*	*	*	*	*	13	21	3	7	3	2	6	10	6	10											
06:00	*	*	*	*	*	*	*	*	54	71	21	10	8	10	28	30	28	30											
07:00	*	*	*	*	*	*	*	*	118	205	30	36	4	6	51	82	51	82											
08:00	*	*	*	*	*	*	*	*	104	187	38	45	19	26	54	86	26	54											
09:00	*	*	*	*	*	*	*	*	80	83	50	31	21	29	50	48	29	50											
10:00	*	*	*	*	*	*	*	*	49	50	68	61	45	52	33	26	49	47											
11:00	*	*	*	*	*	*	*	*	89	87	86	90	56	54	25	41	64	68											
12:00 pm	*	*	*	*	*	*	*	*	106	96	100	87	56	68	36	64	74	79											
01:00	*	*	*	*	*	*	*	*	85	96	57	93	45	69	33	57	55	79											
02:00	*	*	*	*	*	*	*	*	70	88	87	89	52	67	28	63	59	77											
03:00	*	*	*	*	*	*	*	*	99	124	116	122	57	60	58	57	82	91											
04:00	*	*	*	*	*	*	*	*	154	97	146	104	62	60	47	52	102	78											
05:00	*	*	*	*	*	*	*	*	139	111	174	122	36	39	50	37	100	77											
06:00	*	*	*	*	*	*	*	*	63	96	51	89	45	43	40	41	50	67											
07:00	*	*	*	*	*	*	*	*	51	61	42	49	48	54	35	40	44	51											
08:00	*	*	*	*	*	*	*	*	39	52	27	30	27	33	30	39	31	38											
09:00	*	*	*	*	*	*	*	*	21	27	18	32	12	26	15	33	16	30											
10:00	*	*	*	*	*	*	*	*	14	21	12	24	12	26	6	12	11	21											
11:00	*	*	*	*	*	*	*	*	6	14	12	22	10	20	2	4	8	15											
Totals	0	0	0	0	0	0	0	0	985	1020	1381	1597	723	831	509	667	950	1099											
	0	0	0	0	0	0	0	0	2005	2978	1554	1176	2049																
Avg. Day	.0%	.0%	.0%	.0%	.0%	.0%	.0%	103.6%	92.8%	145.3%	145.3%	76.1%	75.6%	53.5%	60.6%														
AM Peaks								11:00	11:00	07:00	07:00	11:00	11:00	10:00	11:00	11:00	08:00												
Volume								89	87	118	205	56	54	33	41	64	86												
PM Peaks								04:00	03:00	05:00	03:00	04:00	01:00	03:00	12:00	04:00	03:00												
Volume								154	124	174	122	62	69	58	64	102	91												

Municipality: Plymouth Twp

Comments: None

Weather: Variable

ATR #/ Operator: MCM-555/CSM

Street name :Gallagher Rd Btwn/ Cross street:RR & Gravers Rd S ,

McMahon Associates, Inc.
Transportation Engineers & Planners
425 Commerce Dr, Suite 200
Ft. Washington, PA 19034

Site Code : 000080021801

Start Date: 05/29/2000

File I.D. : PLYMOUTH1

Page : 2

Begin Time	Mon. 06/05	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	EB	WB	EB	WB	EB	WB	EB	WB	
12:00 am	3	6	2	6	7	0	9	0	5
01:00	3	4	2	2	5	0	6	0	4
02:00	1	3	0	1	3	0	7	0	3
03:00	1	2	2	3	2	0	3	0	2
04:00	2	3	2	3	2	0	4	0	2
05:00	10	9	12	13	26	0	34	0	20
06:00	69	66	64	67	151	1	153	0	109
07:00	110	174	92	183	257	0	258	2	179
08:00	75	140	108	167	296	0	260	1	185
09:00	73	100	90	109	154	1	*	*	106
10:00	57	61	123	16	118	0	*	*	99
11:00	77	83	161	1	190	0	*	*	143
12:00 pm	97	88	201	0	250	0	*	*	183
01:00	70	87	159	0	185	0	*	*	138
02:00	81	89	145	0	157	2	*	*	128
03:00	97	114	173	0	235	0	*	*	168
04:00	127	110	191	1	249	0	*	*	189
05:00	155	117	211	0	258	0	*	*	208
06:00	52	71	120	0	149	0	*	*	107
07:00	37	58	67	0	97	2	*	*	67
08:00	26	33	48	0	82	0	*	*	52
09:00	15	25	32	0	73	0	*	*	40
10:00	9	22	29	0	36	0	*	*	25
11:00	7	8	12	0	12	0	*	*	10
Totals	1254	1473	2046	572	2996	6	734	3	2172
	2727		2618		3000		737		2787
Avg. Day	57.7%	239.5%	94.2%	93.0%	137.8%	.9%	33.7%	.4%	.0%
AM Peaks	07:00	07:00	11:00	07:00	08:00	06:00	08:00	07:00	08:00
Volume	110	174	161	183	296	1	260	2	185
PM Peaks	05:00	05:00	05:00	04:00	05:00	02:00			05:00
Volume	155	117	211	1	258	2			208
ADTs									

Municipality : Whitemarsh Twp

Comments : None

Weather : Variable

ATR #/Operator : 545/JB

Street name :I-476 Southbound Ramps Cross street:@ Ridge Pike

JAMAR Technologies, Inc.

TAS for Windows

Copyright 1999

Site Code : 000080100230

Start Date: 06/25/2001

File I.D. : DVRPC30

Page : 1

Begin Time	Mon. Off	06/25 On	Tues. Off	On	Wed. Off	On	Thur. Off	On	Fri. Off	On	Sat. Off	On	Sun. Off	On	Week Off	Avg. On
12:00 am	*	*	*	*	38	33	24	28	26	34	55	53	51	43	39	38
01:00	*	*	*	*	8	22	14	18	20	24	29	31	22	32	19	25
02:00	*	*	*	*	19	9	12	21	17	22	24	21	31	14	21	17
03:00	*	*	*	*	12	21	7	20	9	22	16	19	9	13	11	19
04:00	*	*	*	*	12	47	21	28	33	46	20	27	7	9	19	31
05:00	*	*	*	*	70	106	53	110	74	106	32	54	18	22	49	80
06:00	*	*	*	*	230	223	233	276	260	253	80	85	39	29	168	173
07:00	*	*	*	*	527	413	538	401	495	400	124	145	66	26	350	277
08:00	*	*	*	*	545	484	560	433	494	390	152	189	68	48	364	309
09:00	*	*	*	*	309	436	307	369	289	352	195	156	115	96	243	282
10:00	*	*	205	297	242	242	256	323	261	285	233	212	139	134	223	249
11:00	*	*	226	309	249	319	251	329	255	288	263	213	198	167	240	271
12:00 pm	*	*	240	288	280	309	267	269	294	295	274	253	227	211	264	271
01:00	*	*	239	283	288	294	279	312	326	343	289	230	274	186	282	275
02:00	*	*	243	330	269	270	283	274	365	325	270	221	235	204	278	271
03:00	*	*	310	296	304	263	295	306	354	297	274	189	237	205	296	259
04:00	*	*	337	258	370	253	363	268	334	265	263	205	263	199	322	241
05:00	*	*	400	242	390	270	428	246	379	281	274	183	187	165	343	231
06:00	*	*	297	263	351	218	310	236	299	246	227	133	159	157	274	209
07:00	*	*	223	174	261	210	267	194	244	197	208	174	139	146	224	182
08:00	*	*	192	111	210	153	223	144	235	161	145	150	105	116	185	139
09:00	*	*	186	82	232	107	208	92	184	127	143	125	94	119	174	109
10:00	*	*	111	62	115	92	115	63	138	117	110	95	66	51	109	80
11:00	*	*	63	37	64	50	68	54	82	78	89	74	43	44	68	56
Totals	0	0	3272	3032	5395	4844	5382	4814	5467	4954	3789	3237	2792	2436	4565	4094
		0		6304		10239		10196		10421		7026		5228		8659

Avg. Day .0% .0% 71.6% 74.0% 118.1% 118.3% 117.9% 117.5% 119.7% 121.0% 83.0% 79.0% 61.1% 59.5%

AM Peaks 11:00 11:00 08:00 08:00 08:00 08:00 07:00 07:00 11:00 11:00 11:00 11:00 08:00 08:00
Volume 226 309 545 484 560 433 495 400 263 213 198 167 364 309

PM Peaks 05:00 02:00 05:00 12:00 05:00 01:00 05:00 01:00 01:00 12:00 01:00 12:00 05:00 01:00
Volume 400 330 390 309 428 312 379 343 289 253 274 211 343 275

Municipality : Whitemarsh Twp

Comments : None

Weather : Variable

ATR #/Operator : 545/JB

Street name : I-476 Southbound Ramps Cross street: @ Ridge Pike ,

JAMAR Technologies, Inc.

TAS for Windows

Copyright 1999

Site Code : 00008010023

Start Date: 06/25/2001

File I.D. : DVRPC30

Page : 2

Begin Time	Mon. Off	07/02 On	Tues. Off	On	Wed. Off	On	Thur. Off	On	Fri. Off	On	Sat. Off	On	Sun. Off	On	Week Off	Avg. On
12:00 am	26	26	*	*	*	*	*	*	*	*	*	*	*	*	26	26
01:00	12	17	*	*	*	*	*	*	*	*	*	*	*	*	12	17
02:00	14	16	*	*	*	*	*	*	*	*	*	*	*	*	14	16
03:00	10	22	*	*	*	*	*	*	*	*	*	*	*	*	10	22
04:00	23	37	*	*	*	*	*	*	*	*	*	*	*	*	23	37
05:00	71	82	*	*	*	*	*	*	*	*	*	*	*	*	71	82
06:00	238	249	*	*	*	*	*	*	*	*	*	*	*	*	238	249
07:00	520	394	*	*	*	*	*	*	*	*	*	*	*	*	520	394
08:00	470	423	*	*	*	*	*	*	*	*	*	*	*	*	470	423
09:00	277	332	*	*	*	*	*	*	*	*	*	*	*	*	277	332
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Totals	1661	1598	0	0	0	0	0	0	0	0	0	0	0	0	1661	1598
		3259		0		0		0		0		0		0		3259

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 08:00 07:00 08:00
Volume 520 423 520 423

PM Peaks

ADTs

Municipality : Whitmarsh Twp
 Comments : None
 Weather : Variable
 ATR #/Operator : 543/JB

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 TAS for Windows
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Site Code : 000080100232
 Start Date: 06/25/2001
 File I.D. : DVRPC32
 Page : 1

Street name :I-476 South On Ramp Cross street:@ Ridge Pike										
Begin Time	Mon. 06/25	Tues. 06/26	Wed. 06/27	Thur. 06/28	Fri. 06/29	Weekday Avg.	Sat. 06/30	Sun. 07/01	Week Avg. Each * Equals 25 Vehicles	
12:00 am	*	*	*	*	89	89	148	111	116	****
01:00	*	*	*	*	59	59	100	116	92	****
02:00	*	*	*	*	84	84	83	94	87	***
03:00	*	*	*	*	62	62	59	30	50	**
04:00	*	*	*	*	82	82	57	24	54	**
05:00	*	*	*	*	157	157	84	50	97	****
06:00	*	*	*	*	347	347	157	78	194	*****
07:00	*	*	*	*	445	445	242	121	269	*****
08:00	*	*	*	*	472	472	225	143	280	*****
09:00	*	*	*	*	395	395	297	179	290	*****
10:00	*	*	*	*	397	397	302	202	300	*****
11:00	*	*	*	428	396	412	333	232	347	*****
12:00 pm	*	*	*	413	406	410	348	272	360	*****
01:00	*	*	*	426	426	426	361	286	375	*****
02:00	*	*	*	413	458	436	334	316	380	*****
03:00	*	*	*	493	471	482	345	304	403	*****
04:00	*	*	*	476	419	448	329	265	372	*****
05:00	*	*	*	537	450	494	330	269	396	*****
06:00	*	*	*	356	383	370	300	224	316	*****
07:00	*	*	*	349	294	322	227	137	252	*****
08:00	*	*	*	320	296	308	196	149	240	*****
09:00	*	*	*	251	279	265	263	164	239	*****
10:00	*	*	*	151	225	188	212	116	176	*****
11:00	*	*	*	116	147	132	156	77	124	*****
Totals	0	0	0	4729	7239	7282	5488	3959	5809	
% Avg. WkDa	.0%	.0%	.0%	64.9%	99.4%					
% Avg. Day	.0%	.0%	.0%	81.4%	124.6%		94.4%	68.1%		

AM Peak				11:00	08:00	08:00	11:00	11:00	11:00
Volume				428	472	472	333	232	347
PM Peak				05:00	03:00	05:00	01:00	02:00	03:00
Volume				537	471	494	361	316	403

ADTs

Municipality : Whitmarsh Twp
 Comments : None
 Weather : Variable
 ATR #/Operator : 5818/JB
 Street name : I-476 North Ramps

JAMAR Technologies, Inc.
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Site Code : 000080100:
 Start Date: 06/25/200
 File I.D. : DVRPC31
 Page : 1

Begin Time	Mon. 06/25	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	Off	On	Off	On	Off	On	Off	Off	On
12:00 am	*	*	*	*	*	*	*	33	21
01:00	*	*	*	*	*	*	*	12	16
02:00	*	*	*	*	*	*	*	15	23
03:00	*	*	*	*	*	*	*	5	21
04:00	*	*	*	*	*	*	*	12	53
05:00	*	*	*	*	*	*	*	62	76
06:00	*	*	*	*	*	*	*	204	186
07:00	*	*	*	*	*	*	*	404	244
08:00	*	*	*	*	*	*	*	488	231
09:00	*	*	*	*	*	*	*	354	249
10:00	*	*	226	210	227	239	*	226	224
11:00	*	*	217	251	256	234	*	236	242
12:00 pm	*	*	284	257	323	262	*	304	260
01:00	*	*	256	286	267	230	*	262	258
02:00	*	*	255	257	260	319	*	258	288
03:00	*	*	311	365	376	337	*	344	351
04:00	*	*	387	346	434	323	*	410	334
05:00	*	*	477	359	514	318	*	496	338
06:00	*	*	381	168	397	215	*	389	192
07:00	*	*	237	105	293	138	*	265	122
08:00	*	*	226	112	233	103	*	230	108
09:00	*	*	195	102	*	*	*	195	102
10:00	*	*	144	54	*	*	*	144	54
11:00	*	*	83	43	*	*	*	83	43
Totals	0	0	3679	2915	5169	3838	0	5431	4036
		0	6594		9007		0		9467

Avg. Day .0% .0% 67.7% 72.2% 95.1% 95.0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 10:00 11:00 08:00 09:00
 Volume 226 251 488 249

PM Peaks 05:00 03:00 05:00 03:00
 Volume 477 365 514 337

ADTs

Municipality : Plymouth Twp
 Comments : None
 Weather : Variable
 ATR #/Operator : 5719/JB
 Street name : Colwell Rd

JAMAR Technologies, Inc.
 TAS for Windows
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Site Code : 000080100
 Start Date: 06/25/200
 File I.D. : DVRPC40
 Page : 1

Street name :Colwell Rd Cross street:btw 10th Ave & 11th Ave															Page : 1	
Begin Time	Mon. 06/25	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.							
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 am	*	*	*	*	6	18	9	13	12	28	16	39	15	36	12	27
01:00	*	*	*	*	4	9	1	1	3	9	13	27	10	28	6	15
02:00	*	*	*	*	3	4	5	4	3	6	9	19	6	7	5	8
03:00	*	*	*	*	4	5	4	6	3	6	1	7	6	7	4	6
04:00	*	*	*	*	5	4	6	6	6	7	3	6	2	6	4	6
05:00	*	*	*	*	25	30	26	32	17	26	14	22	5	8	17	24
06:00	*	*	*	*	91	77	103	69	97	80	26	32	18	18	67	55
07:00	*	*	*	*	215	132	226	122	196	139	48	52	44	36	146	96
08:00	*	*	*	*	171	124	168	151	160	147	64	125	44	61	121	122
09:00	*	*	*	*	96	126	106	130	95	129	84	141	61	84	88	122
10:00	*	*	*	*	109	156	97	130	108	150	113	191	87	120	103	149
11:00	*	*	*	*	128	151	95	171	129	179	106	208	69	155	105	173
12:00 pm	*	*	162	211	183	217	146	218	159	197	109	185	84	145	140	196
01:00	*	*	113	188	138	165	153	177	148	177	124	183	80	154	126	174
02:00	*	*	133	163	127	150	96	167	144	186	106	186	84	140	115	165
03:00	*	*	125	211	112	191	114	209	157	225	105	139	72	134	114	185
04:00	*	*	123	227	131	228	129	224	165	215	102	122	82	120	122	189
05:00	*	*	116	267	106	253	129	240	133	242	90	143	50	160	104	218
06:00	*	*	126	189	122	195	139	184	117	187	85	146	65	96	109	166
07:00	*	*	118	188	110	196	125	174	86	146	74	118	57	89	95	152
08:00	*	*	79	133	95	163	110	155	81	134	67	98	55	74	81	126
09:00	*	*	70	85	63	117	53	112	69	97	46	84	31	49	55	91
10:00	*	*	43	63	38	67	28	65	43	85	40	62	22	44	36	64
11:00	*	*	22	37	15	25	19	28	30	63	24	50	15	24	21	38
Totals	0	0	1230	1962	2097	2803	2087	2788	2161	2860	1469	2385	1064	1795	1796	2567
	0		3192		4900		4875		5021		3854		2859		4363	
Avg. Day	.0%	.0%	68.4%	76.4%	116.7%	109.1%	116.2%	108.6%	120.3%	111.4%	81.7%	92.9%	59.2%	69.9%		
AM Peaks					07:00	10:00	07:00	11:00	07:00	11:00	10:00	11:00	10:00	11:00	07:00	11:00
Volume					215	156	226	171	196	179	113	208	87	155	146	173
PM Peaks			12:00	05:00	12:00	05:00	01:00	05:00	04:00	05:00	01:00	02:00	12:00	05:00	12:00	05:00
Volume			162	267	183	253	153	240	165	242	124	186	84	160	140	218

Municipality : Plymouth Twp

JAMAR Technologies, Inc.

Comments : None

TAS for Windows

Weather : Variable

Copyright 1999

ATR #/Operator : 5719/JB

Site Code : 000080100

Start Date: 06/25/200

File I.D. : DVRPC40

Street name :Colwell Rd

Cross street:btw 10th Ave & 11th Ave

Page : 2

Begin Time	Mon. 07/02	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	SB	NB	SB	NB	SB	NB	SB	SB	NB
12:00 am	7	9	*	*	*	*	*	*	7
01:00	1	7	*	*	*	*	*	*	1
02:00	3	7	*	*	*	*	*	*	3
03:00	1	0	*	*	*	*	*	*	1
04:00	5	6	*	*	*	*	*	*	5
05:00	20	24	*	*	*	*	*	*	20
06:00	102	66	*	*	*	*	*	*	102
07:00	195	129	*	*	*	*	*	*	195
08:00	162	129	*	*	*	*	*	*	162
09:00	126	138	*	*	*	*	*	*	126
10:00	110	139	*	*	*	*	*	*	110
11:00	*	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Totals	732	654	0	0	0	0	0	732	654
	1386		0	0	0	0	0	1386	

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 10:00 07:00 10:00
Volume 195 139 195 139

PM Peaks

ADTs

Municipality : Plymouth Twp
 Comments : None
 Weather : Variable
 ATR #/Operator : 4342/JB

JAMAR Technologies, Inc.
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 Copyright 1999

Site Code : 0000801002
 Start Date: 06/25/2001
 File I.D. : DVRPC38
 Page : 1

Street name :North Lane Cross street:btw Butler Pike & Ridge Pike ,																
Begin Time	Mon. 06/25	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.							
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 am	*	*	*	*	*	*	33	45	59	56	80	93	68	86	60	70
01:00	*	*	*	*	*	*	32	20	34	26	52	58	46	44	41	37
02:00	*	*	*	*	*	*	16	14	30	29	41	37	34	42	30	30
03:00	*	*	*	*	*	*	21	10	18	20	23	20	28	16	22	16
04:00	*	*	*	*	*	*	19	16	22	16	23	26	15	12	20	18
05:00	*	*	*	*	*	*	71	77	61	69	37	38	25	16	48	50
06:00	*	*	*	*	*	*	243	251	217	243	101	65	37	32	150	148
07:00	*	*	*	*	*	*	505	427	502	439	135	105	80	57	306	257
08:00	*	*	*	*	*	*	474	397	404	452	262	180	149	103	322	283
09:00	*	*	*	*	*	*	310	325	377	341	302	220	180	185	292	268
10:00	*	*	*	*	*	*	327	278	341	316	363	263	286	190	329	262
11:00	*	*	*	*	340	291	376	303	456	321	385	274	336	233	379	284
12:00 pm	*	*	*	*	501	365	489	395	549	358	384	321	368	257	458	339
01:00	*	*	*	*	400	369	410	374	455	409	356	278	337	232	392	332
02:00	*	*	*	*	350	316	365	280	423	348	288	255	296	234	344	287
03:00	*	*	*	*	485	359	498	349	479	389	336	269	260	270	412	327
04:00	*	*	*	*	603	421	575	418	614	467	262	281	286	288	468	375
05:00	*	*	*	*	747	514	715	493	695	502	314	271	231	260	540	408
06:00	*	*	*	*	517	412	503	370	449	378	273	257	195	222	387	328
07:00	*	*	*	*	365	307	374	350	373	321	247	229	195	200	311	281
08:00	*	*	*	*	311	331	266	310	277	285	223	234	141	191	244	270
09:00	*	*	*	*	244	290	202	274	235	275	140	211	144	176	193	245
10:00	*	*	*	*	160	142	162	160	166	200	133	154	100	95	144	150
11:00	*	*	*	*	88	100	83	99	129	120	93	111	73	51	93	96
Totals	0	0	0	0	5111	4217	7069	6035	7365	6380	4853	4250	3910	3492	5985	5161
	0	0	0	0	9328	13104	13745	9103	7402	11146						
Avg. Day	.0%	.0%	.0%	.0%	85.4%	81.7%	118.1%	116.9%	123.0%	123.6%	81.0%	82.3%	65.3%	67.6%		
AM Peaks					11:00	11:00	07:00	07:00	07:00	08:00	11:00	11:00	11:00	11:00	11:00	11:00
Volume					340	291	505	427	502	452	385	274	336	233	379	284
PM Peaks					05:00	05:00	05:00	05:00	05:00	05:00	12:00	12:00	12:00	04:00	05:00	05:00
Volume					747	514	715	493	695	502	384	321	368	288	540	408

Municipality : Plymouth Twp

Comments : None

Weather : Variable

ATR #/Operator : 4342/JB

Street name :North Lane Cross street:btw Butler Pike & Ridge Pike ,

JAMAR Technologies, Inc.

