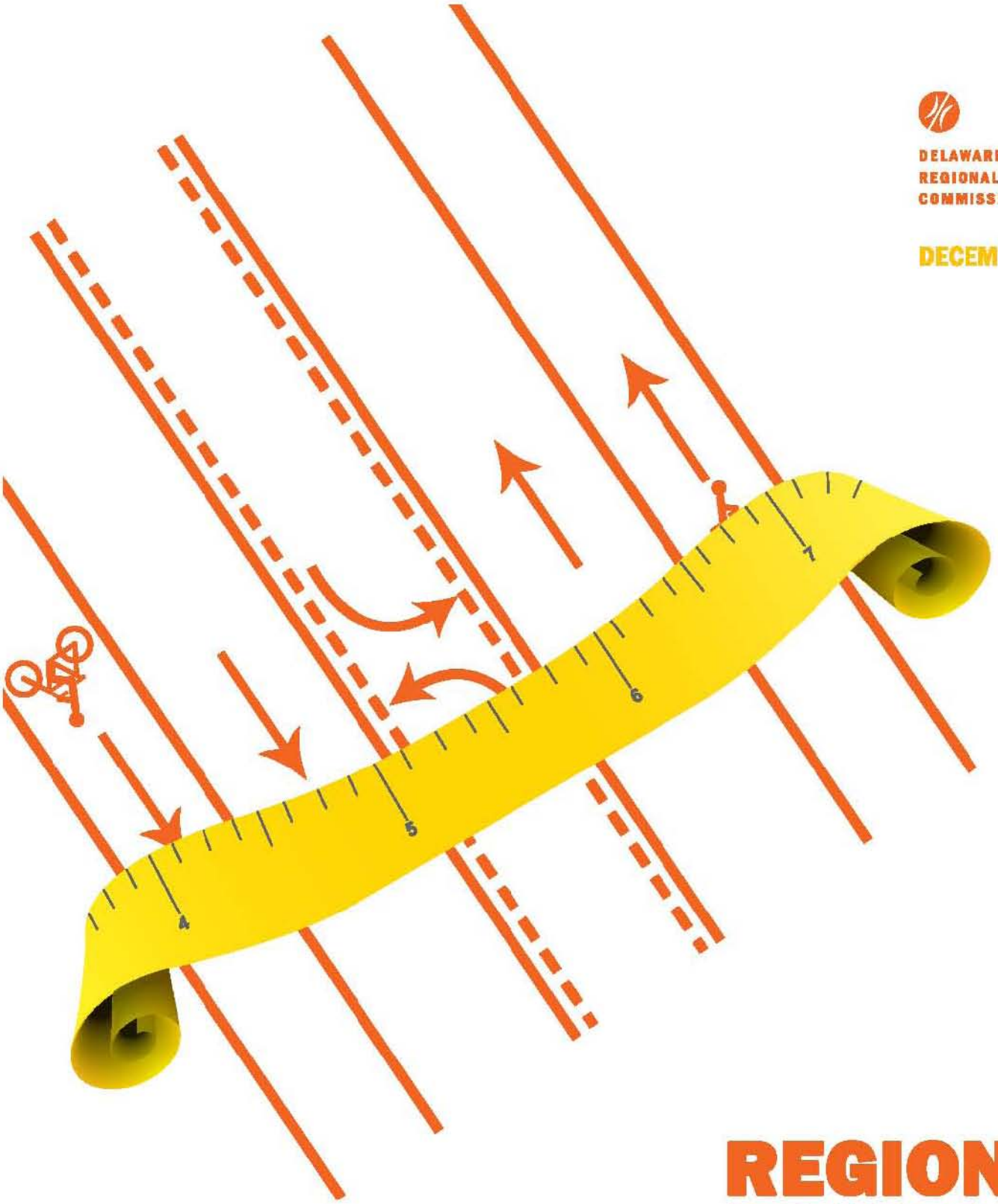


DELAWARE VALLEY
REGIONAL PLANNING
COMMISSION

DECEMBER 2008

REGIONAL ROAD DIET ANALYSIS

FEASIBILITY ASSESSMENT

The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals and the public with a common vision of making a great region even greater. Shaping the way we live, work and play, DVRPC builds consensus on improving transportation, promoting smart growth, protecting the environment and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region - leading the way to a better future.