TAS for Windows

Copyright 1999

Site Code : 000080100

Start Date: 06/25/200

File I.D. : DVRPC38

Page : 2

Begin Time	Mon. 07/02	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Week	Avg.
	NB	SB	NB	SB	NB	SB	NB	SB	SB
12:00 am	31	39	*	*	*	*	*	*	31 39
01:00	33	11	*	*	*	*	*	*	33 11
02:00	21	7	*	*	*	*	*	*	21 7
03:00	13	10	*	*	*	*	*	*	13 10
04:00	21	15	*	*	*	*	*	*	21 15
05:00	82	66	*	*	*	*	*	*	82 66
06:00	209	242	*	*	*	*	*	*	209 242
07:00	469	439	*	*	*	*	*	*	469 439
08:00	462	464	*	*	*	*	*	*	462 464
09:00	326	324	*	*	*	*	*	*	326 324
10:00	301	288	*	*	*	*	*	*	301 288
11:00	*	*	*	*	*	*	*	*	*
12:00 pm	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
Totals	1968	1905	0	0	0	0	0	0	1968 1905
	3873		0	0	0	0	0	0	3873

Avg. Day 100.0% 100.0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0% .0%

AM Peaks 07:00 08:00 07:00 08:00
Volume 469 464 469 464

PM Peaks

ADTs

APPENDIX B

INTERSECTION TURNING MOVEMENT COUNTS

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TABLE OF CONTENTS

<u>INTERSECTION TURNING MOVEMENT COUNT LOCATION</u>	<u>Page</u>
Lafayette Street and Swede Street	B-5
Lafayette Street and DeKalb Street (US 202 North)	B-10
Lafayette Street and Franklin Street	B-14
Lafayette Street and Ford Street	B-18
Main Street and Markley Street (US 202 South)	B-21
Main Street and Barbadoes Street	B-24
Main Street and Cherry Street	B-28
Main Street and Swede Street	B-32
Main Street and DeKalb Street (US 202 North)	B-36
Main Street and Walnut Street	B-40
Main Street and High Street	B-44
Ridge Pike and Lucetta Street/Conshohocken Road	B-47
Ridge Pike and Fairfield Road	B-50
<i>All intersection turning movement counts were taken by consultants and are not shown using DVRPC format..</i>	

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Pennoni Associates
Turning Movement Counts

File Name : laf_swe
Site Code : 00960118
Start Date : 09/12/2000
Page : 1

Groups Printed: Passenger Veh - Heavy Veh - Buses

Start Time	Swede St. Southbound					Lafayette St. Westbound					Swede St. Northbound					Lafayette St. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	57	1	5	10	73	0	21	0	5	26	3	0	1	3	7	0	34	0	8	42	148
07:15 AM	92	3	5	6	106	0	35	0	7	42	0	0	0	5	5	0	48	1	14	63	216
07:30 AM	102	0	11	6	119	1	24	1	0	26	3	0	1	5	9	0	62	3	9	74	228
07:45 AM	94	2	7	15	118	0	37	0	3	40	0	0	1	7	8	0	52	1	26	79	245
Total	345	6	28	37	416	1	117	1	15	134	6	0	3	20	29	0	196	5	57	258	837
08:00 AM	102	1	14	8	125	0	26	0	1	27	3	0	1	5	9	0	29	1	18	48	209
08:15 AM	87	3	4	13	107	0	32	0	5	37	1	1	0	4	6	0	32	0	19	51	201
08:30 AM	65	0	8	10	83	0	32	0	2	34	0	0	1	21	22	0	34	0	9	43	182
08:45 AM	48	2	4	24	78	1	37	0	4	42	0	0	0	19	19	0	45	0	39	84	223
Total	302	6	30	55	393	1	127	0	12	140	4	1	2	49	56	0	140	1	85	226	815
09:00 AM	37	0	14	10	61	0	22	0	0	22	3	0	4	8	15	0	37	0	10	47	145
09:15 AM	29	3	10	8	50	0	27	4	5	36	0	0	0	6	6	0	27	0	5	32	124
09:30 AM	29	0	14	8	51	0	22	0	3	25	0	0	0	6	6	0	29	3	8	40	122
09:45 AM	28	4	7	14	53	0	38	0	6	44	1	0	0	13	14	0	38	0	4	42	153
Total	123	7	45	40	215	0	109	4	14	127	4	0	4	33	41	0	131	3	27	161	544
*** BREAK ***																					
11:00 AM	30	1	4	7	42	0	29	0	1	30	3	1	2	3	9	2	37	0	10	49	130
11:15 AM	33	0	5	5	43	0	27	0	1	28	0	0	0	6	6	0	39	0	6	45	122
11:30 AM	35	3	5	16	59	1	22	0	1	24	0	1	0	2	3	0	36	1	5	42	128
11:45 AM	56	4	10	5	75	0	17	0	12	29	0	0	0	3	3	0	45	0	13	58	165
Total	154	8	24	33	219	1	95	0	15	111	3	2	2	14	21	2	157	1	34	194	545
12:00 PM	46	0	6	10	62	0	18	0	0	18	4	0	1	9	14	0	33	1	7	41	135
12:15 PM	42	2	5	13	62	0	33	0	3	36	0	1	1	3	5	0	20	0	16	36	139
12:30 PM	31	1	16	9	57	0	25	0	2	27	0	0	0	9	9	0	42	0	10	52	145
12:45 PM	41	2	16	6	65	0	24	0	4	28	1	0	1	8	10	0	43	0	12	55	158
Total	160	5	43	38	246	0	100	0	9	109	5	1	3	29	38	0	138	1	45	184	577
01:00 PM	41	0	4	11	56	0	23	2	0	25	3	2	1	2	8	0	37	0	3	40	129
01:15 PM	48	1	8	16	73	0	24	1	5	30	0	0	0	16	16	0	29	0	10	39	158
01:30 PM	35	3	9	13	60	3	25	1	1	30	0	0	0	12	12	0	39	0	8	47	149
01:45 PM	30	2	11	32	75	0	29	0	2	31	1	0	1	21	23	0	40	3	13	56	185
Total	154	6	32	72	264	3	101	4	8	116	4	2	2	51	59	0	145	3	34	182	621
*** BREAK ***																					
02:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
03:00 PM	52	1	13	18	84	0	39	0	6	45	4	0	1	14	19	2	37	0	13	52	200
03:15 PM	39	0	5	19	63	0	34	0	0	34	3	0	0	3	6	1	41	0	8	50	153
03:30 PM	34	0	5	16	55	0	50	0	1	51	1	0	1	5	7	0	43	2	10	55	168
03:45 PM	57	1	6	17	81	0	38	0	9	47	0	0	2	7	9	0	56	0	9	65	202
Total	182	2	29	70	283	0	161	0	16	177	8	0	4	29	41	3	177	2	40	222	723
04:00 PM	46	1	5	24	76	0	29	0	3	32	5	0	1	17	23	0	44	0	24	68	199
04:15 PM	50	1	5	23	79	0	58	6	12	76	0	0	0	27	27	1	56	0	10	67	249
04:30 PM	62	4	10	17	93	0	51	0	5	56	1	0	0	21	22	1	89	2	14	106	277
04:45 PM	41	4	10	23	78	4	40	0	16	60	0	2	2	12	16	0	49	3	29	81	235
Total	199	10	30	87	326	4	178	6	36	224	6	2	3	77	88	2	238	5	77	322	960

Pennoni Associates
Turning Movement Counts

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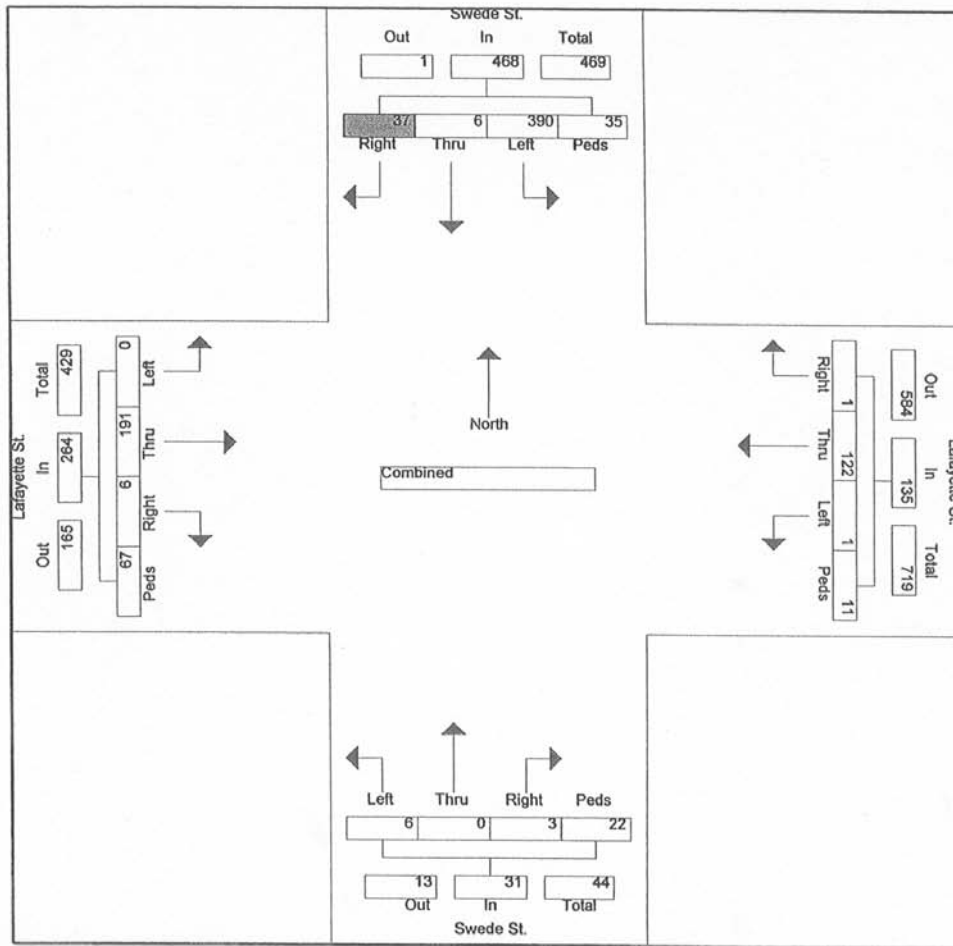
Groups Printed: Passenger Veh - Heavy Veh - Buses

	Swede St. Southbound					Lafayette St. Westbound					Swede St. Northbound					Lafayette St. Eastbound								
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0					
05:00 PM	50	1	10	18	79	1	53	0	7	61	3	0	2	15	20	1	93	0	24	118	278			
05:15 PM	37	8	30	24	99	0	102	0	12	114	4	2	0	16	22	0	123	0	3	126	361			
05:30 PM	58	6	25	17	106	0	74	2	5	81	1	2	1	26	30	0	88	2	4	94	311			
05:45 PM	105	10	28	14	157	0	122	0	6	128	2	0	6	24	32	0	135	0	11	146	463			
Total	250	25	93	73	441	1	351	2	30	384	10	4	9	81	104	1	439	2	42	484	1413			
Grand Total	186	9	76	354	505	2804	11	133	9	17	155	1522	50	12	32	383	477	8	176	2	23	441	2234	7037
Apprch %	66.7	2.7	12.6	18.0			0.7	88.0	1.1	10.2		10.5	2.5	6.7	80.3		0.4	78.9	1.0	19.7				
Total %	26.6	1.1	5.0	7.2	39.8		0.2	19.0	0.2	2.2	21.6		0.7	0.2	0.5	5.4	6.8	0.1	25.0	0.3	6.3	31.7		

	Swede St. Southbound					Lafayette St. Westbound					Swede St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Intersection	07:15 AM					07:15 AM					07:30 AM					07:45 AM					07:45
Volume	390	6	37	35	468	1	122	1	11	135	6	0	3	22	31	0	191	6	67	264	898
Percent	83.3	1.3	7.9	7.5		0.7	90.4	0.7	8.1		19.4	0.0	9.7	71.0		0.0	72.3	2.3	25.4		
High Int.	08:00 AM					07:15 AM					07:30 AM					07:45 AM					07:45
Volume	102	3	14	15	125	1	37	1	7	42	3	0	1	7	9	0	62	3	26	79	245
Peak Factor	0.936					0.804					0.861					0.835					0.916

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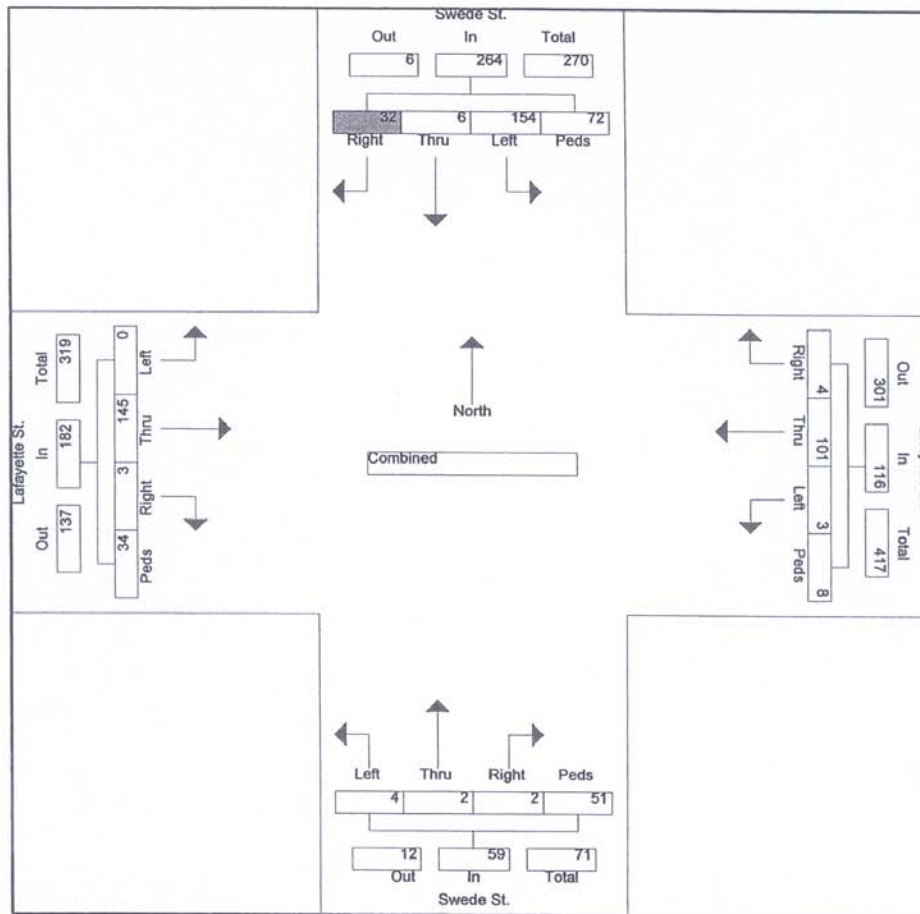


Peak Hour From 10:00 AM to 01:45 PM - Peak 1 of 1
Intersection 01:00 PM

Volume	154	6	32	72	264	3	101	4	8	116	4	2	2	51	59	0	145	3	34	182	621
Percent	58.3	2.3	12.1	27.3		2.6	87.1	3.4	6.9		6.8	3.4	3.4	86.4		0.0	79.7	1.6	18.7		
High Int.	01:45 PM					01:45 PM					01:45 PM					01:45 PM					01:45
Volume	48	3	11	32	75	3	29	2	5	31	3	2	1	21	23	0	40	3	13	56	185
Peak Factor					0.880					0.935				0.641						0.813	0.839

Pennoni Associates
Turning Movement Counts

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Peak Hour From 02:00 PM to 05:45 PM - Peak 1 of 1
Intersection 05:00 PM

Volume	250	25	93	73	441
Percent	56.7	5.7	21.1	16.6	
High Int.	05:45 PM				
Volume	105	10	30	24	157
Peak Factor					0.702

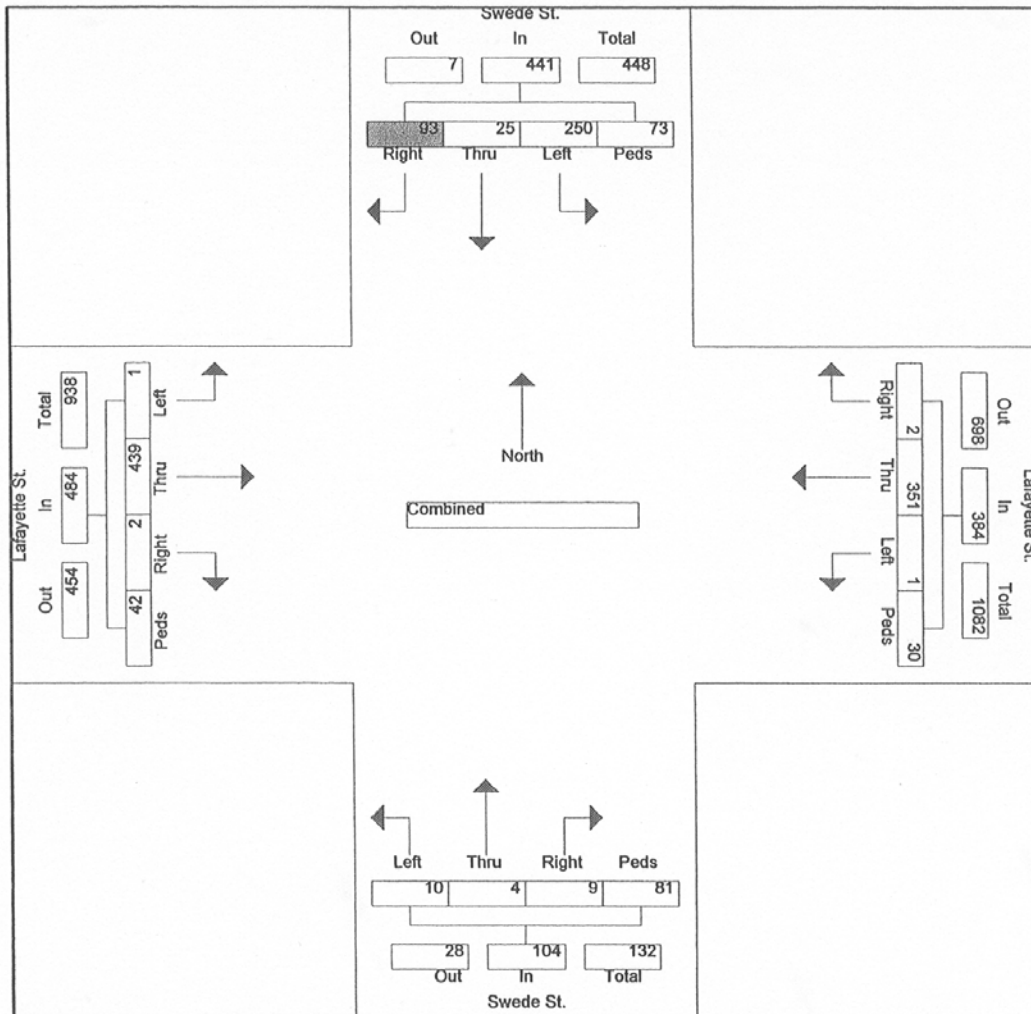
1	351	2	30	384
0.3	91.4	0.5	7.8	
05:45 PM				
1	122	2	12	128
				0.750

10	4	9	81	104
9.6	3.8	8.7	77.9	
05:45 PM				
4	2	6	26	32
				0.813

1	439	2	42	484	1413
0.2	90.7	0.4	8.7		
05:45 PM					05:45
1	135	2	24	146	463
				0.829	0.763

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Turning Movement Counts

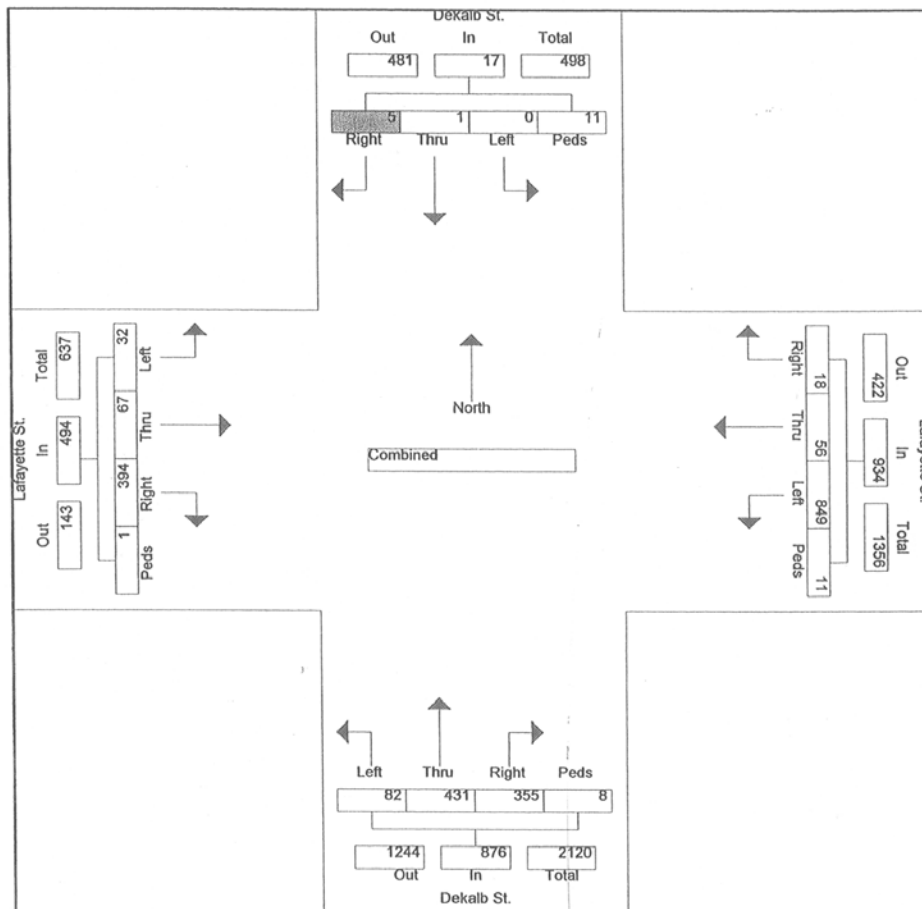
File Name : laf_dek
Site Code : 00960118
Start Date : 09/13/2000
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Groups Printed: Passenger Veh - Heavy Veh - Buses

Start Time	Dekalb St. Southbound					Lafayette St. Westbound					Dekalb St. Northbound					Lafayette St. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	1	5	1	7	208	10	4	1	223	18	110	114	0	242	12	13	113	0	138	610
07:15 AM	0	0	0	1	1	215	14	7	3	239	18	94	77	3	192	4	23	93	0	120	552
07:30 AM	0	0	0	3	3	236	16	5	3	260	23	116	91	5	235	12	14	116	0	142	640
07:45 AM	0	0	0	6	6	190	16	2	4	212	23	111	73	0	207	4	17	72	1	94	519
Total	0	1	5	11	17	849	56	18	11	934	82	431	355	8	876	32	67	394	1	494	2321
08:00 AM	0	0	0	0	0	150	11	6	3	170	24	115	77	1	217	12	16	81	0	109	496
08:15 AM	0	0	0	2	2	139	15	11	1	166	25	112	69	1	207	10	11	49	0	70	445
08:30 AM	0	0	0	3	3	149	10	1	0	160	15	107	55	0	177	17	25	51	0	93	433
08:45 AM	0	0	0	6	6	108	21	4	0	133	13	67	55	0	135	4	21	39	0	64	338
Total	0	0	0	11	11	546	57	22	4	629	77	401	256	2	736	43	73	220	0	336	1712
09:00 AM	0	0	0	1	1	91	7	5	1	104	17	98	49	0	164	9	14	36	0	59	328
09:15 AM	0	0	0	1	1	76	13	7	2	98	12	82	57	4	155	16	24	35	0	75	329
09:30 AM	0	0	0	2	2	69	12	8	1	90	11	73	54	0	138	18	22	43	0	83	313
09:45 AM	0	0	0	0	0	69	8	9	2	88	13	84	54	2	153	9	9	35	0	53	294
Total	0	0	0	4	4	305	40	29	6	380	53	337	214	6	610	52	69	149	0	270	1264
*** BREAK ***																					
11:00 AM	0	0	0	0	0	45	9	7	0	61	15	92	39	1	147	12	16	40	1	69	277
11:15 AM	0	0	0	0	0	66	8	12	1	87	17	91	46	1	155	14	20	37	0	71	313
11:30 AM	0	0	0	4	4	73	14	9	3	99	9	91	69	1	170	17	14	51	1	83	356
11:45 AM	0	0	0	3	3	80	13	4	1	98	17	116	67	0	200	16	18	43	0	77	378
Total	0	0	0	7	7	264	44	32	5	345	58	390	221	3	672	59	68	171	2	300	1324
12:00 PM	0	0	0	0	0	61	9	6	0	76	17	85	73	1	176	25	26	65	0	116	368
12:15 PM	0	0	0	6	6	75	12	7	14	108	16	126	55	2	199	10	18	52	3	83	396
12:30 PM	0	0	0	2	2	76	17	5	1	99	23	107	57	0	187	11	13	49	0	73	361
12:45 PM	0	0	0	5	5	74	11	12	2	99	19	95	82	2	198	19	18	40	0	77	379
Total	0	0	0	13	13	286	49	30	17	382	75	413	267	5	760	65	75	206	3	349	1504
01:00 PM	0	0	0	3	3	81	13	14	0	108	19	101	74	0	194	18	28	46	2	94	399
01:15 PM	0	0	0	6	6	73	13	7	6	99	21	104	66	1	192	8	15	40	0	63	360
01:30 PM	0	0	0	3	3	55	8	10	5	78	18	109	59	0	186	15	16	43	0	74	341
01:45 PM	0	0	0	5	5	65	8	6	6	85	17	102	63	0	182	6	22	46	0	74	346
Total	0	0	0	17	17	274	42	37	17	370	75	416	262	1	754	47	81	175	2	305	1446
*** BREAK ***																					
03:00 PM	0	0	0	2	2	84	11	15	5	115	21	128	98	1	248	10	27	50	0	87	452
03:15 PM	0	0	0	3	3	94	12	8	2	116	30	119	86	1	236	16	22	47	1	86	441
03:30 PM	0	0	0	0	0	109	15	10	4	138	18	121	102	1	242	8	24	43	2	77	457
03:45 PM	0	0	0	7	7	90	19	10	1	120	26	126	96	2	250	10	26	57	0	93	470
Total	0	0	0	12	12	377	57	43	12	489	95	494	382	5	976	44	99	197	3	343	1820
04:00 PM	0	0	0	3	3	112	8	9	2	131	28	140	106	2	276	17	32	67	0	116	526
04:15 PM	0	0	0	3	3	113	10	13	5	141	30	157	118	0	305	30	36	69	7	142	591
04:30 PM	0	0	0	6	6	111	11	6	10	138	16	175	112	4	307	24	26	61	1	112	563
04:45 PM	0	0	0	2	2	117	15	8	6	146	32	174	132	0	338	7	25	44	4	80	566
Total	0	0	0	14	14	453	44	36	23	556	106	646	468	6	1226	78	119	241	12	450	2246
05:00 PM	0	0	0	2	2	147	8	12	2	169	34	169	118	0	321	22	39	83	0	144	636
05:15 PM	0	0	0	2	2	139	9	6	4	158	21	188	131	3	343	18	33	68	2	121	624
05:30 PM	0	0	0	4	4	114	11	5	7	137	29	158	116	5	308	17	18	49	7	91	540
05:45 PM	0	0	0	3	3	104	4	3	1	112	25	188	111	1	325	34	26	50	0	110	550
Total	0	0	0	11	11	504	32	26	14	576	109	703	476	9	1297	91	116	250	9	466	2350