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

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

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

1.0 INTRODUCTION

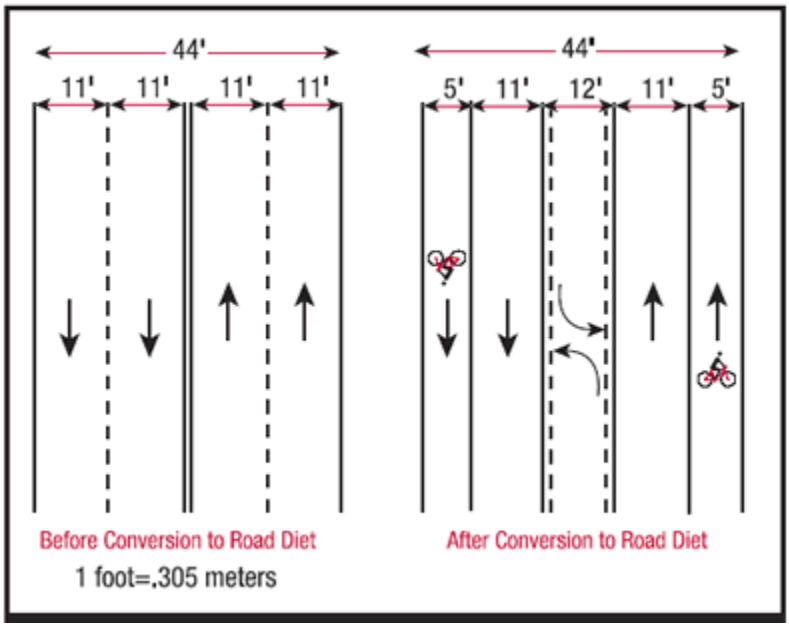
The goal of this project is to examine the effectiveness of road diet conversions on transportation safety while maintaining adequate traffic flow. In cooperation with our planning partners and other stakeholders, this project will identify guidelines for the conditions in which road diets are appropriate to accomplish the goal of increasing safety while preserving mobility. These guidelines were then applied to select locations in the region to determine if appropriate for road diet application. An objective of this project is to show that the concept can be applied in many other projects and programs, and included in the toolbox of strategies for corridor studies and congestion management.

As transportation planning becomes more comprehensive and integrated, we find that many of our roads are unaccommodating for non-automotive modes of travel. In the past, most roadway improvements were skewed towards more efficient automotive travel in many instances to the detriment of other travel modes. These roads tend to encourage higher speeds and conflict points are numerous. In many cases, a road diet can serve as a cost and time effective means of satisfying the need for safer roads while still maintaining adequate level of service.

Road Diet

A typical road diet technique is to reduce the number of lanes on a roadway cross-section. One of the most common applications of a road diet is to convert a four-lane roadway, into three lanes with one travel lane in each direction and a two-way left-turn lane in the middle.

***Figure 1*: A Typical Road Diet Conversion**



(http://www.tfhrc.gov/safety/hsis/pubs/04082/fig1.gif)

Road diets can be used as a safety tool, or as a design objective. Initial public perception of road diets is that they are a reduction in the roadway capacity. Most users believe that a road diet will result in much worse traffic congestion than the original four-lane design and that they are no safer than a four-lane configuration. Businesses also frequently object to road diets because they believe that they will have fewer customers (due to the perceived reduction in capacity). In both cases road users and business owners believe the reduction in capacity will mean a diversion of traffic onto other streets. Several research and case studies indicate that this is rarely the case.

Methodology

Several research papers and publications have been completed on road diets. In addition, numerous articles have been posted on the concept and many case studies have been documented. Drawing from these, this project has developed the documents, *Road Diets: Primer* and *Municipal Implementation Tool #16*, *Road Diets* which discuss – what a road diet is, its effects, and guidelines for application. These documents are intended to give the reader general information on the road diet concept and its application. The reader is encouraged to see any of the referenced sources for further information.

This report documents the characteristics and the analysis of three locations in DVRPC's New Jersey region for their suitability for road diet conversion. The length and character of the three corridors vary. They are sections of Parkway Avenue (CR 634) in Ewing Township; Haddonfield Road (CR 644) in Pennsauken Township; and Delsea Drive (NJ 47) in Glassboro Borough.

Based on select road diet criteria, roadway segments were selected and submitted to the corresponding counties. The three locations being studied were selected. The study team conducted field views of the locations to observe the issues. Data was then compiled and analyzed. This included land use data, crash records data, transit data, Average Annual Daily Traffic (AADT), turning movement counts, opportunities for vehicles to make left-turns, and non-motorized traffic. Subsequently, a technical analysis was performed to quantify the effects of the road diet application. This included conducting arterial travel and intersection level of service (LOS) analyses. Based on these analyses, findings and recommendations are made.

2.0 CANDIDATE SELECTION PROCESS

One of the most common applications of a road diet is the conversion a 4-lane roadway, into 3 lanes with one travel lane in each direction and a two-way left-turn lane in the middle. Given this, a regional scan was conducted for segments for roadways in the New Jersey region that could be eligible for a road diet application. Two-way, undivided roadway segments with four-lanes were used as the preliminary criteria to select candidate locations using GIS. Maps were generated showing identified locations with corresponding lists; see ***Figures 2, 3, 4,*** *and* ***5***. Corresponding tables were developed that supplied additional data for each identified segment. The data included:

- county name
- municipality name
- State Route Identifier (SRI)
- route number
- milepost start/milepost end (per segment)
- pavement width (feet)
- number of Average Annual Daily Traffic (AADT) counts available in the system for that segment
- average of those AADTs

The tables and accompanying county maps were sent to each of the four county planning and/or engineering departments to assist in the final selection of corridors for study. As well as the candidate road segment information, county planning partners were armed with the *Road Diets: Primer* which discussed criteria and benefits of a road diet application. Given their familiarity with the identified roadway segments they were asked to assess them for suitability and make prioritized selections. Additionally, they were encouraged to select segments which did not appear on the list but considered priority for the road diet application.