Grand Total	0	1	5	100	106	385	421	273	109	4661	730	423	290	45	7907	511	767	200	32	3313	1598
Apprch %	0.0	0.9	4.7	94.3		82.8	9.0	5.9	2.3		9.2	53.5	36.7	0.6		15.4	23.2	60.5	1.0		7
Total %	0.0	0.0	0.0	0.6	0.7	24.1	2.6	1.7	0.7	29.2	4.6	26.5	18.1	0.3	49.5	3.2	4.8	12.5	0.2	20.7	

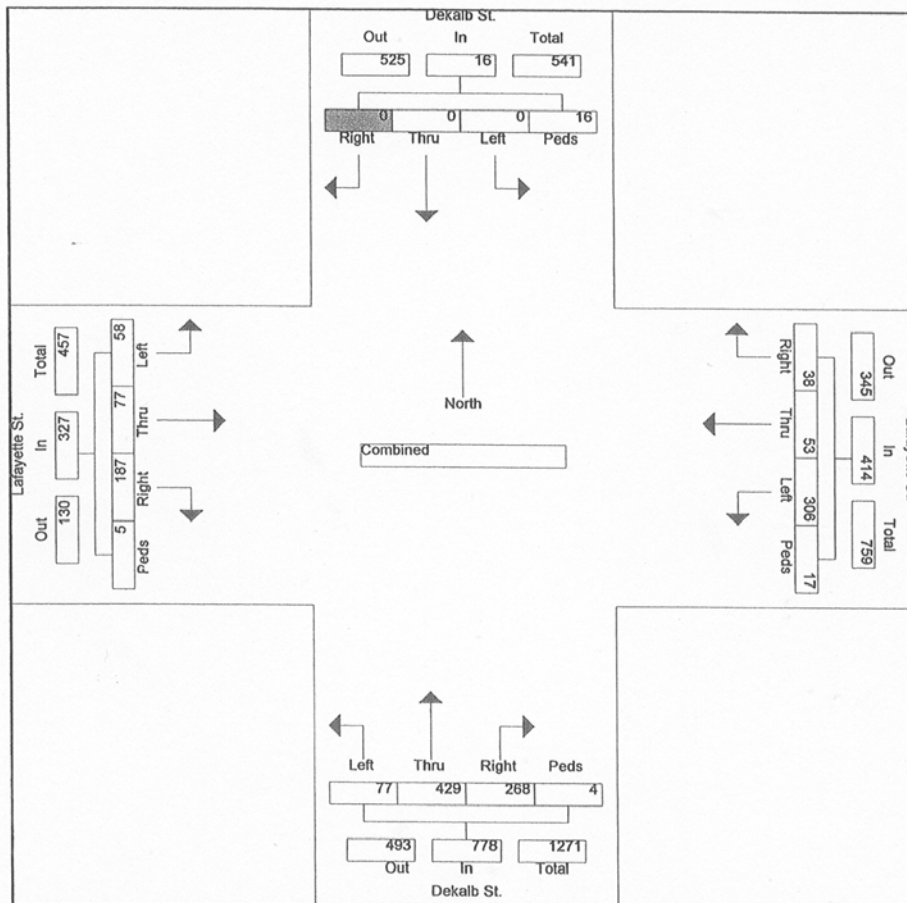
	Dekalb St. Southbound					Lafayette St. Westbound					Dekalb St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Intersection 07:00 AM																					
Volume	0	1	5	11	17	849	56	18	11	934	82	431	355	8	876	32	67	394	1	494	2321
Percent	0.0	5.9	29.4	64.7		90.9	6.0	1.9	1.2		9.4	49.2	40.5	0.9		6.5	13.6	79.8	0.2		
High Int. 07:00 AM																					07:30
Volume	0	1	5	6	7	236	16	7	4	260	23	116	114	5	242	12	23	116	1	142	640
Peak Factor					0.607					0.898					0.905					0.870	0.907



Pennoni Associates
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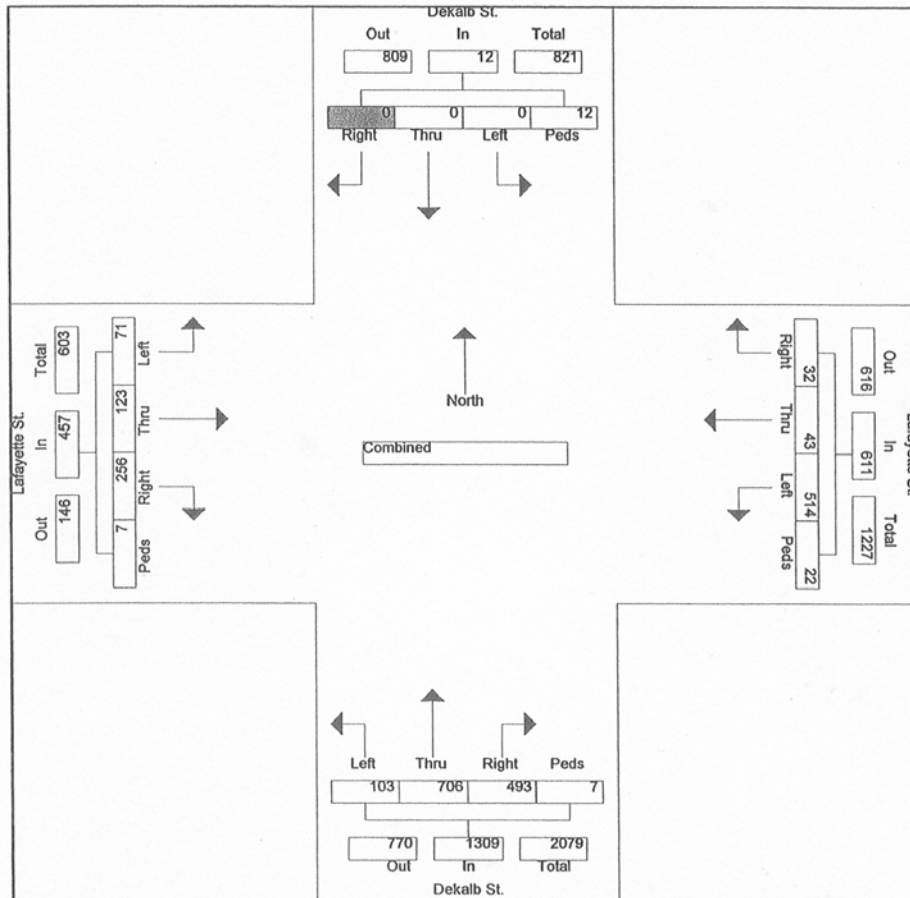
	Dekalb St. Southbound					Lafayette St. Westbound					Dekalb St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Intersection 12:15 PM																					
Volume	0	0	0	16	16	306	53	38	17	414	77	429	268	4	778	58	77	187	5	327	1535
Percent	0.0	0.0	0.0	100.0		73.9	12.8	9.2	4.1		9.9	55.1	34.4	0.5		17.7	23.5	57.2	1.5		
High Int. Volume Peak Factor	12:15 PM					12:15 PM					12:15 PM					01:00 PM					01:00
	0	0	0	6	6	81	17	14	14	108	23	126	82	2	199	19	28	52	3	94	399
					0.667					0.958					0.977					0.870	0.962



Pennoni Associates
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	Dekalb St. Southbound					Lafayette St. Westbound					Dekalb St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection																					
04:30 PM																					
Volume	0	0	0	12	12	514	43	32	22	611	103	706	493	7	1309	71	123	256	7	457	2389
Percent	0.0	0.0	0.0	100.0		84.1	7.0	5.2	3.6		7.9	53.9	37.7	0.5		15.5	26.9	56.0	1.5		
High Int.																					
04:30 PM																					
Volume	0	0	0	6	6	147	15	12	10	169	34	188	132	4	343	24	39	83	4	144	636
Peak Factor	0.500					0.904					0.954					0.793					0.939



Pennoni Associates
Turning Movement Counts

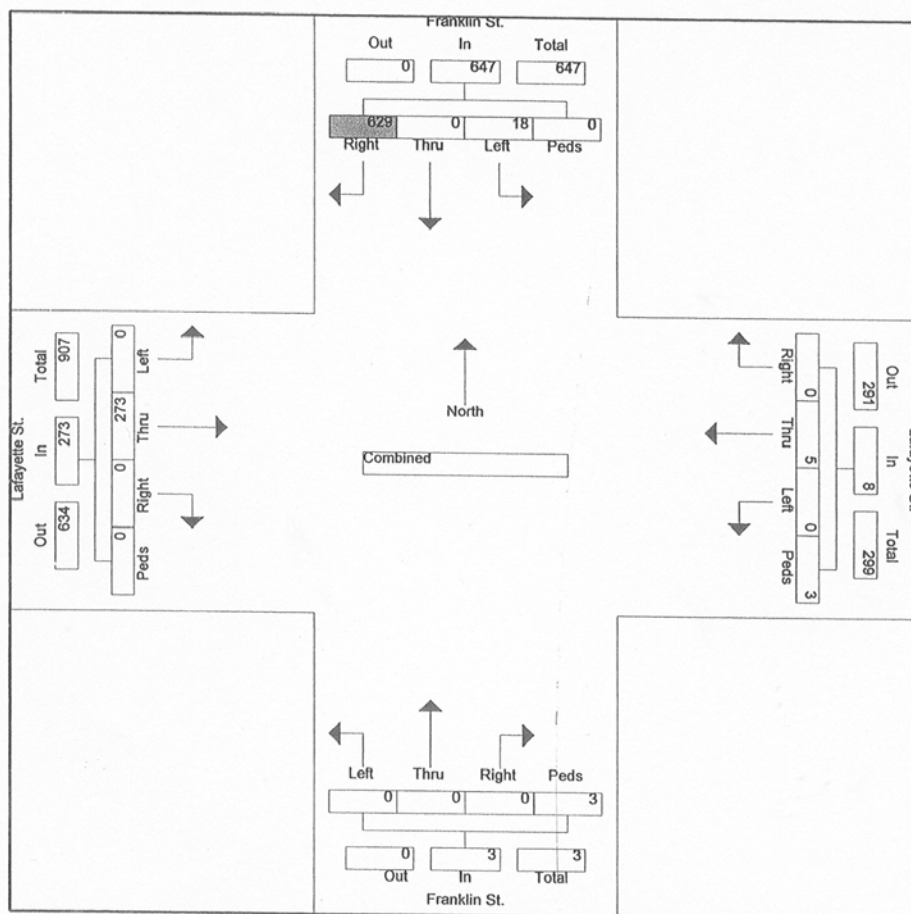
File Name : laf_fra
Site Code : 00960118
Start Date : 09/14/2000
Page : 1

Groups Printed: Passenger Veh - Heavy Veh - Buses

Start Time	Franklin St. Southbound					Lafayette St. Westbound					Franklin St. Northbound					Lafayette St. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	6	0	98	0	104	0	2	0	0	2	0	0	0	0	0	0	74	0	0	74	180
07:15 AM	3	0	132	0	135	0	3	0	1	4	0	0	0	0	0	0	57	0	0	57	196
07:30 AM	3	0	147	0	150	0	0	0	2	2	0	0	0	1	1	0	66	0	0	66	219
07:45 AM	3	0	157	0	160	0	1	0	0	1	0	0	0	2	2	0	74	0	0	74	237
Total	15	0	534	0	549	0	6	0	3	9	0	0	0	3	3	0	271	0	0	271	832
08:00 AM	5	0	178	0	183	0	1	0	0	1	0	0	0	0	0	0	69	0	0	69	253
08:15 AM	7	0	147	0	154	0	3	0	1	4	0	0	0	0	0	0	64	0	0	64	222
08:30 AM	4	0	111	0	115	0	3	0	0	3	0	0	0	0	0	0	52	0	0	52	170
08:45 AM	2	0	121	0	123	0	2	0	1	3	0	0	0	0	0	0	72	0	0	72	198
Total	18	0	557	0	575	0	9	0	2	11	0	0	0	0	0	0	257	0	0	257	843
09:00 AM	7	0	107	0	114	0	0	0	0	0	0	0	0	0	0	0	55	0	0	55	169
09:15 AM	8	0	80	0	88	0	1	0	0	1	0	0	0	0	0	0	63	0	0	63	152
09:30 AM	4	0	66	0	70	0	3	0	0	3	0	0	0	0	0	0	38	0	0	38	111
09:45 AM	5	0	67	0	72	0	8	0	0	8	0	0	0	0	0	0	54	0	0	54	134
Total	24	0	320	0	344	0	12	0	0	12	0	0	0	0	0	0	210	0	0	210	566
*** BREAK ***																					
11:00 AM	5	0	48	0	53	0	3	0	0	3	0	0	0	0	0	0	48	0	0	48	104
11:15 AM	5	0	69	0	74	0	3	0	0	3	0	0	0	0	0	0	60	0	0	60	137
11:30 AM	12	0	66	0	78	0	10	0	0	10	0	0	0	0	0	0	43	0	0	43	131
11:45 AM	8	0	56	0	64	0	1	0	3	4	0	0	0	0	0	0	45	0	0	45	113
Total	30	0	239	0	269	0	17	0	3	20	0	0	0	0	0	0	196	0	0	196	485
12:00 PM	7	0	60	0	67	0	2	0	0	2	0	0	0	0	0	0	74	0	0	74	143
12:15 PM	3	0	73	3	79	0	1	0	0	1	0	0	0	0	0	0	62	0	0	62	142
12:30 PM	6	0	53	0	59	0	3	0	1	4	0	0	0	0	0	0	58	0	0	58	121
12:45 PM	7	0	59	0	66	0	6	0	1	7	0	0	0	0	0	0	50	0	0	50	123
Total	23	0	245	3	271	0	12	0	2	14	0	0	0	0	0	0	244	0	0	244	529
01:00 PM	8	0	69	0	77	0	5	0	0	5	0	0	0	0	0	0	79	0	0	79	161
01:15 PM	4	0	63	0	67	0	4	0	0	4	0	0	0	0	0	0	37	0	0	37	108
01:30 PM	5	0	51	0	56	0	3	0	0	3	0	0	0	0	0	0	55	0	0	55	114
01:45 PM	3	0	63	0	66	0	4	0	0	4	0	0	0	0	0	0	68	0	0	68	138
Total	20	0	246	0	266	0	16	0	0	16	0	0	0	0	0	0	239	0	0	239	521
*** BREAK ***																					
03:00 PM	4	0	83	0	87	0	3	0	1	4	0	0	0	2	2	0	77	0	0	77	170
03:15 PM	5	0	77	0	82	0	4	0	0	4	0	0	0	0	0	0	82	0	0	82	168
03:30 PM	4	0	68	0	72	0	7	0	0	7	0	0	0	0	0	0	65	0	0	65	144
03:45 PM	4	0	86	0	90	0	7	0	1	8	0	0	0	1	1	0	80	0	0	80	179
Total	17	0	314	0	331	0	21	0	2	23	0	0	0	3	3	0	304	0	0	304	661
04:00 PM	5	0	91	0	96	0	3	0	0	3	0	0	0	0	0	0	103	0	0	103	202
04:15 PM	9	0	82	0	91	0	6	0	0	6	0	0	0	1	1	0	100	0	0	100	198
04:30 PM	2	0	100	0	102	0	11	0	2	13	0	0	0	5	5	0	105	0	0	105	225
04:45 PM	2	0	75	0	77	0	6	0	0	6	0	0	0	0	0	0	101	0	0	101	184
Total	18	0	348	0	366	0	26	0	2	28	0	0	0	6	6	0	409	0	0	409	809
05:00 PM	2	0	82	0	84	0	8	0	0	8	0	0	0	0	0	0	107	0	0	107	199
05:15 PM	5	0	106	0	111	0	7	0	0	7	0	0	0	1	1	0	84	0	0	84	203
05:30 PM	5	0	91	0	96	0	7	0	3	10	0	0	0	0	0	0	96	0	0	96	202
05:45 PM	6	0	87	0	93	0	3	0	1	4	0	0	0	1	1	0	67	0	0	67	165
Total	18	0	366	0	384	0	25	0	4	29	0	0	0	2	2	0	354	0	0	354	769

Grand Total	183	0	316	3	3355	0	144	0	18	162	0	0	0	14	14	0	248	0	0	2484	6015
Apprch %	5.5	0.0	94.5	0.1		0.0	88.9	0.0	11.1		0.0	0.0	0.0	100.0		0.0	100.0	0.0	0.0		
Total %	3.0	0.0	52.7	0.0	55.8	0.0	2.4	0.0	0.3	2.7	0.0	0.0	0.0	0.2	0.2	0.0	41.3	0.0	0.0	41.3	

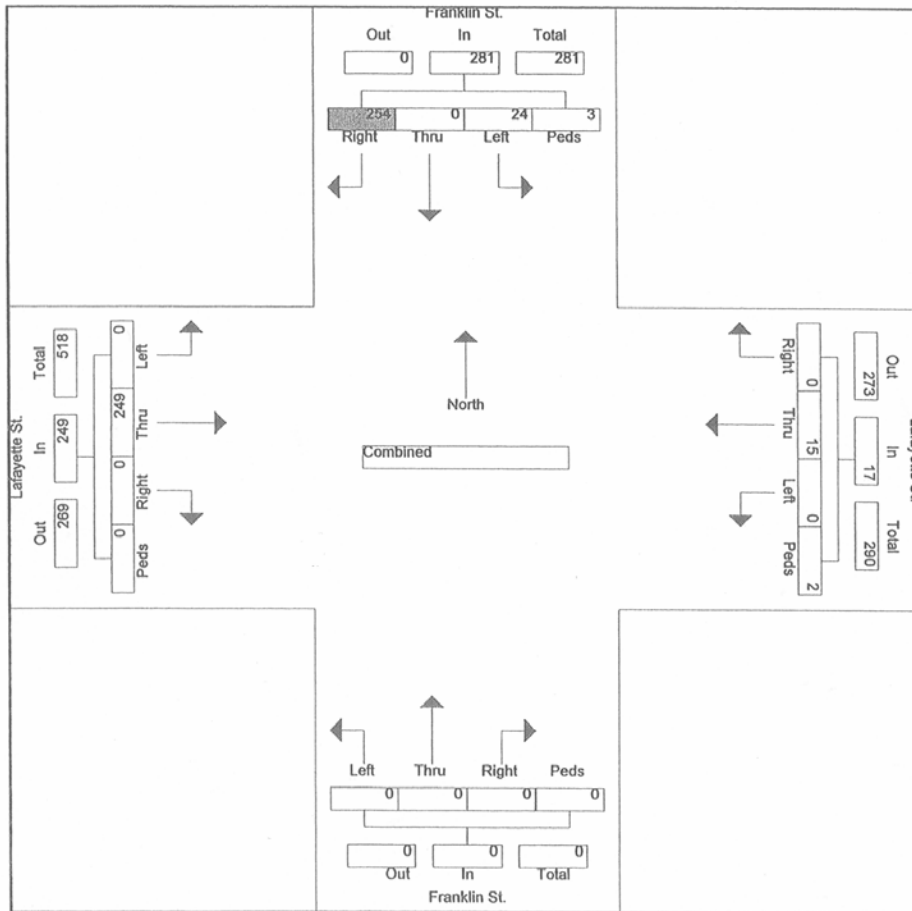
	Franklin St. Southbound					Lafayette St. Westbound					Franklin St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Intersection 07:30 AM																					
Volume	18	0	629	0	647	0	5	0	3	8	0	0	0	3	3	0	273	0	0	273	931
Percent	2.8	0.0	97.2	0.0		0.0	62.5	0.0	37.5		0.0	0.0	0.0	100.0		0.0	100.0	0.0	0.0		
High Int. Volume Peak Factor	08:00 AM					08:15 AM					07:45 AM					07:45 AM					08:00
	7	0	178	0	183	0	3	0	2	4	0	0	0	2	2	0	74	0	0	74	253
					0.884					0.500					0.375					0.922	0.920



Pennoni Associates
Turning Movement Counts

File Name : laf'fra
Site Code : 00960118
Start Date : 09/14/2000
Page : 3

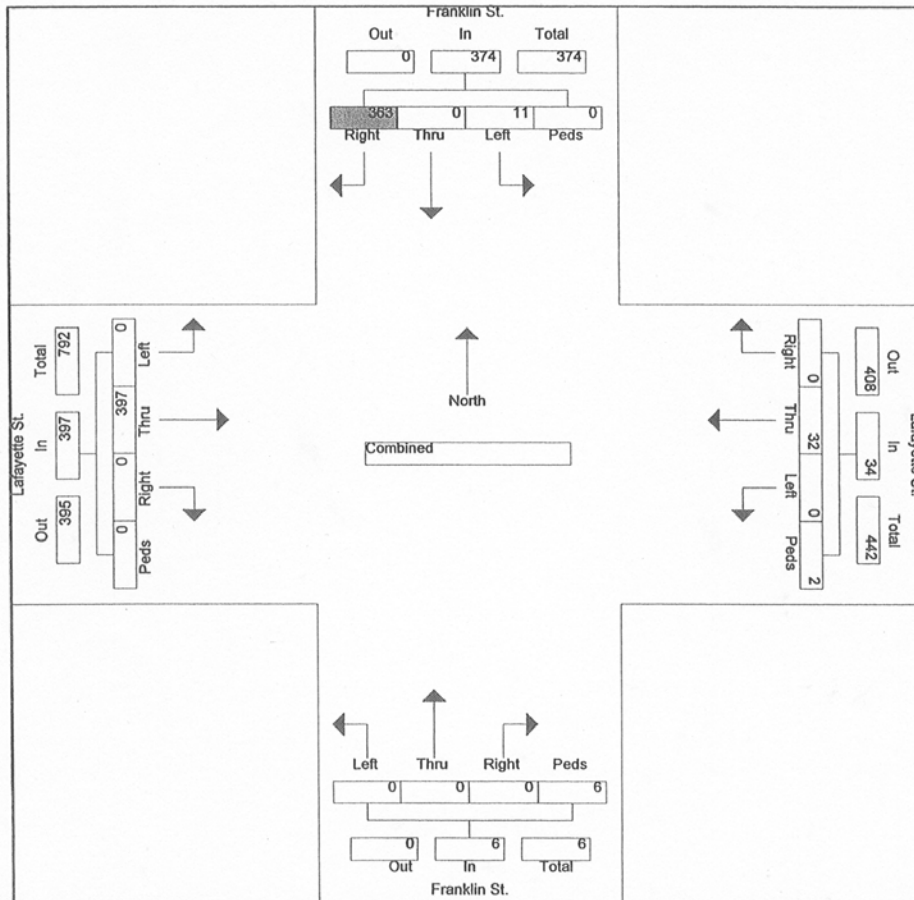
	Franklin St. Southbound					Lafayette St. Westbound					Franklin St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Intersection 12:15 PM																					
Volume	24	0	254	3	281	0	15	0	2	17	0	0	0	0	0	0	249	0	0	249	547
Percent	8.5	0.0	90.4	1.1		0.0	88.2	0.0	11.8		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
High Int. Volume	12:15 PM					12:45 PM										01:00 PM					01:00
Peak Factor	8	0	73	3	79	0	6	0	1	7	0	0	0	0	0	0	79	0	0	79	161
	0.889					0.607										0.788					0.849



Pennoni Associates
Turning Movement Counts

File Name : laf_fra
Site Code : 00960118
Start Date : 09/14/2000
Page : 4

	Franklin St. Southbound					Lafayette St. Westbound					Franklin St. Northbound					Lafayette St. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	11	0	363	0	374	0	32	0	2	34	0	0	0	6	6	0	397	0	0	397	811
Percent	2.9	0.0	97.1	0.0		0.0	94.1	0.0	5.9		0.0	0.0	0.0	100.0		0.0	100.0	0.0	0.0		
High Int. Volume	05:15 PM					04:30 PM					04:30 PM					05:00 PM					04:30
Peak Factor	5	0	106	0	111	0	11	0	2	13	0	0	0	5	5	0	107	0	0	107	225
	0.842					0.654					0.300					0.928					0.901



Municipality: Bridgeport
 Location: Ford St and Lafayette St
 Counter/Board #: WW/McM-1397

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Drive, Suite 200
 Fort Washington, PA 19034-2716

Study Name: DVRPC93W
 Site Code : 80100293
 Start Date: 06/19/01
 Page : 1

Start Time	Ford St Southbound				Factory Westbound				Ford St Northbound				Lafayette St Eastbound				Intvl Exclu Inclu		
	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Total	Total	Total
06/19/01																			
07:00	0	0	0	0	0	0	0	0	0	1	0	0	58	0	8	6	73	6	67
[BREAK]																			
Hour	0	0	0	0	0	0	0	0	0	1	0	0	58	0	8	6	73	6	67
08:00	0	0	0	0	0	0	0	0	2	5	0	0	76	0	4	5	92	5	87
08:15	0	0	0	0	0	0	0	0	0	6	0	0	62	0	3	13	84	13	71
08:30	0	0	0	0	0	0	0	0	1	3	0	0	68	0	5	8	85	8	77
08:45	0	0	0	0	0	0	0	0	0	2	0	1	57	0	4	11	75	12	63
Hour	0	0	0	0	0	0	0	0	3	16	0	1	263	0	16	37	336	38	298
[BREAK]																			
16:00	0	0	0	0	0	0	0	0	1	10	0	0	76	0	1	3	91	3	88
16:15	0	0	0	0	0	0	0	0	3	3	0	0	84	0	5	6	101	6	95
16:30	0	0	0	0	0	0	0	0	1	8	0	2	82	1	3	3	100	5	95
16:45	0	0	0	0	1	0	0	1	4	7	0	1	68	0	3	4	89	6	83
Hour	0	0	0	0	1	0	0	1	9	28	0	3	310	1	12	16	381	20	361
17:00	0	0	0	0	0	0	0	0	3	17	0	0	90	0	1	5	116	5	111
17:15	0	0	0	0	0	0	0	0	1	17	0	1	83	2	2	4	110	5	105
17:30	0	0	0	0	0	0	0	0	1	7	0	0	99	0	2	2	111	2	109
17:45	0	0	0	0	0	0	0	0	1	12	0	0	79	1	2	3	98	3	95
Hour	0	0	0	0	0	0	0	0	6	53	0	1	351	3	7	14	435	15	420
Total	0	0	0	0	1	0	0	1	18	98	0	5	982	4	43	73	1225	79	1146
% Apr.	-	-	-	-	50.0	-	-	50.0	14.8	80.9	-	4.1	89.1	0.3	3.9	6.6	-	-	-
% Int.	-	-	-	-	-	-	-	-	1.4	8.0	-	0.4	80.1	0.3	3.5	5.9	-	-	-

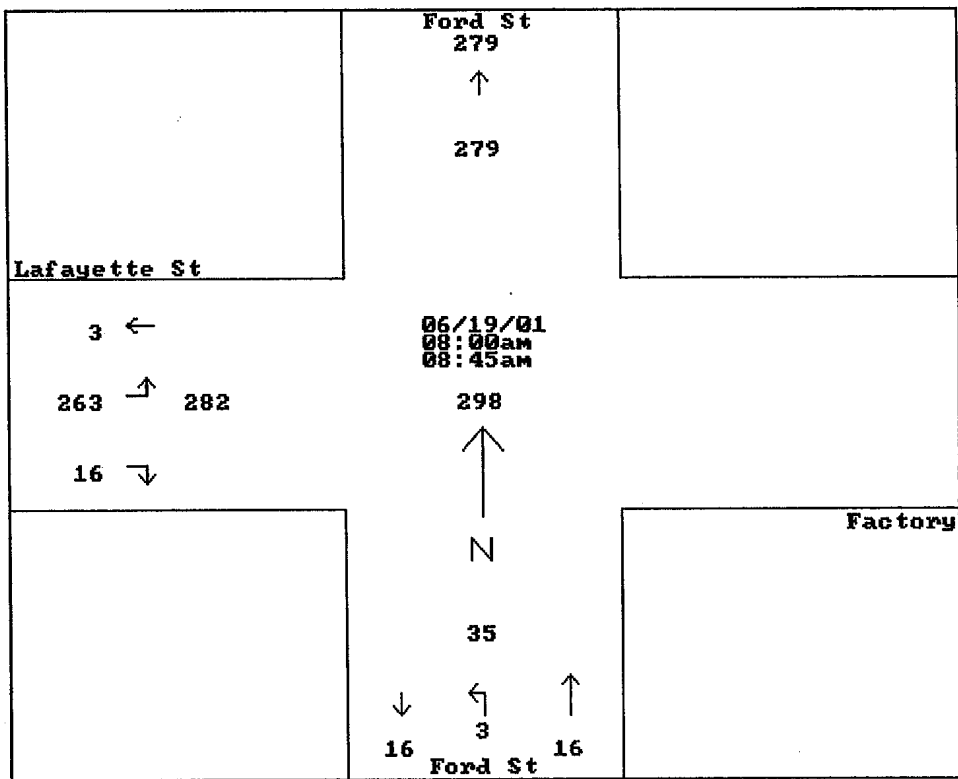
Municipality: Bridgeport
 Location: Ford St and Lafayette St

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Drive, Suite 200
 Fort Washington, PA 19034-2716

Study Name: DVRPC93W
 Site Code : 80100293
 Start Date: 06/19/01
 Page : 2

Counter/Board #: WW/MCM-1397

Start Time	Ford St Southbound				HV	Factory Westbound				HV	Ford St Northbound				HV	Lafayette St Eastbound				HV	Intvl	Exclu	Inclu
	Left	Thru	Right			Left	Thru	Right			Left	Thru	Right			Left	Thru	Right					
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 06/19/01 to 08:45 on 06/19/01																							
Time	08:00					08:00					08:00					08:00							
Vol.	0	0	0		x	0	0	0		x	3	16	0		x	263	0	16		x			
Pct.	0.0	0.0	0.0		x	0.0	0.0	0.0		x	15.7	84.2	0.0		x	94.2	0.0	5.7		x			
Total	0					0					19					279							
High	07:-1					07:-1					08:00					08:00							
Vol.	0	0	0		x	0	0	0		x	2	5	0		x	76	0	4		x			
Total	0					0					7					80							
PHF	0.000					0.000					0.678					0.871							

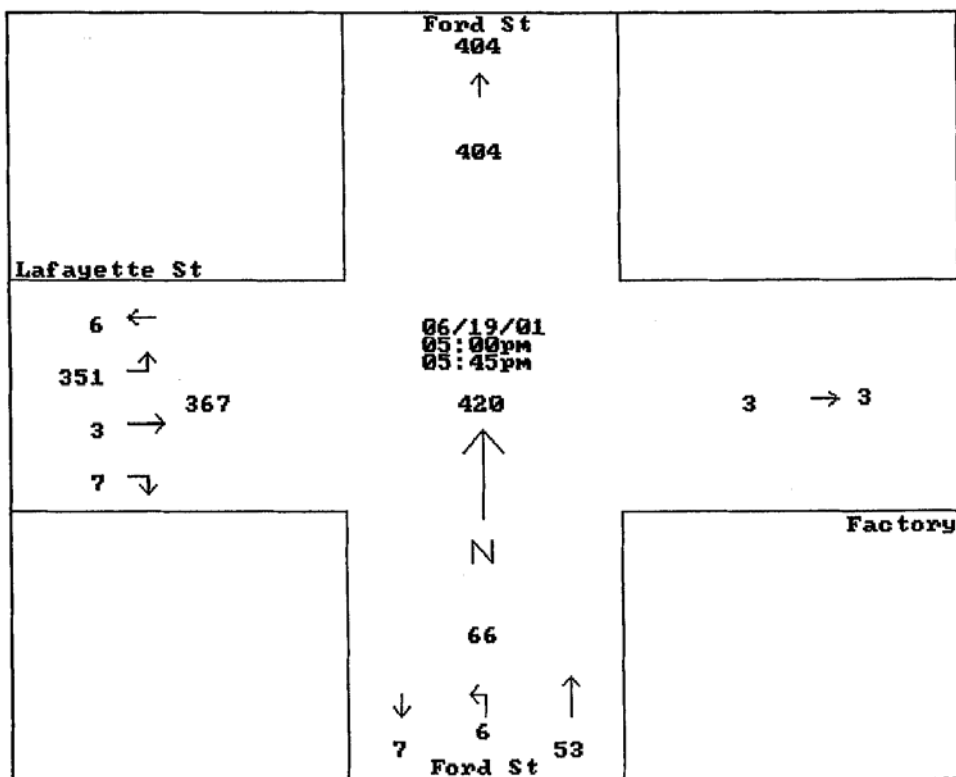


Municipality: Bridgeport
 Location: Ford St and Lafayette St
 Counter/Board #: WW/MCM-1397

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Drive, Suite 200
 Fort Washington, PA 19034-2716

Study Name: DVRPC93W
 Site Code : 80100293
 Start Date: 06/19/01
 Page : 3

	Ford St					Factory					Ford St					Lafayette St							
	Southbound					Westbound					Northbound					Eastbound							
Start																				Intvl	Exclu	Inclu	
Time	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Total	Total	Total
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 06/19/01 to 17:45 on 06/19/01																							
Time	17:00					17:00					17:00					17:00							
Vol.	0	0	0	x	0	0	0	x	6	53	0	x	351	3	7	x							
Pct.	0.0	0.0	0.0	x	0.0	0.0	0.0	x	10.1	89.8	0.0	x	97.2	0.8	1.9	x							
Total	0					0					59					361							
High	08:00					08:00					17:00					17:30							
Vol.	0	0	0	x	0	0	0	x	3	17	0	x	99	0	2	x							
Total	0					0					20					101							
PHF	0.000					0.000					0.737					0.893							



Municipality: Norristown, PA
 Location: Main St & Markley St (rt202)

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr., Suite 200
 Ft. Washington, PA 19034

Study Name: LAFAY01W
 Site Code : 80007101
 Start Date: 04/12/00
 Page : 1

Counter/Board #: CA/MCM-2212

Start Time	Markley St (202s) Southbound				Main St Westbound				Markley St (202) Northbound				Main St Eastbound				Intvl Exclu Inclu		
	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Total	Total	Total
04/12/00																			
07:00	25	88	76	4	7	271	3	0	16	98	1	7	15	170	0	0	781	11	770
07:15	10	106	151	11	13	268	7	9	42	62	4	3	28	102	17	6	839	29	810
07:30	8	136	196	12	14	287	2	5	35	74	5	6	43	118	28	10	979	33	946
07:45	18	134	197	21	15	276	4	11	42	96	9	4	55	119	25	12	1038	48	990
Hour	61	464	620	48	49	1102	16	25	135	330	19	20	141	509	70	28	3637	121	3516
08:00	13	104	152	18	14	279	3	7	30	53	5	7	43	110	20	9	867	41	826
08:15	24	129	163	10	23	255	3	17	40	79	8	14	49	101	20	9	944	50	894
08:30	16	139	137	18	20	203	2	10	21	82	5	7	40	101	17	7	825	42	783
08:45	19	116	92	12	5	133	3	6	24	66	4	3	35	70	12	2	602	23	579
Hour	72	488	544	58	62	870	11	40	115	280	22	31	167	382	69	27	3238	156	3082
[BREAK]																			
16:00	15	60	41	0	42	199	6	4	9	97	9	2	88	192	29	4	797	10	787
16:15	13	150	89	10	17	196	8	4	25	110	10	3	62	198	23	3	921	20	901
16:30	14	114	74	3	21	191	11	9	18	101	14	9	58	198	34	5	874	26	848
16:45	18	133	88	5	25	191	11	10	34	125	9	5	60	227	46	9	996	29	967
Hour	60	457	292	18	105	777	36	27	86	433	42	19	268	815	132	21	3588	85	3503
17:00	18	117	99	5	10	161	17	1	33	83	5	2	49	205	53	3	861	11	850
17:15	21	132	72	5	16	207	24	3	19	109	7	3	53	255	60	5	991	16	975
17:30	19	115	60	5	12	190	15	7	23	107	12	4	52	278	56	5	960	21	939
17:45	14	100	81	8	9	163	9	4	18	98	8	6	41	192	41	7	799	25	774
Hour	72	464	312	23	47	721	65	15	93	397	32	15	195	930	210	20	3611	73	3538
Total	265	1873	1768	147	263	3470	128	107	429	1440	115	85	771	2636	481	96	14074	435	13639
% Apr.	6.5	46.2	43.6	3.6	6.6	87.4	3.2	2.6	20.7	69.5	5.5	4.1	19.3	66.1	12.0	2.4	-	-	-
% Int.	1.8	13.3	12.5	1.0	1.8	24.6	0.9	0.7	3.0	10.2	0.8	0.6	5.4	18.7	3.4	0.6	-	-	-

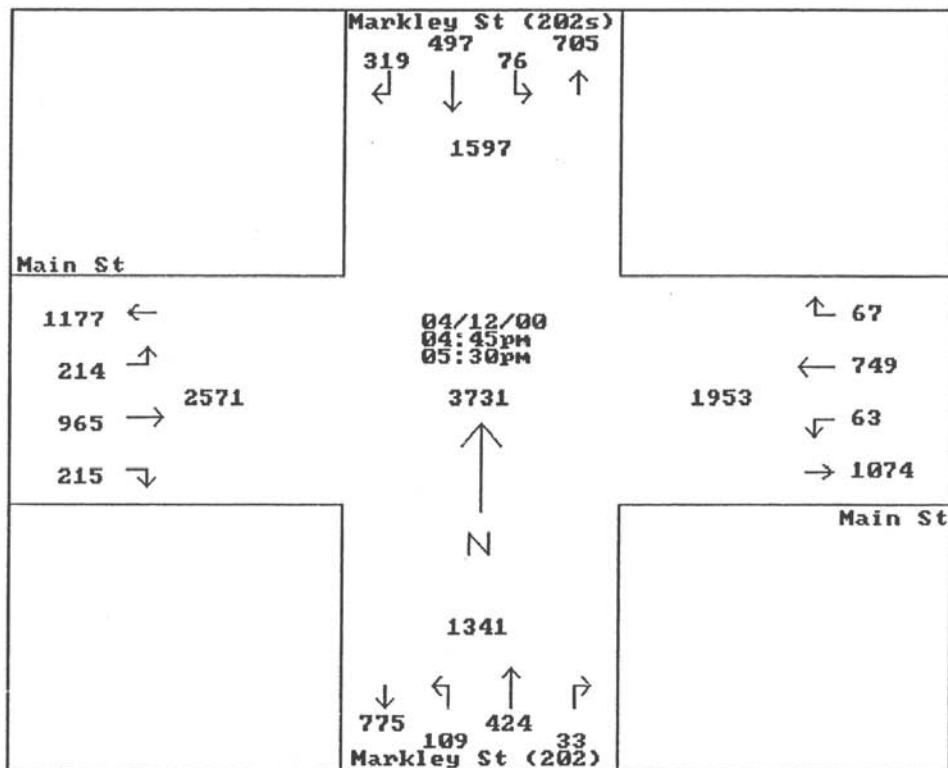
Municipality: Norristown, PA
 Location: Main St & Markley St (rt202)

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034

Study Name: LAFAY01W
 Site Code : 80007101
 Start Date: 04/12/00
 Page : 3

Counter/Board #: CA/MCM-2212

	Markley St (202s)					Main St					Markley St (202)					Main St							
	Southbound					Westbound					Northbound					Eastbound							
Start																				Intvl	Exclu	Inclu	
Time	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	Total	Total	Total	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 04/12/00 to 17:45 on 04/12/00																							
Time	16:45					16:45					16:45					16:45							
Vol.	76	497	319	x	63	749	67	x	109	424	33	x	214	965	215	x							
Pct.	8.5	55.7	35.7	x	7.1	85.2	7.6	x	19.2	74.9	5.8	x	15.3	69.2	15.4	x							
Total	892				879				566				1394										
High	16:45					17:15					16:45					17:30							
Vol.	18	133	88	x	16	207	24	x	34	125	9	x	52	278	56	x							
Total	239				247				168				386										
PHF	0.933					0.889					0.842					0.902							



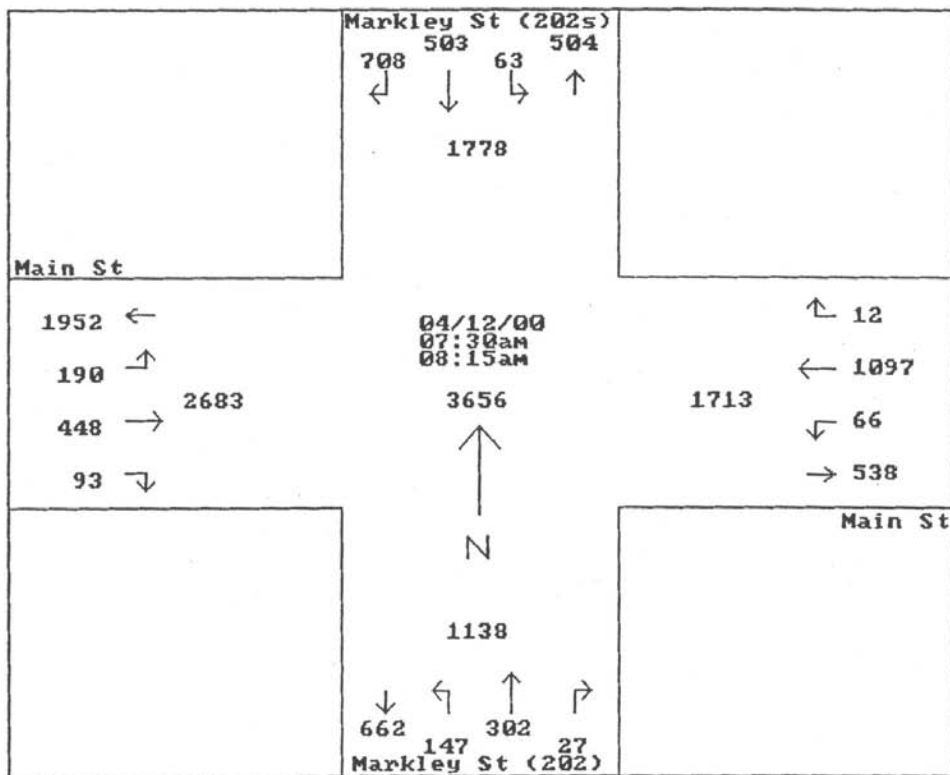
Municipality: Norristown, PA
 Location: Main St & Markley St (rt202)

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034

Study Name: LAFAY01W
 Site Code : 80007101
 Start Date: 04/12/00
 Page : 2

Counter/Board #: CA/MCM-2212

		Markley St (202s) Southbound			Main St Westbound			Markley St (202) Northbound			Main St Eastbound			Intvl Exclu Inclu		
Start	Time	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Total	Total	Total
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 04/12/00 to 08:45 on 04/12/00																
Time	07:30					07:30				07:30						
Vol.	63	503	708	x	66	1097	12	x	147	302	27	x	190	448	93	x
Pct.	4.9	39.4	55.5	x	5.6	93.3	1.0	x	30.8	63.4	5.6	x	25.9	61.2	12.7	x
Total	1274				1175			476		731						
High	07:45				07:30			07:45		07:45						
Vol.	18	134	197	x	14	287	2	x	42	96	9	x	55	119	25	x
Total	349				303			147		199						
PHF	0.912				0.969			0.809		0.918						



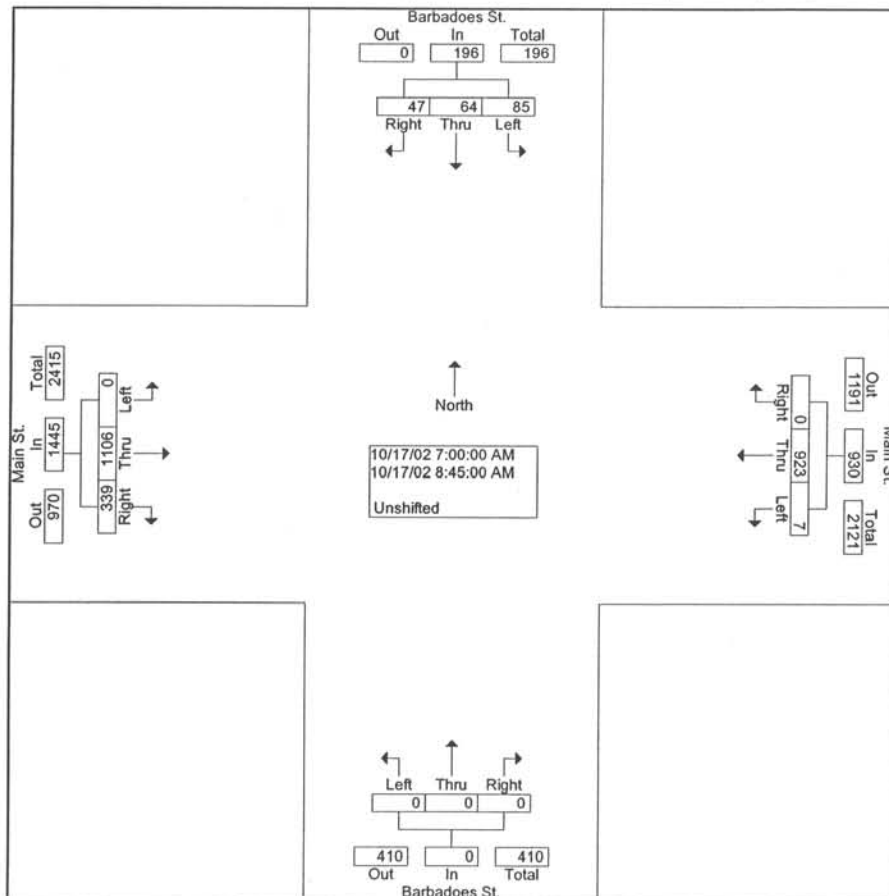
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Barbadoes St. and Main St.

Counter: 3
Counted By: C. Lincoln
Weather: sunny
AMMSBS

File Name : AMMSBS
Site Code : 0000000C
Start Date : 10/17/200
Page No : 1

Groups Printed- Unshifted

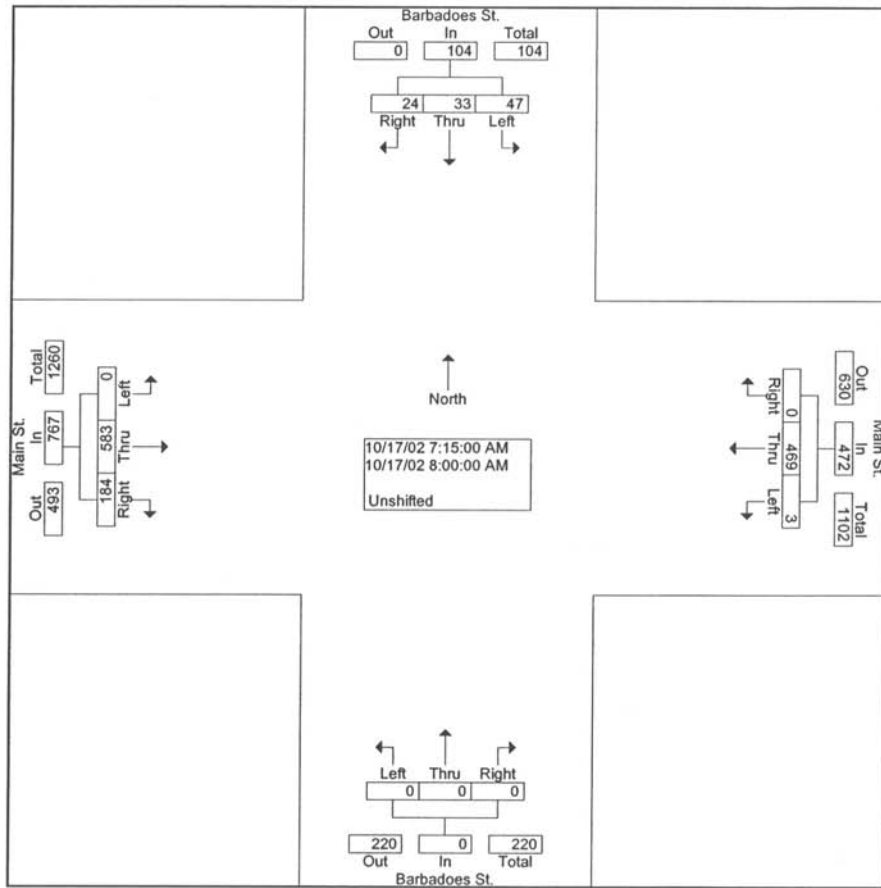
	Barbadoes St. Southbound					Main St. Westbound					Barbadoes St. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	3	7	2	0	12	2	122	0	9	124	0	0	0	0	0	0	114	31	4	145	13	281	294
07:15 AM	9	9	1	2	19	0	108	0	8	108	0	0	0	0	0	0	142	65	15	207	25	334	359
07:30 AM	6	6	6	1	18	3	130	0	17	133	0	0	0	0	0	0	139	45	10	184	28	335	363
07:45 AM	16	12	10	1	38	0	117	0	6	117	0	0	0	0	0	0	136	41	10	177	17	332	349
Total	34	34	19	4	87	5	477	0	40	482	0	0	0	0	0	0	531	182	39	713	83	1282	1365
08:00 AM	16	6	7	1	29	0	114	0	6	114	0	0	0	0	0	0	166	33	4	199	11	342	353
08:15 AM	10	12	7	2	29	1	104	0	9	105	0	0	0	0	0	0	134	53	9	187	20	321	341
08:30 AM	14	6	6	0	26	0	110	0	12	110	0	0	0	0	0	0	124	32	11	156	23	292	315
08:45 AM	11	6	8	0	25	1	118	0	10	119	0	0	0	0	0	0	151	39	14	190	24	334	358
Total	51	30	28	3	109	2	446	0	37	448	0	0	0	0	0	0	575	157	38	732	78	1289	1367
Grand Total	85	64	47	7	196	7	923	0	77	930	0	0	0	0	0	0	1106	339	77	1445	161	2571	2732
Apprch %	43.	32.	24.			0.8	99.	0.0			0.0	0.0	0.0			0.0	76.	23.					
	4	7	0				2										5	5					
Total %	3.3	2.5	1.8		7.6	0.3	35.	0.0		36.2	0.0	0.0	0.0		0.0	0.0	43.	13.		56.2	5.9	94.1	
							9										0	2					



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Barbadoes St. and Main St.

File Name : AMMSB
Site Code : 0000000C
Start Date : 10/17/200
Page No : 2

	Barbadoes St. Southbound				Main St. Westbound				Barbadoes St. Northbound				Main St. Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection 07:15 AM																	
Volume	47	33	24	104	3	469	0	472	0	0	0	0	0	583	184	767	1343
Percent	45.2	31.7	23.1		0.6	99.4	0.0		0.0	0.0	0.0		0.0	76.0	24.0		
08:00 Volume	16	6	7	29	0	114	0	114	0	0	0	0	0	166	33	199	342
Peak Factor																	0.982
High Int. 07:45 AM					07:30 AM				6:45:00 AM				07:15 AM				
Volume	16	12	10	38	3	130	0	133	0	0	0	0	0	142	65	207	
Peak Factor				0.684				0.887								0.926	



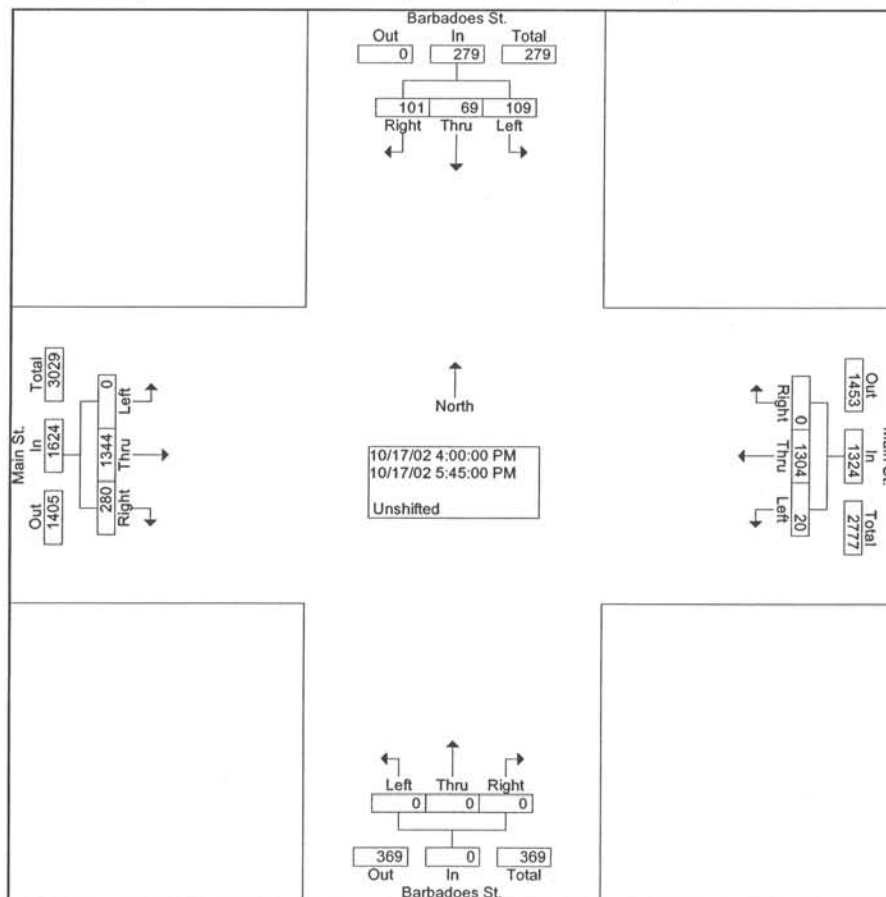
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Barbadoes St. and Main St.

Counter: 3
Counted By: C. Lincoln
Weather: overcast
PMMSBS

File Name : PMMSBS
Site Code : 00001234
Start Date : 10/17/2006
Page No : 1

Groups Printed- Unshifted

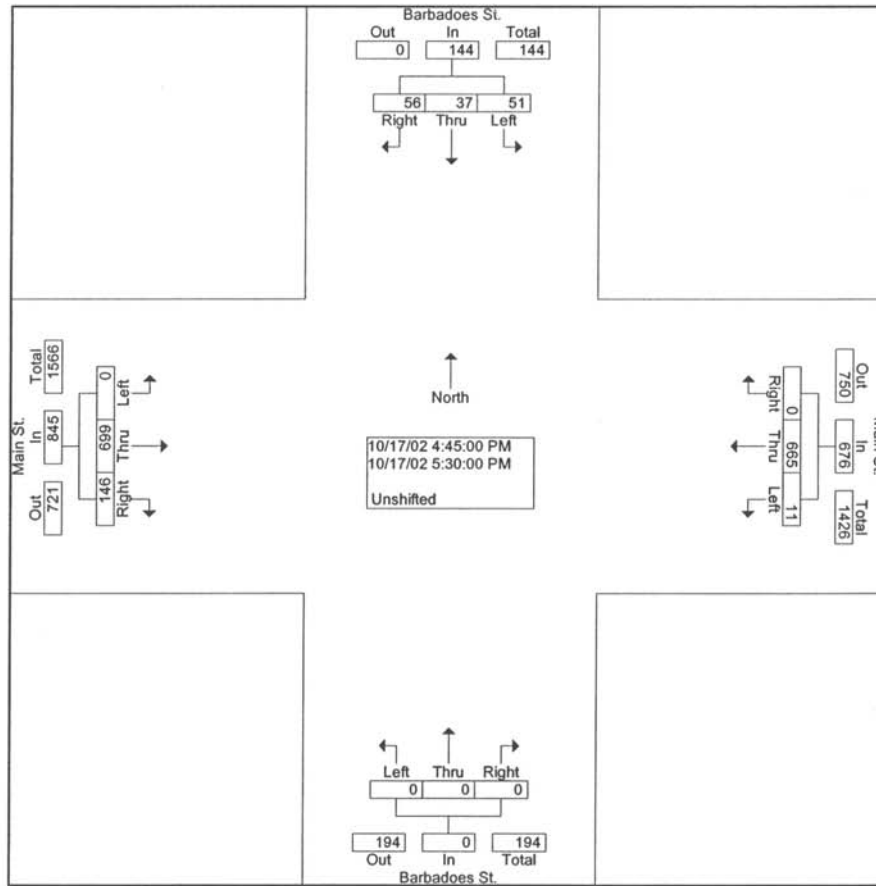
	Barbadoes St. Southbound					Main St. Westbound					Barbadoes St. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
04:00 PM	16	8	4	0	28	3	153	0	5	156	0	0	0	0	0	0	156	42	13	198	18	382	400
04:15 PM	15	13	18	0	46	4	173	0	3	177	0	0	0	0	0	0	168	44	8	212	11	435	446
04:30 PM	15	4	11	0	30	2	147	0	7	149	0	0	0	0	0	0	144	26	5	170	12	349	361
04:45 PM	14	11	18	1	43	2	181	0	5	183	0	0	0	0	0	0	166	41	5	207	11	433	444
Total	60	36	51	1	147	11	654	0	20	665	0	0	0	0	0	0	634	153	31	787	52	1599	1651
05:00 PM	14	7	16	0	37	2	168	0	12	170	0	0	0	0	0	0	189	33	2	222	14	429	443
05:15 PM	12	10	11	0	33	3	156	0	3	159	0	0	0	0	0	0	191	42	6	233	9	425	434
05:30 PM	11	9	11	0	31	4	160	0	4	164	0	0	0	0	0	0	153	30	5	183	9	378	387
05:45 PM	12	7	12	0	31	0	166	0	3	166	0	0	0	0	0	0	177	22	5	199	8	396	404
Total	49	33	50	0	132	9	650	0	22	659	0	0	0	0	0	0	710	127	18	837	40	1628	1668
Grand Total	109	69	101	1	279	20	1304	0	42	1324	0	0	0	0	0	0	1344	280	49	1624	92	3227	3319
Apprch %	39.1	24.7	36.2			1.5	98.5	0.0			0.0	0.0	0.0			0.0	82.8	17.2					
Total %	3.4	2.1	3.1		8.6	0.6	40.4	0.0		41.0	0.0	0.0	0.0		0.0	0.0	41.6	8.7		50.3	2.8	97.2	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Barbadoes St. and Main St.

File Name : PMMSBS
Site Code : 00001234
Start Date : 10/17/200
Page No : 2

	Barbadoes St. Southbound				Main St. Westbound				Barbadoes St. Northbound				Main St. Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:45 PM																
Volume	51	37	56	144	11	665	0	676	0	0	0	0	0	699	146	845	1665
Percent	35.4	25.7	38.9		1.6	98.4	0.0		0.0	0.0	0.0		0.0	82.7	17.3		
04:45 Volume	14	11	18	43	2	181	0	183	0	0	0	0	0	166	41	207	433
Peak Factor																	0.961
High Int.	04:45 PM				04:45 PM				3:45:00 PM				05:15 PM				
Volume	14	11	18	43	2	181	0	183	0	0	0	0	0	191	42	233	
Peak Factor	0.837								0.923				0.907				



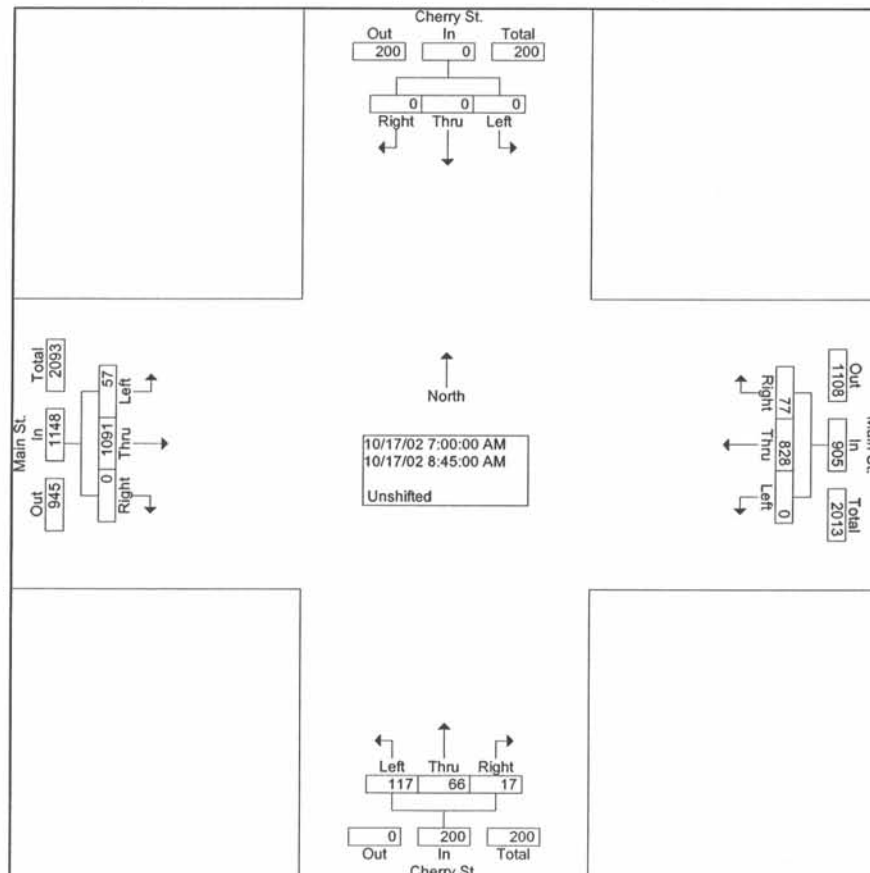
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Cherry St. and Main St.

Counter: 30
Counted By: J. Platt
Weather: sunny
AMMSCS

File Name : AMMSCS
Site Code : 00000000
Start Date : 10/17/200
Page No : 1

Groups Printed- Unshifted

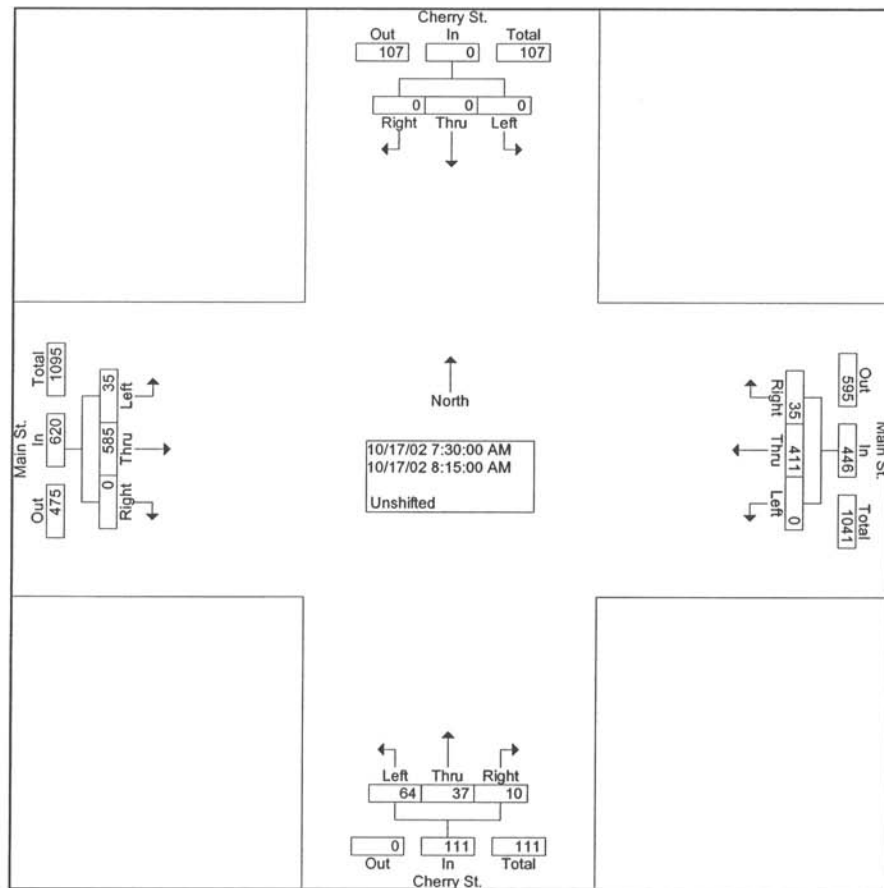
Start Time	Cherry St. Southbound					Main St. Westbound					Cherry St. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	0	0	0	0	0	0	111	5	6	116	17	7	0	11	24	2	102	0	6	104	23	244	267
07:15 AM	0	0	0	0	0	0	95	8	6	103	10	6	2	4	18	3	135	0	14	138	24	259	283
07:30 AM	0	0	0	0	0	0	116	6	14	122	20	5	1	6	26	6	142	0	9	148	29	296	325
07:45 AM	0	0	0	0	0	0	106	8	5	114	11	8	5	2	24	9	138	0	8	147	15	285	300
Total	0	0	0	0	0	0	428	27	31	455	58	26	8	23	92	20	517	0	37	537	91	1084	1175
08:00 AM	0	0	0	0	0	0	99	10	7	109	21	11	1	4	33	13	160	0	7	173	18	315	333
08:15 AM	0	0	0	0	0	0	90	11	8	101	12	13	3	1	28	7	145	0	4	152	13	281	294
08:30 AM	0	0	0	0	0	0	105	11	13	116	12	6	3	2	21	5	134	0	6	139	21	276	297
08:45 AM	0	0	0	0	0	0	106	18	7	124	14	10	2	4	26	12	135	0	11	147	22	297	319
Total	0	0	0	0	0	0	400	50	35	450	59	40	9	11	108	37	574	0	28	611	74	1169	1243
Grand Total	0	0	0	0	0	0	828	77	66	905	117	66	17	34	200	57	1091	0	65	1148	165	2253	2418
Apprch %	0.0	0.0	0.0			0.0	91.5	8.5			58.5	33.0	8.5			5.0	95.0	0.0					
Total %	0.0	0.0	0.0		0.0	0.0	36.8	3.4		40.2	5.2	2.9	0.8		8.9	2.5	48.4	0.0		51.0	6.8	93.2	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Cherry St. and Main St.

File Name : AMMSCS
Site Code : 0000000C
Start Date : 10/17/20C
Page No : 2

	Cherry St. Southbound				Main St. Westbound				Cherry St. Northbound				Main St. Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	07:30 AM																
Volume	0	0	0	0	0	411	35	446	64	37	10	111	35	585	0	620	1177
Percent	0.0	0.0	0.0		0.0	92.2	7.8		57.7	33.3	9.0		5.6	94.4	0.0		
08:00 Volume	0	0	0	0	0	99	10	109	21	11	1	33	13	160	0	173	315
Peak Factor																	0.934
High Int.	6:45:00 AM				07:30 AM				08:00 AM				08:00 AM				
Volume	0	0	0	0	0	116	6	122	21	11	1	33	13	160	0	173	
Peak Factor																	0.896



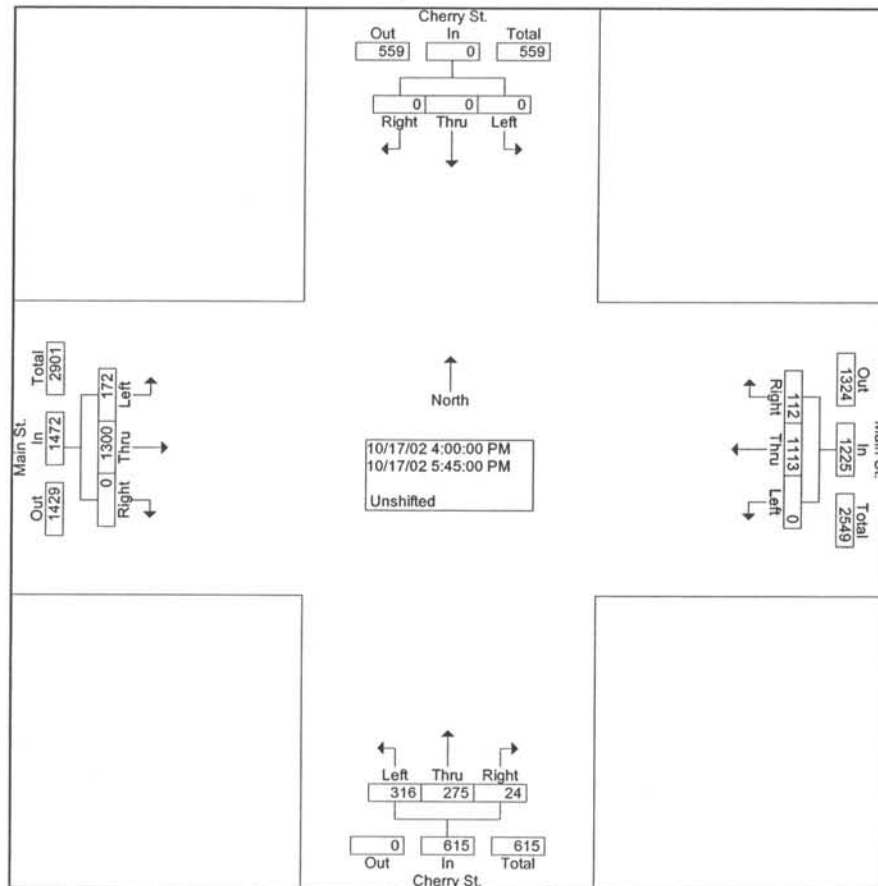
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Cherry St. and Main St.

Counter: 21
Counted By: S. Gerhard
Weather: sunny
PMMSCS

File Name : PMMSCS
Site Code : 0000000C
Start Date : 10/17/20C
Page No : 1

Groups Printed- Unshifted

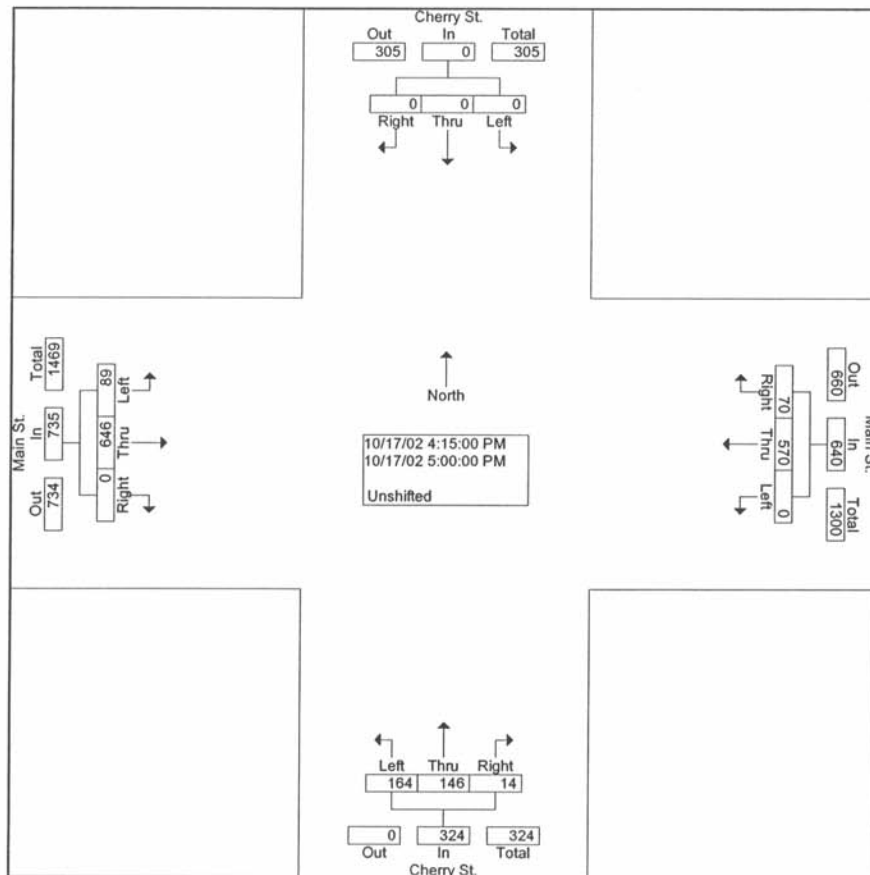
Start Time	Cherry St. Southbound					Main St. Westbound					Cherry St. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
04:00 PM	0	0	0	0	0	0	121	11	1	132	39	32	5	7	76	16	163	0	12	179	20	387	407
04:15 PM	0	0	0	0	0	0	149	16	5	165	44	42	7	0	93	20	159	0	8	179	13	437	450
04:30 PM	0	0	0	0	0	0	142	18	5	160	27	24	4	1	55	17	160	0	7	177	13	392	405
04:45 PM	0	0	0	0	0	0	130	20	2	150	48	39	0	4	87	22	162	0	7	184	13	421	434
Total	0	0	0	0	0	0	542	65	13	607	158	137	16	12	311	75	644	0	34	719	59	1637	1696
05:00 PM	0	0	0	0	0	0	149	16	3	165	45	41	3	10	89	30	165	0	4	195	17	449	466
05:15 PM	0	0	0	0	0	0	144	15	1	159	27	32	2	3	61	23	173	0	3	196	7	416	423
05:30 PM	0	0	0	0	0	0	146	5	3	151	38	26	2	4	66	21	165	0	4	186	11	403	414
05:45 PM	0	0	0	0	0	0	132	11	2	143	48	39	1	1	88	23	153	0	5	176	8	407	415
Total	0	0	0	0	0	0	571	47	9	618	158	138	8	18	304	97	656	0	16	753	43	1675	1718
Grand Total	0	0	0	0	0	0	1113	112	22	1225	316	275	24	30	615	172	1300	0	50	1472	102	3312	3414
Apprch %	0.0	0.0	0.0			0.0	90.9	9.1			51.4	44.7	3.9			11.7	88.3	0.0					
Total %	0.0	0.0	0.0		0.0	0.0	33.6	3.4		37.0	9.5	8.3	0.7		18.6	5.2	39.3	0.0		44.4	3.0	97.0	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Cherry St. and Main St.

File Name : PMMSCS
Site Code : 0000000C
Start Date : 10/17/200
Page No : 2

	Cherry St. Southbound				Main St. Westbound				Cherry St. Northbound				Main St. Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:15 PM																
Volume	0	0	0	0	0	570	70	640	164	146	14	324	89	646	0	735	1699
Percent	0.0	0.0	0.0		0.0	89.1	10.9		50.6	45.1	4.3		12.1	87.9	0.0		
05:00 Volume	0	0	0	0	0	149	16	165	45	41	3	89	30	165	0	195	449
Peak Factor																	0.946
High Int.	3:45:00 PM				04:15 PM				04:15 PM				05:00 PM				
Volume	0	0	0	0	0	149	16	165	44	42	7	93	30	165	0	195	
Peak Factor									0.970				0.871				0.942



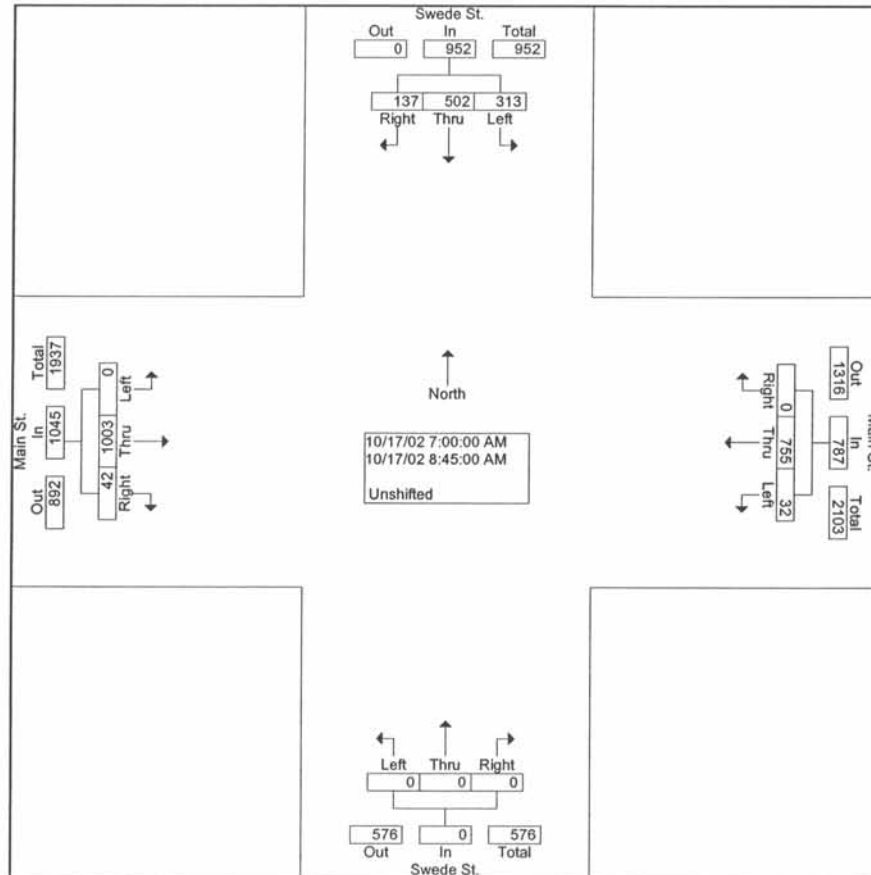
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Swede St. and Main St.

Counter: 15
Counted By: G. DiMartino
Weather: sunny
AMMSSS

File Name : AMMSSS
Site Code : 0000000C
Start Date : 10/17/200
Page No : 1

Groups Printed- Unshifted

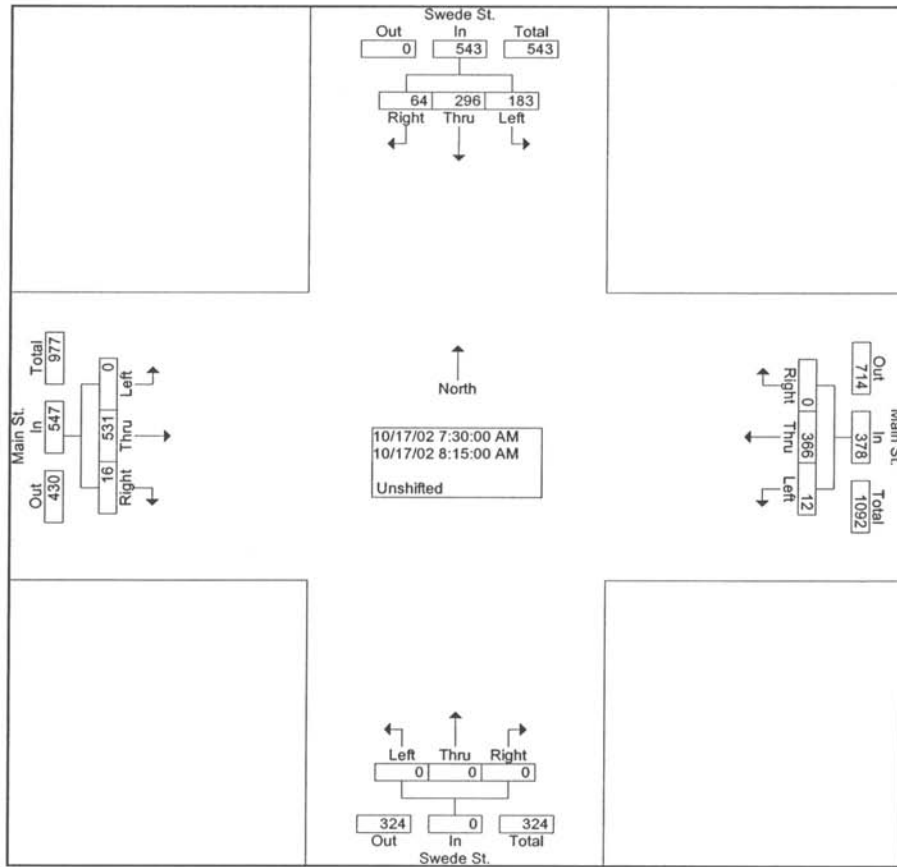
Start Time	Swede St. Southbound					Main St. Westbound					Swede St. Northbound					Main St. Eastbound					Exclu Total	Inclu. Total	Int. Total
	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	21	43	14	2	78	7	101	0	6	108	0	0	0	0	0	0	96	3	2	99	10	285	295
07:15 AM	23	66	14	3	103	5	86	0	4	91	0	0	0	0	0	0	131	8	6	139	13	333	346
07:30 AM	32	83	23	1	138	4	99	0	3	103	0	0	0	0	0	0	137	5	3	142	7	383	390
07:45 AM	48	75	20	7	143	2	91	0	2	93	0	0	0	0	0	0	122	3	4	125	13	361	374
Total	124	267	71	13	462	18	377	0	15	395	0	0	0	0	0	0	486	19	15	505	43	1362	1405
08:00 AM	47	71	11	1	129	4	93	0	4	97	0	0	0	0	0	0	143	5	3	148	8	374	382
08:15 AM	56	67	10	3	133	2	83	0	3	85	0	0	0	0	0	0	129	3	2	132	8	350	358
08:30 AM	40	60	27	4	127	6	94	0	6	100	0	0	0	0	0	0	127	5	4	132	14	359	373
08:45 AM	46	37	18	6	101	2	108	0	3	110	0	0	0	0	0	0	118	10	6	128	15	339	354
Total	189	235	66	14	490	14	378	0	16	392	0	0	0	0	0	0	517	23	15	540	45	1422	1467
Grand Total	313	502	137	27	952	32	755	0	31	787	0	0	0	0	0	0	1003	42	30	1045	88	2784	2872
Apprch %	32.9	52.7	14.4			4.1	95.9	0.0			0.0	0.0	0.0			0.0	96.0	4.0					
Total %	11.2	18.0	4.9		34.2	1.1	27.1	0.0		28.3	0.0	0.0	0.0		0.0	0.0	36.0	1.5		37.5	3.1	96.9	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Swede St. and Main St.

File Name : AMMSSS
Site Code : 0000000C
Start Date : 10/17/200
Page No : 2

	Swede St. Southbound				Main St. Westbound				Swede St. Northbound				Main St. Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection 07:30 AM																	
Volume	183	296	64	543	12	366	0	378	0	0	0	0	0	531	16	547	1468
Percent	33.7	54.5	11.8		3.2	96.8	0.0		0.0	0.0	0.0		0.0	97.1	2.9		
07:30 Volume	32	83	23	138	4	99	0	103	0	0	0	0	0	137	5	142	383
Peak Factor																	0.958
High Int.	07:45 AM																
Volume	48	75	20	143	4	99	0	103	6:45:00 AM				08:00 AM				
Peak Factor																	
				0.949				0.917								0.924	



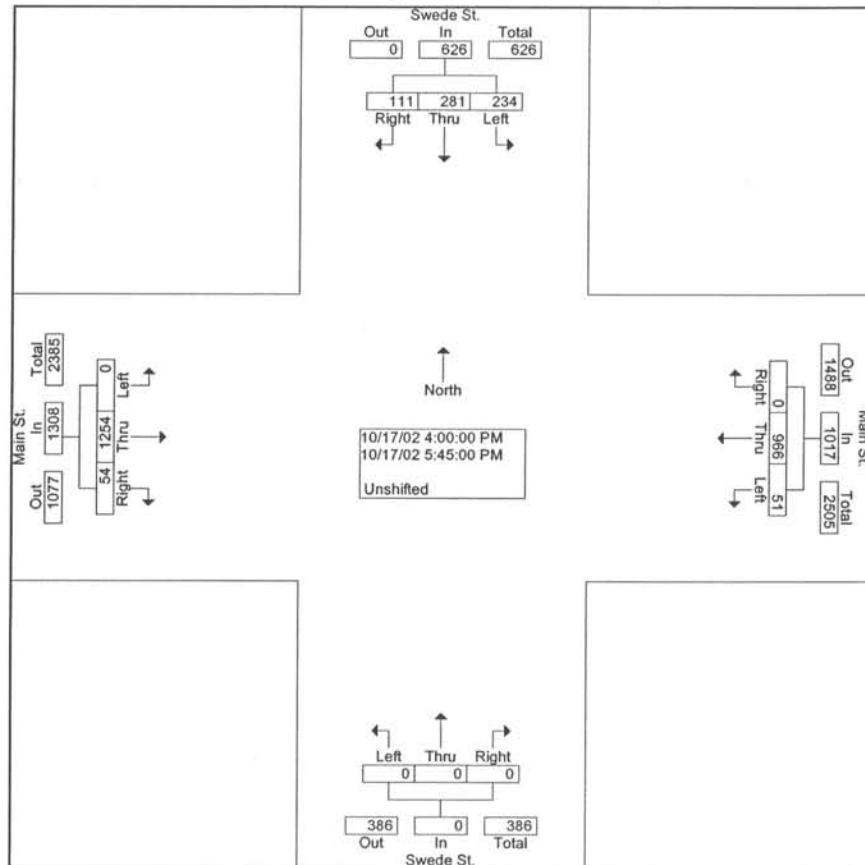
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Swede St. and Main St.

Counter: 15
Counted By: G. DiMartino
Weather: sunny
PMMSSS

File Name : PMMSSS
Site Code : 00001111
Start Date : 10/17/200
Page No : 1

Groups Printed- Unshifted

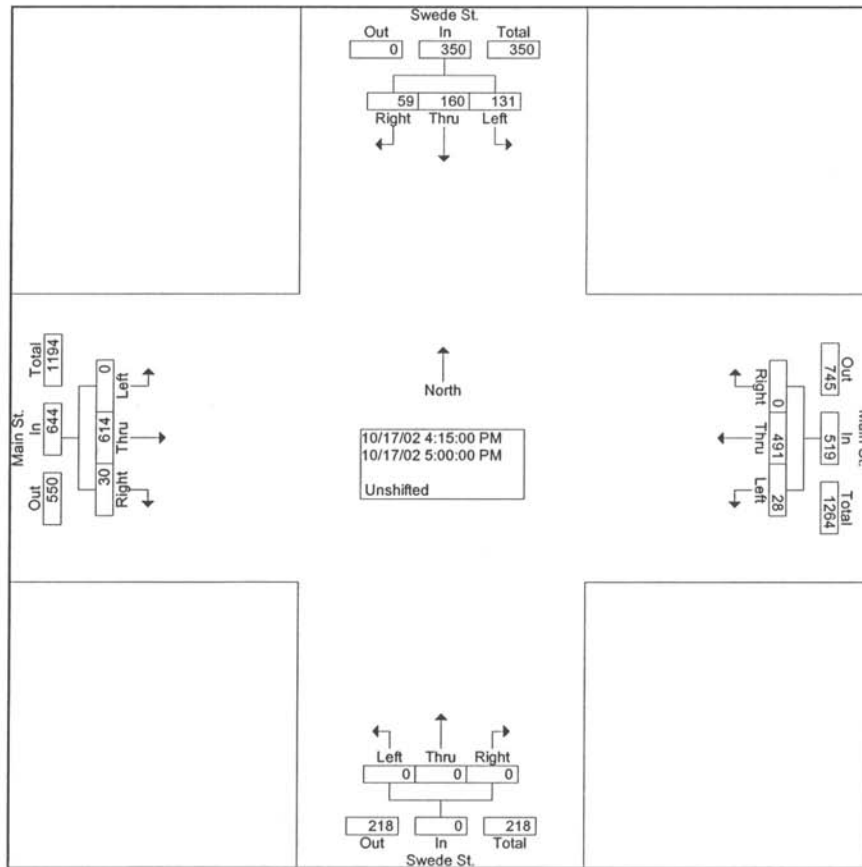
Start Time	Swede St. Southbound					Main St. Westbound					Swede St. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
04:00 PM	38	34	16	3	88	12	110	0	2	122	0	0	0	0	0	0	158	8	6	166	11	376	387
04:15 PM	41	39	24	3	104	8	115	0	1	123	0	0	0	0	0	0	152	6	3	158	7	385	392
04:30 PM	30	34	16	1	80	5	116	0	4	121	0	0	0	0	0	0	158	6	3	164	8	365	373
04:45 PM	31	47	11	6	89	6	131	0	1	137	0	0	0	0	0	0	148	9	4	157	11	383	394
Total	140	154	67	13	361	31	472	0	8	503	0	0	0	0	0	0	616	29	16	645	37	1509	1546
05:00 PM	29	40	8	3	77	9	129	0	2	138	0	0	0	0	0	0	156	9	1	165	6	380	386
05:15 PM	18	32	10	1	60	3	128	0	0	131	0	0	0	0	0	0	163	9	2	172	3	363	366
05:30 PM	25	24	13	1	62	5	117	0	0	122	0	0	0	0	0	0	166	3	1	169	2	353	355
05:45 PM	22	31	13	5	66	3	120	0	1	123	0	0	0	0	0	0	153	4	1	157	7	346	353
Total	94	127	44	10	265	20	494	0	3	514	0	0	0	0	0	0	638	25	5	663	18	1442	1460
Grand Total	234	281	111	23	626	51	966	0	11	1017	0	0	0	0	0	0	1254	54	21	1308	55	2951	3006
Apprch %	37.4	44.9	17.7			5.0	95.0	0.0			0.0	0.0	0.0			0.0	95.9	4.1					
Total %	7.9	9.5	3.8		21.2	1.7	32.7	0.0		34.5	0.0	0.0	0.0		0.0	0.0	42.5	1.8		44.3	1.8	98.2	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Swede St. and Main St.

File Name : PMMSSS
Site Code : 00001111
Start Date : 10/17/2006
Page No : 2

	Swede St. Southbound				Main St. Westbound				Swede St. Northbound				Main St. Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:15 PM																
Volume	131	160	59	350	28	491	0	519	0	0	0	0	0	614	30	644	1513
Percent	37.4	45.7	16.9		5.4	94.6	0.0		0.0	0.0	0.0		0.0	95.3	4.7		
04:15 Volume	41	39	24	104	8	115	0	123	0	0	0	0	0	152	6	158	385
Peak Factor																	0.982
High Int.	04:15 PM				05:00 PM				3:45:00 PM				05:00 PM				
Volume	41	39	24	104	9	129	0	138	0	0	0	0	0	156	9	165	
Peak Factor	0.841				0.940								0.976				



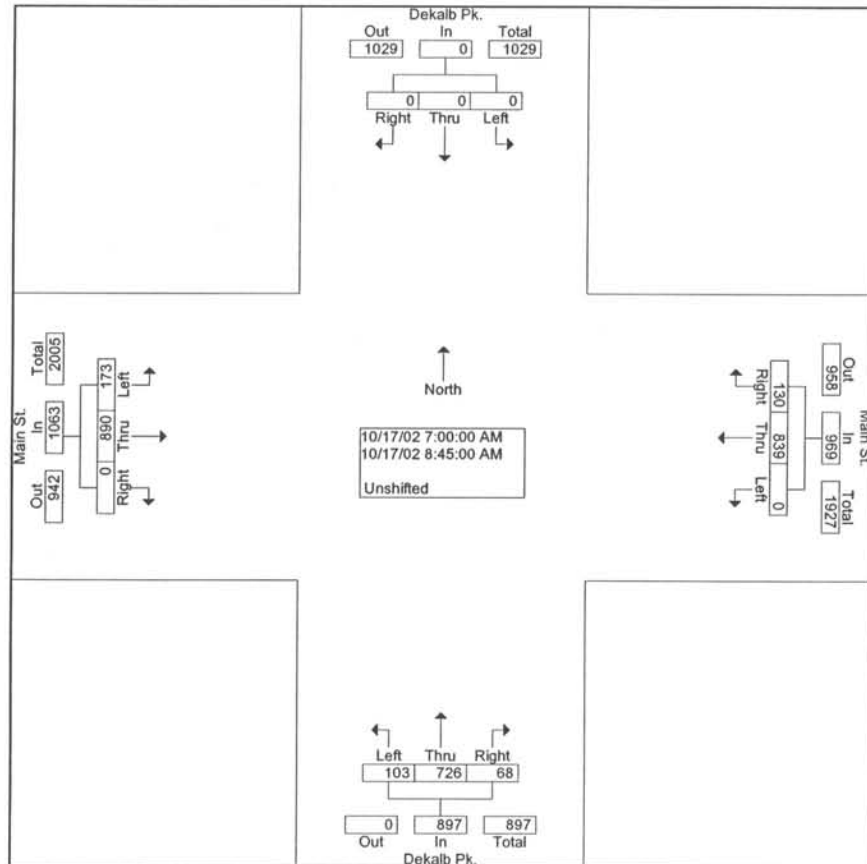
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Dekalb Pk. and Main St.

Counter: I
Counted By: C. Staudt
Weather: sunny
AMMSDP

File Name : AMMSDI
Site Code : 00001111
Start Date : 10/17/2006
Page No : 1

Groups Printed- Unshifted

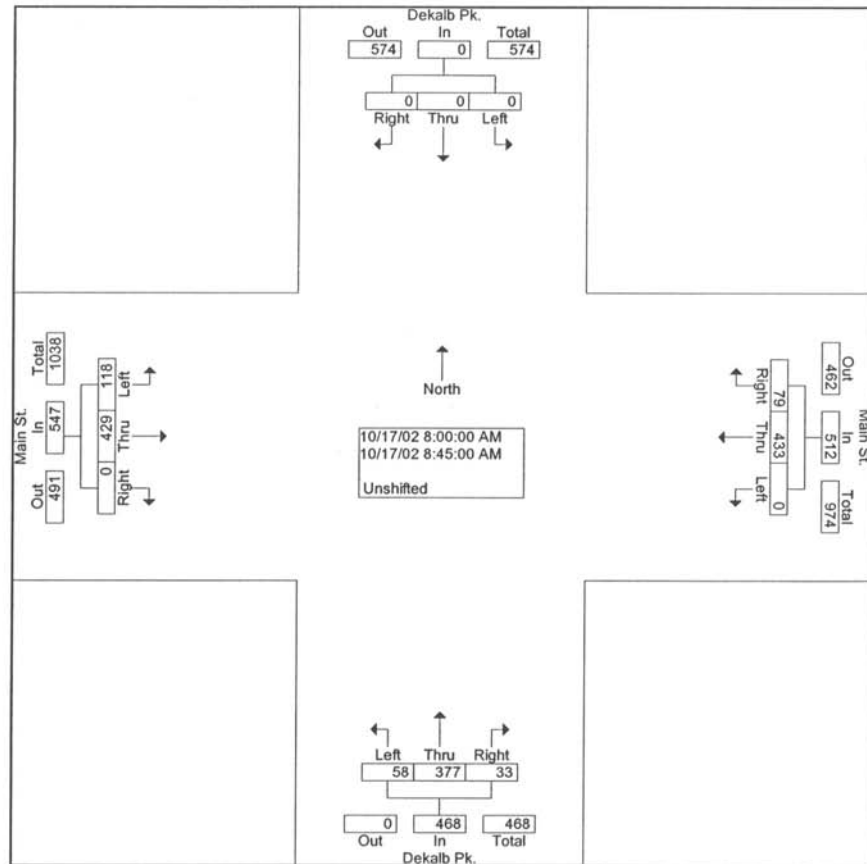
Start Time	Dekalb Pk. Southbound					Main St. Westbound					Dekalb Pk. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	0	0	0	0	0	0	107	11	6	118	16	68	6	6	90	11	107	0	1	118	13	326	339
07:15 AM	0	0	0	0	0	0	93	17	4	110	6	82	13	8	101	21	111	0	8	132	20	343	363
07:30 AM	0	0	0	0	0	0	103	7	15	110	7	115	6	9	128	10	128	0	5	138	29	376	405
07:45 AM	0	0	0	0	0	0	103	16	3	119	16	84	10	7	110	13	115	0	7	128	17	357	374
Total	0	0	0	0	0	0	406	51	28	457	45	349	35	30	429	55	461	0	21	516	79	1402	1481
08:00 AM	0	0	0	0	0	0	109	13	8	122	15	95	9	7	119	23	129	0	4	152	19	393	412
08:15 AM	0	0	0	0	0	0	107	20	5	127	9	98	9	5	116	30	105	0	2	135	12	378	390
08:30 AM	0	0	0	0	0	0	113	21	9	134	19	87	8	8	114	34	100	0	5	134	22	382	404
08:45 AM	0	0	0	0	0	0	104	25	3	129	15	97	7	8	119	31	95	0	8	126	19	374	393
Total	0	0	0	0	0	0	433	79	25	512	58	377	33	28	468	118	429	0	19	547	72	1527	1599
Grand Total	0	0	0	0	0	0	839	130	53	969	103	726	68	58	897	173	890	0	40	1063	151	2929	3080
Apprch %	0.0	0.0	0.0			0.0	86.6	13.4			11.5	80.9	7.6			16.3	83.7	0.0					
Total %	0.0	0.0	0.0		0.0	0.0	28.6	4.4		33.1	3.5	24.8	2.3		30.6	5.9	30.4	0.0		36.3	4.9	95.1	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Dekalb Pk. and Main St.

File Name : AMMSD1
Site Code : 00001111
Start Date : 10/17/200
Page No : 2

	Dekalb Pk. Southbound				Main St. Westbound				Dekalb Pk. Northbound				Main St. Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	08:00 AM																
Volume	0	0	0	0	0	433	79	512	58	377	33	468	118	429	0	547	1527
Percent	0.0	0.0	0.0		0.0	84.6	15.4		12.4	80.6	7.1		21.6	78.4	0.0		
08:00 Volume	0	0	0	0	0	109	13	122	15	95	9	119	23	129	0	152	393
Peak Factor																	0.971
High Int.	6:45:00 AM				08:30 AM				08:00 AM				08:00 AM				
Volume	0	0	0	0	0	113	21	134	15	95	9	119	23	129	0	152	
Peak Factor																	0.900



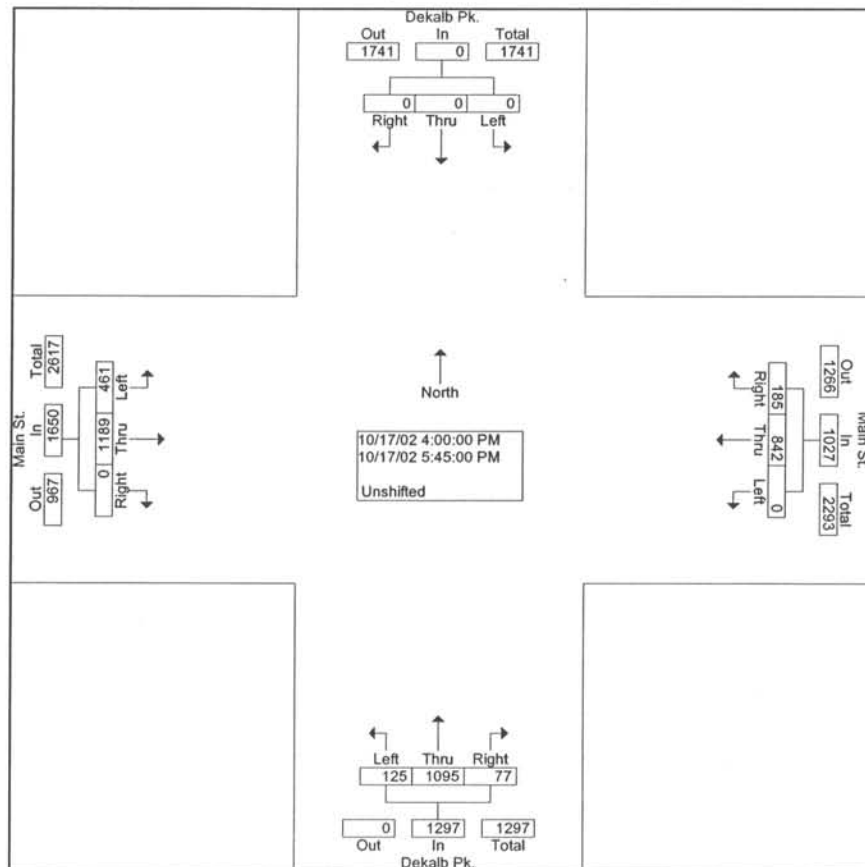
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Dekalb Pk. and Main St.

Counter: 6
Counted By: C. Kent
Weather: sunny
PMMSDP

File Name : PMMSDF
Site Code : 00000001
Start Date : 10/17/2001
Page No : 1

Groups Printed- Unshifted

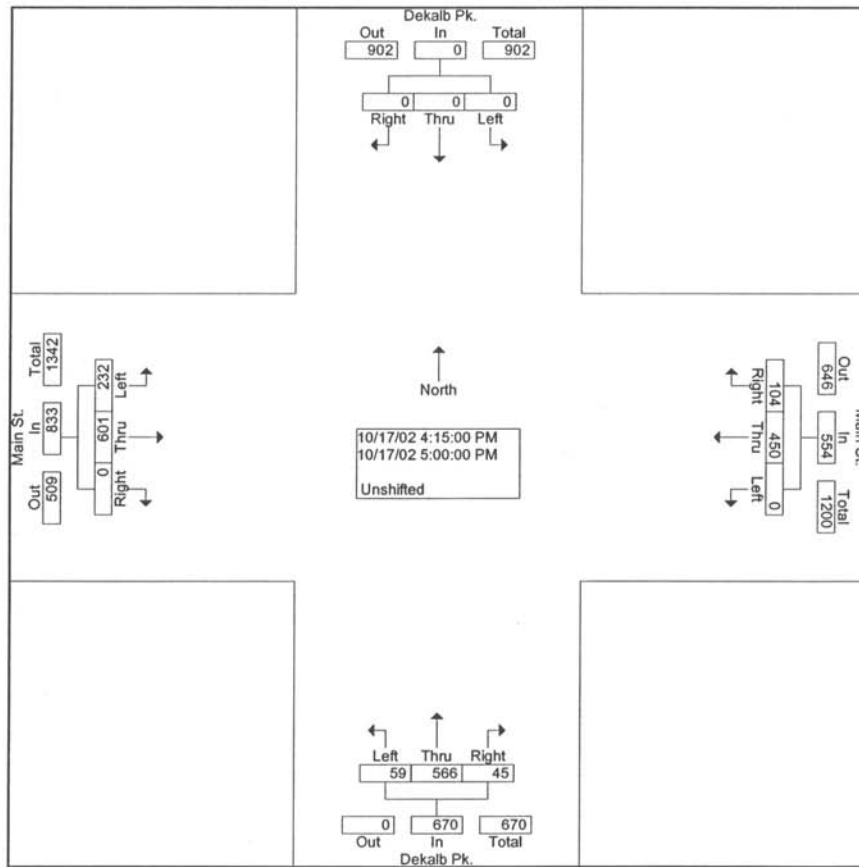
Start Time	Dekalb Pk. Southbound					Main St. Westbound					Dekalb Pk. Northbound					Main St. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
04:00 PM	0	0	0	0	0	0	86	20	1	106	17	133	11	12	161	58	154	0	10	212	23	479	502
04:15 PM	0	0	0	0	0	0	104	29	3	133	13	133	9	7	155	51	157	0	10	208	20	496	516
04:30 PM	0	0	0	0	0	0	111	26	6	137	12	159	10	4	181	65	152	0	7	217	17	535	552
04:45 PM	0	0	0	0	0	0	121	20	4	141	15	137	7	5	159	55	139	0	3	194	12	494	506
Total	0	0	0	0	0	0	422	95	14	517	57	562	37	28	656	229	602	0	30	831	72	2004	2076
05:00 PM	0	0	0	0	0	0	114	29	3	143	19	137	19	9	175	61	153	0	5	214	17	532	549
05:15 PM	0	0	0	0	0	0	100	19	1	119	13	136	5	2	154	64	137	0	2	201	5	474	479
05:30 PM	0	0	0	0	0	0	104	23	2	127	16	139	10	6	165	41	168	0	5	209	13	501	514
05:45 PM	0	0	0	0	0	0	102	19	3	121	20	121	6	3	147	66	129	0	5	195	11	463	474
Total	0	0	0	0	0	0	420	90	9	510	68	533	40	20	641	232	587	0	17	819	46	1970	2016
Grand Total	0	0	0	0	0	0	842	185	23	1027	125	1095	77	48	1297	461	1189	0	47	1650	118	3974	4092
Apprch %	0.0	0.0	0.0			0.0	82.	18.			9.6	84.	5.9			27.	72.	0.0					
Total %	0.0	0.0	0.0		0.0	0.0	21.	4.7		25.8	3.1	27.	1.9		32.6	11.	29.	0.0		41.5	2.9	97.1	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Dekalb Pk. and Main St.

File Name : PMMSDF
Site Code : 00000001
Start Date : 10/17/200
Page No : 2

	Dekalb Pk. Southbound				Main St. Westbound				Dekalb Pk. Northbound				Main St. Eastbound						
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total		
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																			
Intersection	04:15 PM																		
Volume	0	0	0	0	0	450	104	554	59	566	45	670	232	601	0	833	2057		
Percent	0.0	0.0	0.0		0.0	81.2	18.8		8.8	84.5	6.7		27.9	72.1	0.0				
04:30 Volume	0	0	0	0	0	111	26	137	12	159	10	181	65	152	0	217	535		
Peak Factor																	0.961		
High Int.	3:45:00 PM				05:00 PM				04:30 PM				04:30 PM						
Volume	0	0	0	0	0	114	29	143	12	159	10	181	65	152	0	217			
Peak Factor									0.969					0.925					0.960



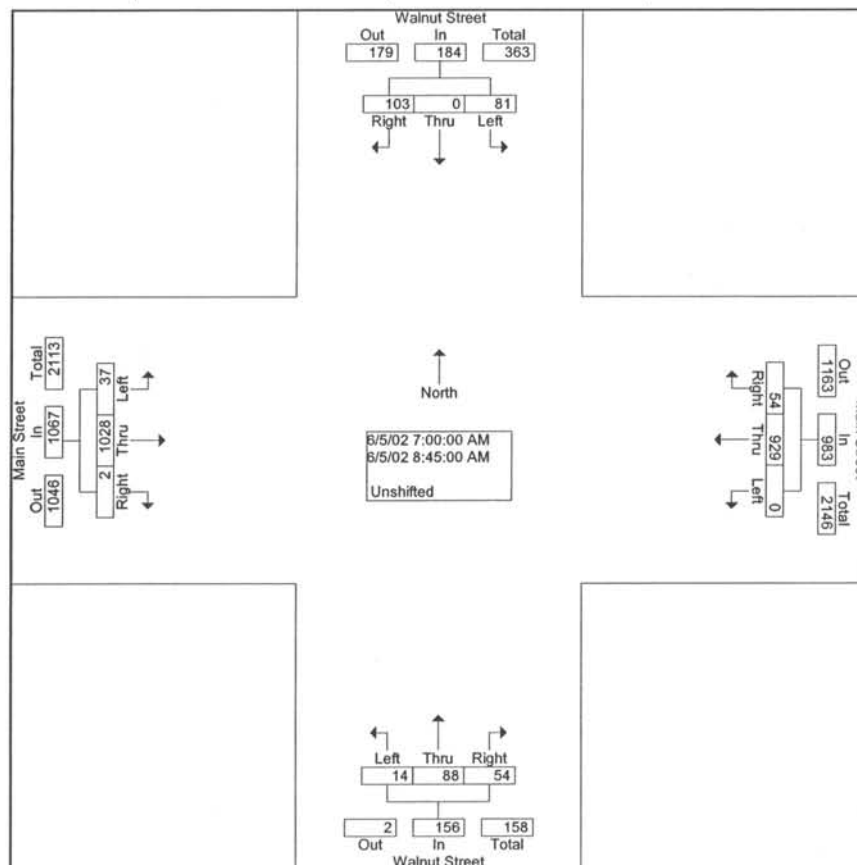
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Walnut St. and Main St.

Counter: 38
Counted By: J. Platt
Weather: sunny

File Name : AMMSW
Site Code : 0000000C
Start Date : 06/05/200
Page No : 1

Groups Printed- Unshifted

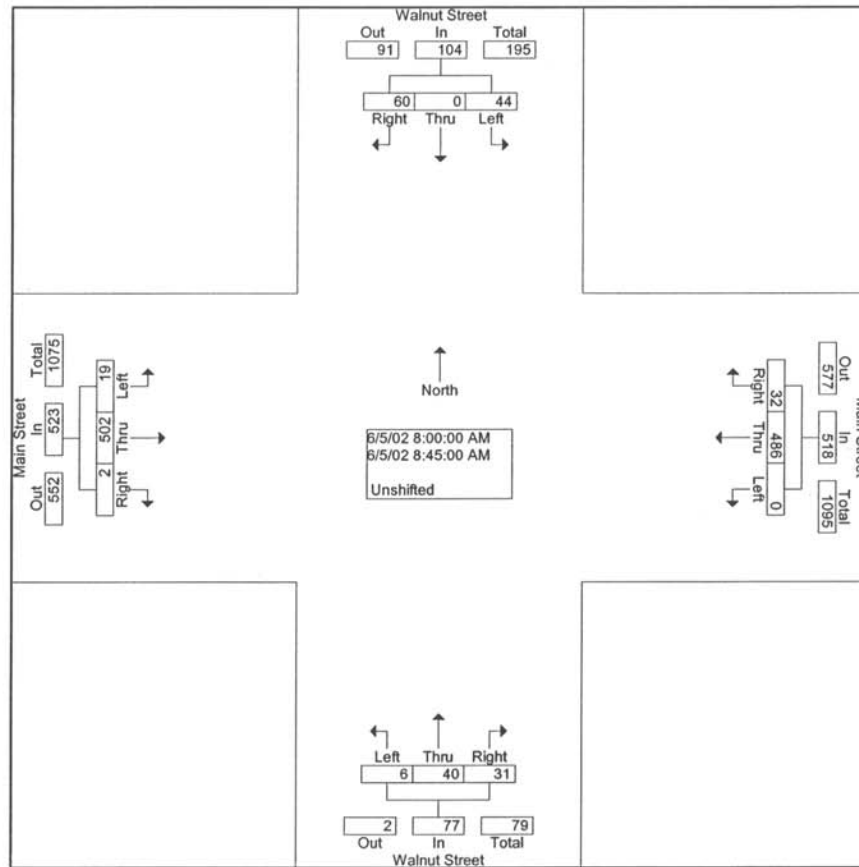
	Walnut Street Southbound					Main Street Westbound					Walnut Street Northbound					Main Street Eastbound					Exclu.	Inclu.	Int.
Start Time	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Total	Total	Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
07:00 AM	3	0	6	0	9	0	113	6	9	119	3	12	5	0	20	1	129	0	5	130	14	278	292
07:15 AM	12	0	13	1	25	0	106	4	10	110	0	10	6	0	16	4	135	0	6	139	17	290	307
07:30 AM	13	0	10	1	23	0	103	8	5	111	4	12	4	1	20	6	151	0	9	157	16	311	327
07:45 AM	9	0	14	1	23	0	121	4	11	125	1	14	8	1	23	7	111	0	9	118	22	289	311
Total	37	0	43	3	80	0	443	22	35	465	8	48	23	2	79	18	526	0	29	544	69	1168	1237
08:00 AM	12	0	21	2	33	0	116	7	10	123	2	10	7	2	19	6	132	1	12	139	26	314	340
08:15 AM	10	0	15	2	25	0	119	4	11	123	2	12	8	1	22	4	113	0	6	117	20	287	307
08:30 AM	14	0	15	2	29	0	115	14	11	129	2	14	6	1	22	3	132	0	10	135	24	315	339
08:45 AM	8	0	9	0	17	0	136	7	8	143	0	4	10	1	14	6	125	1	10	132	19	306	325
Total	44	0	60	6	104	0	486	32	40	518	6	40	31	5	77	19	502	2	38	523	89	1222	1311
Grand Total	81	0	103	9	184	0	929	54	75	983	14	88	54	7	156	37	1028	2	67	1067	158	2390	2548
Apprch %	44.0	0.0	56.0			0.0	94.5	5.5			9.0	56.4	34.6			3.5	96.3	0.2					
Total %	3.4	0.0	4.3		7.7	0.0	38.9	2.3		41.1	0.6	3.7	2.3		6.5	1.5	43.0	0.1		44.6	6.2	93.8	



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Walnut St. and Main St.

File Name : AMMSW
Site Code : 0000000C
Start Date : 06/05/200
Page No : 2

	Walnut Street Southbound				Main Street Westbound				Walnut Street Northbound				Main Street Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Intersection	08:00 AM																
Volume	44	0	60	104	0	486	32	518	6	40	31	77	19	502	2	523	1222
Percent	42.3	0.0	57.7		0.0	93.8	6.2		7.8	51.9	40.3		3.6	96.0	0.4		
08:30 Volume	14	0	15	29	0	115	14	129	2	14	6	22	3	132	0	135	315
Peak Factor																	0.970
High Int.	08:00 AM				08:45 AM				08:15 AM				08:00 AM				
Volume	12	0	21	33	0	136	7	143	2	12	8	22	6	132	1	139	
Peak Factor				0.788				0.906				0.875				0.941	



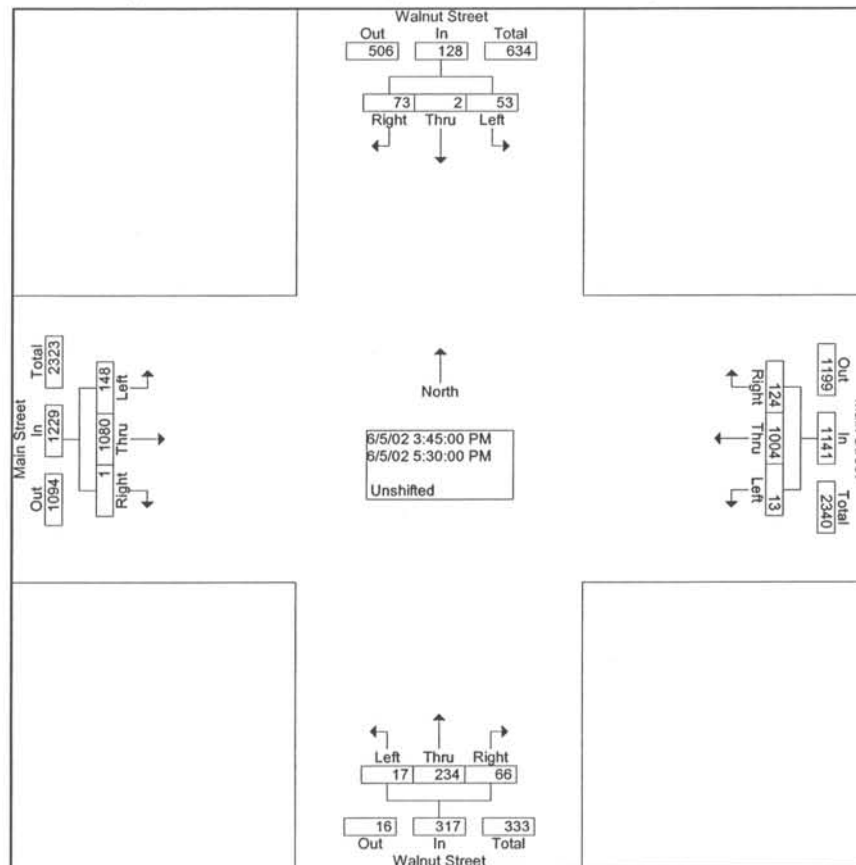
Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Walnut St. and Main St.

Counter: 38
Counted By: J. Platt
Weather: sunny

File Name : PMMSW:
Site Code : 0000000C
Start Date : 06/05/200
Page No : 1

Groups Printed- Unshifted

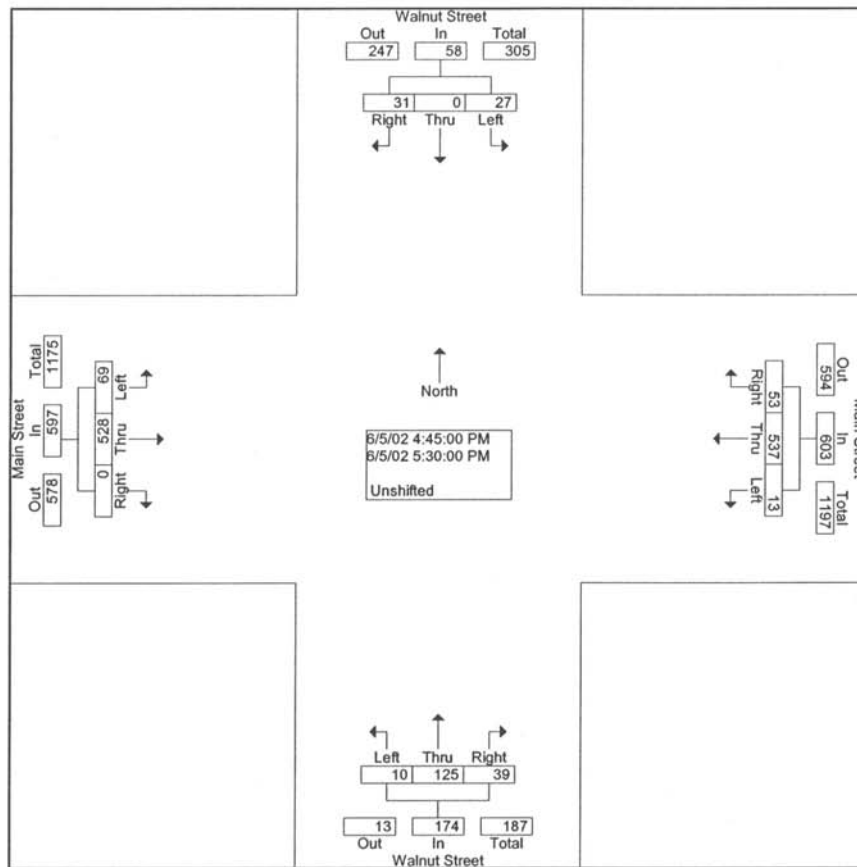
	Walnut Street Southbound					Main Street Westbound					Walnut Street Northbound					Main Street Eastbound					Exclu	Inclu	Int
Start Time	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Left	Thru	Right	truck	App. Total	Total	Total	Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
03:45 PM	6	2	3	0	11	0	142	23	3	165	1	18	6	0	25	15	161	0	10	176	13	377	390
Total	6	2	3	0	11	0	142	23	3	165	1	18	6	0	25	15	161	0	10	176	13	377	390
04:00 PM	5	0	12	2	17	0	113	13	1	126	1	22	7	1	30	23	122	0	10	145	14	318	332
04:15 PM	9	0	12	0	21	0	113	20	7	133	3	34	8	1	45	23	146	0	5	169	13	368	381
04:30 PM	6	0	15	0	21	0	99	15	2	114	2	35	6	1	43	18	123	1	7	142	10	320	330
04:45 PM	13	0	9	2	22	1	125	17	4	143	4	29	19	1	52	21	156	0	7	177	14	394	408
Total	33	0	48	4	81	1	450	65	14	516	10	120	40	4	170	85	547	1	29	633	51	1400	1451
05:00 PM	5	0	7	1	12	0	128	12	4	140	2	41	5	0	48	12	132	0	2	144	7	344	351
05:15 PM	4	0	12	0	16	0	140	14	4	154	3	32	13	0	48	12	117	0	4	129	8	347	355
05:30 PM	5	0	3	0	8	12	144	10	5	166	1	23	2	0	26	24	123	0	3	147	8	347	355
Grand Total	53	2	73	5	128	13	1004	124	30	1141	17	234	66	4	317	148	1080	1	48	1229	87	2815	2902
Apprch %	41.	1.6	57.			1.1	88.	10.			5.4	73.	20.			12.	87.	0.1					
Total %	4	0				35.	0	9			8	8				0	9						
	1.9	0.1	2.6		4.5	0.5	35.	4.4		40.5	0.6	8.3	2.3		11.3	5.3	38.	0.0		43.7	3.0	97.0	
						7										4							



Traffic Planning and Design
2500 East High Street, Suite 650
Pottstown, PA 19464
Walnut St. and Main St.

File Name : PMMSW;
Site Code : 0000000C
Start Date : 06/05/20C
Page No : 2

	Walnut Street Southbound				Main Street Westbound				Walnut Street Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour From 03:45 PM to 05:30 PM - Peak 1 of 1																	
Intersection	04:45 PM																
Volume	27	0	31	58	13	537	53	603	10	125	39	174	69	528	0	597	1432
Percent	46.6	0.0	53.4		2.2	89.1	8.8		5.7	71.8	22.4		11.6	88.4	0.0		
04:45 Volume	13	0	9	22	1	125	17	143	4	29	19	52	21	156	0	177	394
Peak Factor																	0.909
High Int.	04:45 PM				05:30 PM				04:45 PM				04:45 PM				
Volume	13	0	9	22	12	144	10	166	4	29	19	52	21	156	0	177	
Peak Factor	0.659				0.908				0.837				0.843				



Municipality: Norristown, PA
 Location: Main St & Ford St/ High St

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034

Study Name: LAFAY02W
 Site Code : 80007102
 Start Date: 05/03/00
 Page : 1

Counter/Board #: JB2/MCM-1398

Start	High St Southbound					Main St Westbound					Ford St Northbound					Main St Eastbound					Intvl
Time	Left	Thru	Right	RTOR	HV	Left	Thru	Right	RTOR	HV	Left	Thru	RTOR	Right	HV	Left	Thru	Right	RTOR	HV	Total
05/03/00																					
07:00	3	0	18	0	0	0	201	2	0	11	3	7	0	54	2	1	136	0	0	6	444
07:15	9	0	27	1	1	0	222	2	0	17	4	14	1	53	6	1	131	0	0	5	494
07:30	4	0	34	2	1	0	238	2	0	20	2	17	0	64	5	8	107	0	0	3	507
07:45	2	0	48	0	0	0	236	3	2	11	2	14	0	72	12	1	136	0	0	9	548
Hour	18	0	127	3	2	0	897	9	2	59	11	52	1	243	25	11	510	0	0	23	1993
08:00	5	0	29	0	0	0	224	3	1	13	4	8	1	57	9	5	141	0	0	5	505
08:15	3	0	39	0	0	0	205	1	2	14	3	8	1	44	8	6	117	0	0	1	452
08:30	3	0	25	1	0	0	230	5	0	16	2	10	0	51	4	3	130	0	0	3	483
08:45	7	0	23	0	0	0	234	5	4	13	2	14	1	46	4	3	78	0	0	3	437
Hour	18	0	116	1	0	0	893	14	7	56	11	40	3	198	25	17	466	0	0	12	1877
[BREAK]																					
16:00	0	0	13	0	0	0	187	12	3	10	4	20	0	78	4	6	154	0	0	5	496
16:15	0	0	16	0	0	0	203	14	0	9	3	22	0	68	6	9	155	0	0	5	510
16:30	2	0	16	0	0	0	199	15	5	16	7	22	1	70	3	4	149	0	0	4	513
16:45	3	1	13	0	0	0	186	11	4	12	6	17	1	70	3	4	130	0	0	1	462
Hour	5	1	58	0	0	0	775	52	12	47	20	81	2	286	16	23	588	0	0	15	1981
17:00	6	0	18	0	2	0	235	17	3	6	8	28	0	70	2	5	139	0	0	2	541
17:15	2	0	20	0	0	0	202	9	3	4	5	27	2	81	2	6	121	0	0	2	486
17:30	2	0	17	0	0	0	220	7	2	9	4	23	0	80	1	6	137	0	0	7	515
17:45	1	0	16	3	0	0	173	7	1	5	5	28	2	83	3	7	125	0	0	1	460
Hour	11	0	71	3	2	0	830	40	9	24	22	106	4	314	8	24	522	0	0	12	2002
Total	52	1	372	7	4	0	3395	115	30	186	64	279	10	1041	74	75	2086	0	0	62	7853
% Apr.	11.9	0.2	85.3	1.6	0.9	-	91.1	3.0	0.8	4.9	4.3	19.0	0.6	70.9	5.0	3.3	93.8	-	-	2.7	-
% Int.	0.6	-	4.7	-	-	-	43.2	1.4	0.3	2.3	0.8	3.5	0.1	13.2	0.9	0.9	26.5	-	-	0.7	-

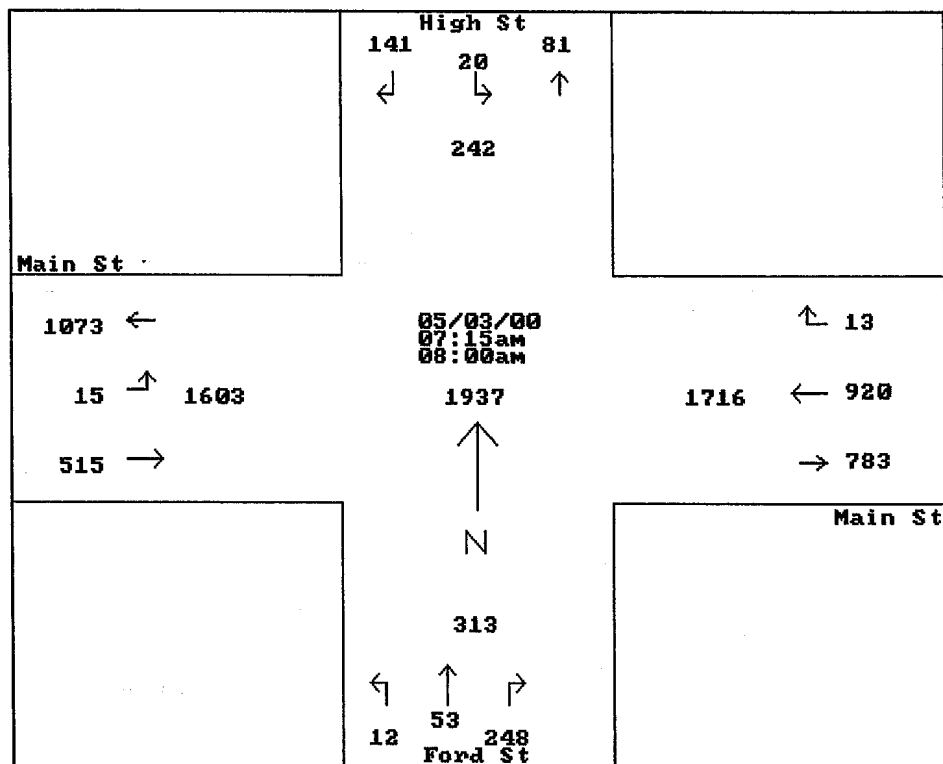
Municipality: Norristown, PA
 Location: Main St & Ford St/ High St

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034

Study Name: LAFAY02W
 Site Code : 80007102
 Start Date: 05/03/00
 Page : 2

Counter/Board #: JB2/McM-1398

Start	High St Southbound					Main St Westbound					Ford St Northbound					Main St Eastbound					Intvl
Time	Left	Thru	Right	RTOR	HV	Left	Thru	Right	RTOR	HV	Left	Thru	RTOR	Right	HV	Left	Thru	Right	RTOR	HV	Total
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 05/03/00 to 08:45 on 05/03/00																					
Time	07:15					07:15					07:15					07:15					
Vol.	20	0	138	3	x	0	920	10	3	x	12	53	2	246	x	15	515	0	0	x	
Pct.	12.4	0.0	85.7	1.8	x	0.0	98.6	1.0	0.3	x	3.8	16.9	0.6	78.5	x	2.8	97.1	0.0	0.0	x	
Total	161					933					313					530					
High	07:45					07:45					07:45					08:00					
Vol.	2	0	48	0	x	0	236	3	2	x	2	14	0	72	x	5	141	0	0	x	
Total	50					241					88					146					
PHF	0.805					0.967					0.889					0.907					

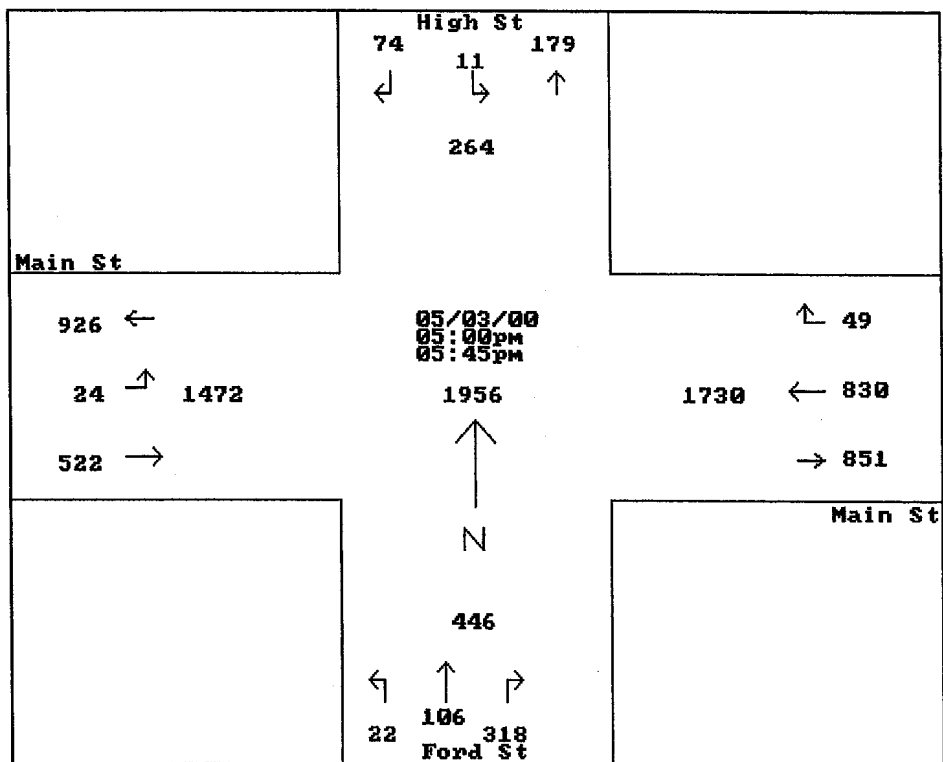


Municipality: Norristown, PA
 Location: Main St & Ford St/ High St
 Counter/Board #: JB2/MCM-1398

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Dr, Suite 200
 Ft. Washington, PA 19034

Study Name: LAFAY02W
 Site Code : 80007102
 Start Date: 05/03/00
 Page : 3

Start	High St Southbound					Main St Westbound					Ford St Northbound					Main St Eastbound					Intvl
Time	Left	Thru	Right	RTOR	HV	Left	Thru	Right	RTOR	HV	Left	Thru	RTOR	Right	HV	Left	Thru	Right	RTOR	HV	Total
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 05/03/00 to 17:45 on 05/03/00																					
Time	17:00					17:00					17:00					17:00					
Vol.	11	0	71	3	x	0	830	40	9	x	22	106	4	314	x	24	522	0	0	x	
Pct.	12.9	0.0	83.5	3.5	x	0.0	94.4	4.5	1.0	x	4.9	23.7	0.8	70.4	x	4.3	95.6	0.0	0.0	x	
Total	85					879					446					546					
High	17:00					17:00					17:45					17:00					
Vol.	6	0	18	0	x	0	235	17	3	x	5	28	2	83	x	5	139	0	0	x	
Total	24					255					118					144					
PHF	0.885					0.861					0.944					0.947					



Municipality: Norristown	McMahon Associates, Inc.	Study Name: DVRPC28W
Location: Conshohocken Rd/Lercetta St &	Transportation Engineers & Planners	Site Code : 00000000
Ridge Pike	425 Commerce Drive, Suite 200	Start Date: 06/12/01
Counter/Board #: ED/2214	Fort Washington, PA 19034-2716	Page : 1

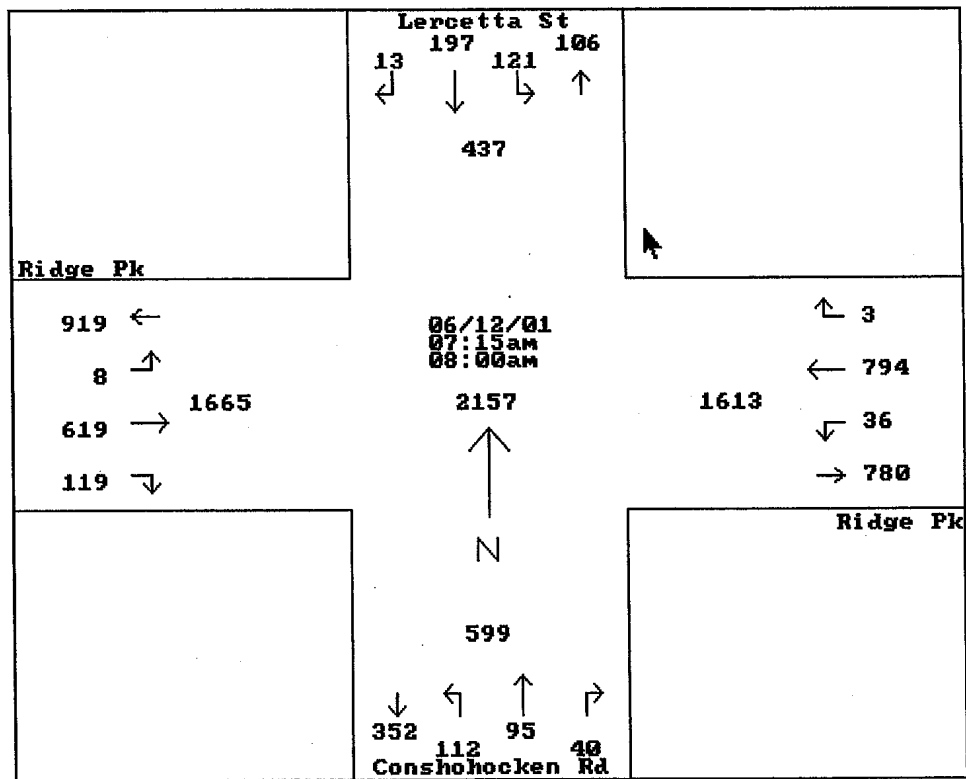
Start Time	Lercetta St From North				Ridge Pk From East				Conshohocken Rd From South				Ridge Pk From West				Intvl Exclu Inclu		
	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Total	Total	Total
06/12/01																			
07:00	24	47	0	6	2	137	0	21	28	24	9	10	0	112	28	19	467	56	411
07:15	43	55	3	2	6	187	0	12	24	17	11	30	0	162	42	6	600	50	550
07:30	25	40	2	2	11	223	2	15	28	30	9	9	5	153	29	13	596	39	557
07:45	22	47	3	2	11	203	0	13	29	23	6	8	1	166	26	14	574	37	537
Hour	114	189	8	12	30	750	2	61	109	94	35	57	6	593	125	52	2237	182	2055
08:00	31	55	5	0	8	181	1	10	31	25	14	11	2	138	22	17	551	38	513
08:15	25	32	0	1	9	168	1	17	42	30	11	9	3	134	28	20	530	47	483
08:30	15	37	1	3	10	161	1	31	26	16	4	9	0	138	36	19	507	62	445
08:45	19	33	3	7	11	169	2	19	17	34	10	11	1	124	21	20	501	57	444
Hour	90	157	9	11	38	679	5	77	116	105	39	40	6	534	107	76	2089	204	1885
[BREAK]																			
16:00	12	26	1	1	2	147	3	17	45	44	18	5	4	175	29	9	538	32	506
16:15	20	26	3	0	2	166	3	14	50	39	16	4	1	176	38	7	565	25	540
16:30	19	33	5	2	3	175	2	15	43	50	29	5	1	200	27	7	616	29	587
16:45	24	51	6	2	1	150	0	8	43	41	19	10	3	181	33	9	581	29	552
Hour	75	136	15	5	8	638	8	54	181	174	82	24	9	732	127	32	2300	115	2185
17:00	34	43	3	0	9	161	1	4	64	62	29	2	1	183	22	5	623	11	612
17:15	24	32	3	2	5	169	0	6	53	52	24	5	3	174	31	8	591	21	570
17:30	16	29	5	0	3	171	0	9	39	43	13	6	3	192	28	7	564	22	542
17:45	13	27	0	0	4	109	2	2	39	57	13	0	3	164	22	4	459	6	453
Hour	67	131	11	2	21	610	3	21	195	214	79	13	10	713	103	24	2237	60	2177
Total	366	613	43	30	97	2677	18	213	601	587	235	134	31	2572	462	184	8863	561	8302
% Apr.	34.7	58.2	4.0	2.8	3.2	89.0	0.5	7.0	38.5	37.7	15.0	8.6	0.9	79.1	14.2	5.6	-	-	-
% Int.	4.1	6.9	0.4	0.3	1.0	30.2	0.2	2.4	6.7	6.6	2.6	1.5	0.3	29.0	5.2	2.0	-	-	-

Municipality: Norristown
 Location: Conshohocken Rd/Lercetta St &
 Ridge Pike
 Counter/Board #: ED/2214

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Drive, Suite 200
 Fort Washington, PA 19034-2716

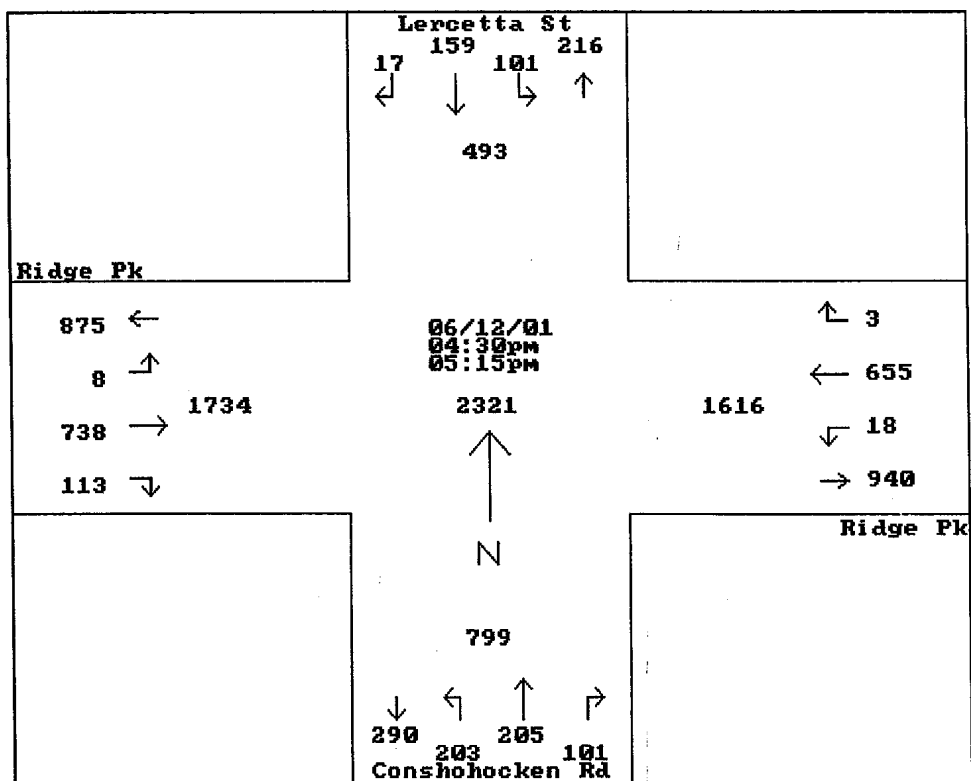
Study Name: DVRPC28W
 Site Code : 00000000
 Start Date: 06/12/01
 Page : 2

	Lercetta St					Ridge Pk					Conshohocken Rd					Ridge Pk							
	From North					From East					From South					From West							
Start																				Intvl	Exclu	Inclu	
Time	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Left	Thru	Right	HV	Total	Total	Total
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 06/12/01 to 08:45 on 06/12/01																							
Time	07:15					07:15					07:15					07:15							
Vol.	121	197	13	x	36	794	3	x	112	95	40	x	8	619	119	x							
Pct.	36.5	59.5	3.9	x	4.3	95.3	0.3	x	45.3	38.4	16.1	x	1.0	82.9	15.9	x							
Total	331					833					247					746							
High	07:15					07:30					08:00					07:15							
Vol.	43	55	3	x	11	223	2	x	31	25	14	x	0	162	42	x							
Total	101					236					70					204							
PHF	0.819					0.882					0.882					0.914							



Municipality: Norristown	McMahon Associates, Inc.	Study Name: DVRPC28W
Location: Conshohocken Rd/Lercetta St &	Transportation Engineers & Planners	Site Code : 00000000
Ridge Pike	425 Commerce Drive, Suite 200	Start Date: 06/12/01
Counter/Board #: ED/2214	Fort Washington, PA 19034-2716	Page : 3

	Lercetta St					Ridge Pk					Conshohocken Rd					Ridge Pk							
	From North					From East					From South					From West							
Start																				Intvl	Exclu	Inclu	
Time	Left	Thru	Right		HV	Left	Thru	Right		HV	Left	Thru	Right		HV	Left	Thru	Right		HV	Total	Total	Total
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 06/12/01 to 17:45 on 06/12/01																							
Time	16:30					16:30					16:30					16:30							
Vol.	101	159	17	x		18	655	3	x		203	205	101	x		8	738	113	x				
Pct.	36.4	57.4	6.1	x		2.6	96.8	0.4	x		39.8	40.2	19.8	x		0.9	85.9	13.1	x				
Total	277					676					509					859							
High	16:45					16:30					17:00					16:30							
Vol.	24	51	6	x		3	175	2	x		64	62	29	x		1	200	27	x				
Total	81					180					155					228							
PHF	0.854					0.938					0.820					0.941							



Municipality: Norristown
Location: Ridge Pk & Fairfield Rd

McMahon Associates, Inc.
Transportation Engineers & Planners
425 Commerce Drive, Suite 200
Fort Washington, PA 19034-2716

Study Name: DVRPC03W
Site Code : 80100203
Start Date: 06/12/01
Page : 1

Counter/Board #: JC/2215

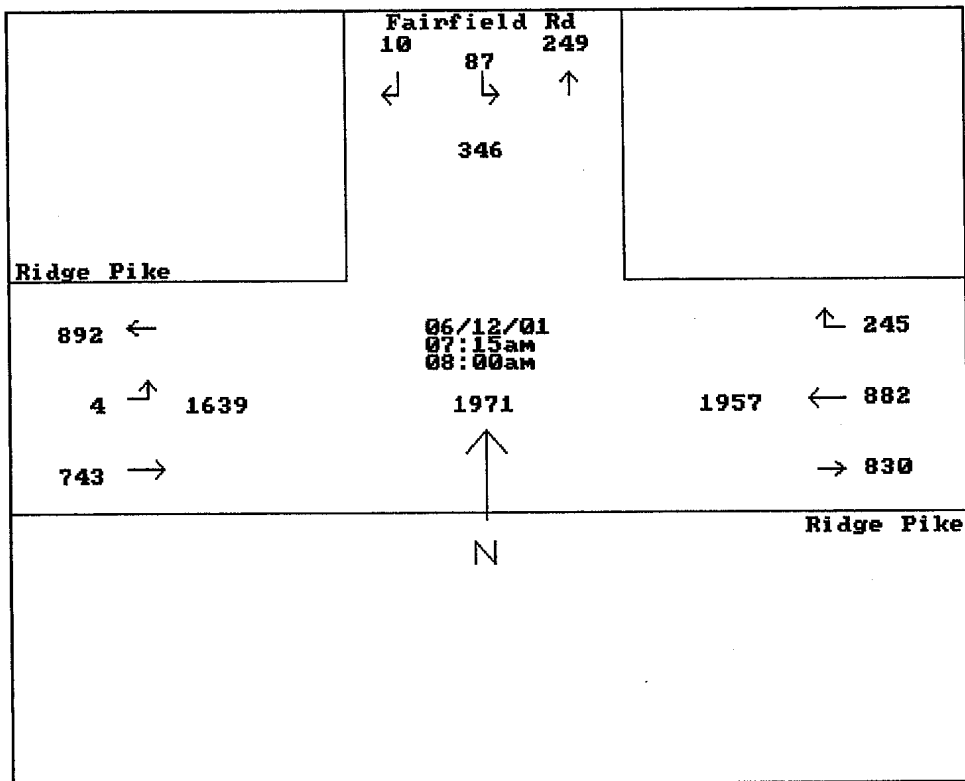
Start Time	Fairfield Rd Southbound			Ridge Pike Westbound			Ridge Pike Eastbound			Intrvl. Exclude Include		
	Left	Right	HV	Thru	Right	HV	Left	Thru	HV	Total	Total	Total
06/12/01												
07:00	31	1	2	161	39	10	3	153	9	409	21	388
07:15	33	6	0	206	47	3	0	195	3	493	6	487
07:30	18	2	0	232	68	6	0	179	7	512	13	499
07:45	5	2	0	230	72	2	1	186	4	502	6	496
Hour	87	11	2	829	226	21	4	713	23	1916	46	1870
08:00	31	0	0	214	58	1	3	183	4	494	5	489
08:15	12	1	0	195	51	8	1	190	6	464	14	450
08:30	20	4	2	205	71	14	3	167	5	491	21	470
08:45	11	2	0	199	46	2	0	167	6	433	8	425
Hour	74	7	2	813	226	25	7	707	21	1882	48	1834
[BREAK]	-----											
16:00	17	2	0	162	77	12	5	211	6	492	18	474
16:15	20	3	0	190	70	9	6	210	7	515	16	499
16:30	23	0	0	188	89	8	3	246	3	560	11	549
16:45	21	0	0	151	106	5	5	221	4	513	9	504
Hour	81	5	0	691	342	34	19	888	20	2080	54	2026
17:00	22	1	0	176	135	1	14	243	4	596	5	591
17:15	25	1	1	170	117	2	3	212	6	537	9	528
17:30	22	1	0	162	110	7	9	202	4	517	11	506
17:45	23	4	0	141	79	2	2	216	2	469	4	465
Hour	92	7	1	649	441	12	28	873	16	2119	29	2090
Total	334	30	5	2982	1235	92	58	3181	80	7997	177	7820
% Apr.	90.5	8.1	1.3	69.2	28.6	2.1	1.7	95.8	2.4	-	-	-
% Int.	4.1	0.3	-	37.2	15.4	1.1	0.7	39.7	1.0	-	-	-

Municipality: Norristown
 Location: Ridge Pk & Fairfield Rd
 Counter/Board #: JC/2215

McMahon Associates, Inc.
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 425 Commerce Drive, Suite 200
 Fort Washington, PA 19034-2716

Study Name: DVRPC03W
 Site Code : 80100203
 Start Date: 06/12/01
 Page : 2

Start Time	Fairfield Rd Southbound		HV	Ridge Pike Westbound		HV	Ridge Pike Eastbound		HV	Intrvl.	Exclude	Include
	Left	Right		Thru	Right		Left	Thru				
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 06/12/01 to 08:45 on 06/12/01												
Time	07:15			07:15			07:15					
Vol.	87	10	x	882	245	x	4	743	x			
Pct.	89.6	10.3	x	78.2	21.7	x	0.5	99.4	x			
Total	97			1127			747					
High	07:15			07:45			07:15					
Vol.	33	6	x	230	72	x	0	195	x			
Total	39			302			195					
PHF	0.621			0.932			0.957					

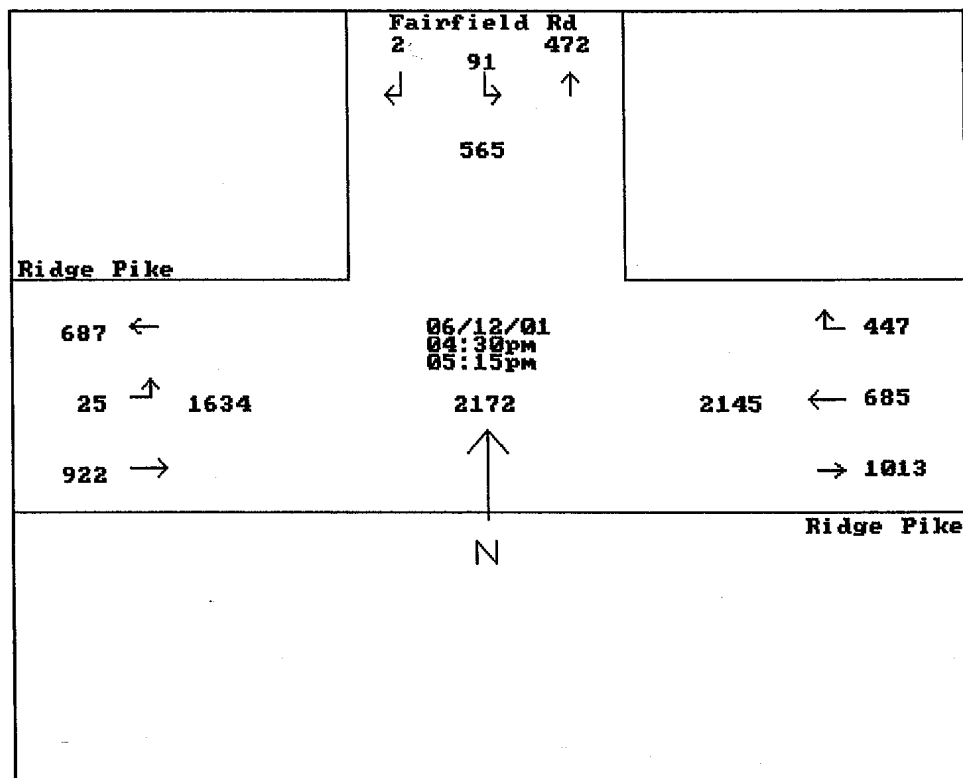


Municipality: Norristown
 Location: Ridge Pk & Fairfield Rd
 Counter/Board #: JC/2215

McMahon Associates, Inc.
 Transportation Engineers & Planners
 425 Commerce Drive, Suite 200
 Fort Washington, PA 19034-2716

Study Name: DVRPC03W
 Site Code : 80100203
 Start Date: 06/12/01
 Page : 3

Start	Fairfield Rd Southbound			Ridge Pike Westbound			Ridge Pike Eastbound			Intrvl.	Exclude	Include
Time	Left	Right	HV	Thru	Right	HV	Left	Thru	HV	Total	Total	Total
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 06/12/01 to 17:45 on 06/12/01												
Time	16:30			16:30			16:30					
Vol.	91	2	x	685	447	x	25	922	x			
Pct.	97.8	2.1	x	60.5	39.4	x	2.6	97.3	x			
Total	93			1132			947					
High	17:15			17:00			17:00					
Vol.	25	1	x	176	135	x	14	243	x			
Total	26			311			257					
PHF	0.894			0.909			0.921					



Lafayette Street Traffic Study - Montgomery County, Pennsylvania

Publication No. : 04005

Date Published: March 2004

Geographic Area Covered: Plymouth Township, Upper Merion Township, West Norriton Township, Bridgeport Borough, Conshohocken Borough, Norristown Borough, in Montgomery County.

Key Words: Highway Network, Traffic Simulation, Traffic Demand Forecasting Analysis, Traffic Volumes, Peak Hour Turning Movements, Design Factors, Lafayette Street.

ABSTRACT

This report presents 2010 and 2030 forecasts for the No-Build and Build with and without Development Surcharge Alternatives for the Lafayette Street corridor and surrounding study area. It was prepared at the request of the Pennsylvania Department of Transportation, which is conducting traffic alternatives analyses in support of providing new slip ramps between Lafayette Street and the Pennsylvania Turnpike. DVRPC's travel simulation model was utilized to estimate future traffic volumes for the No-Build and Build Alternatives. The build alternatives assume completion of the new slip ramps between Lafayette Street and the Pennsylvania Turnpike as well as widening of Lafayette Street into a four lane principal arterial as it approached the proposed Turnpike slip ramps near Conshohocken Road.

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