A short list of candidate locations was received from three of the four counties. The DVRPC study team conducted field visits to each of the highest priority candidate locations, and this led to the final selection of one location in the responding counties for further analysis.

Selected locations are – a 2-mile section of Parkway Avenue in Ewing Township, Mercer County; a 0.6 mile section of NJ 47 (Delsea Drive) in Glassboro, Gloucester County; and a 1.4 mile section of Haddonfield Road in Pennsauken, Camden County.

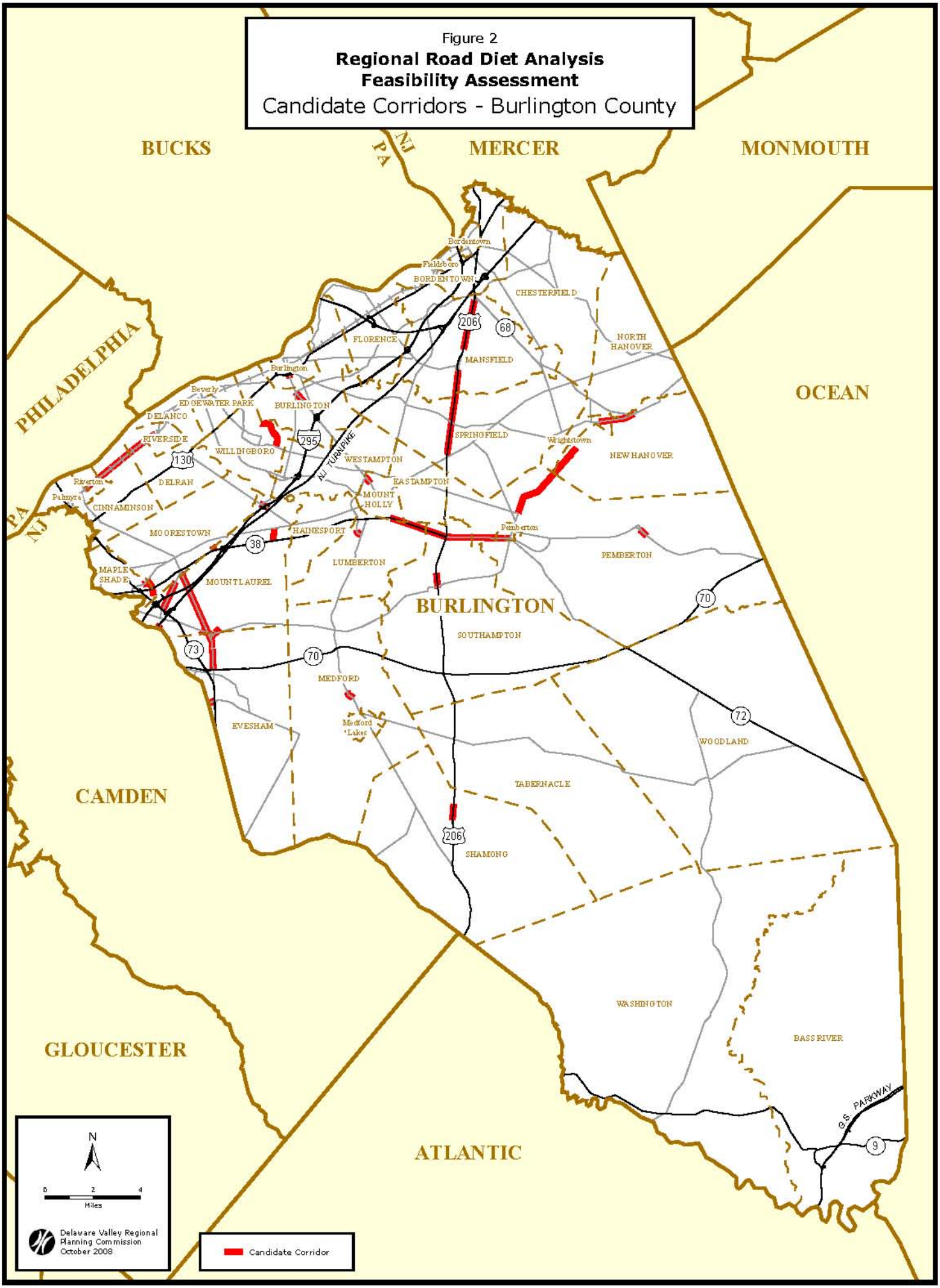
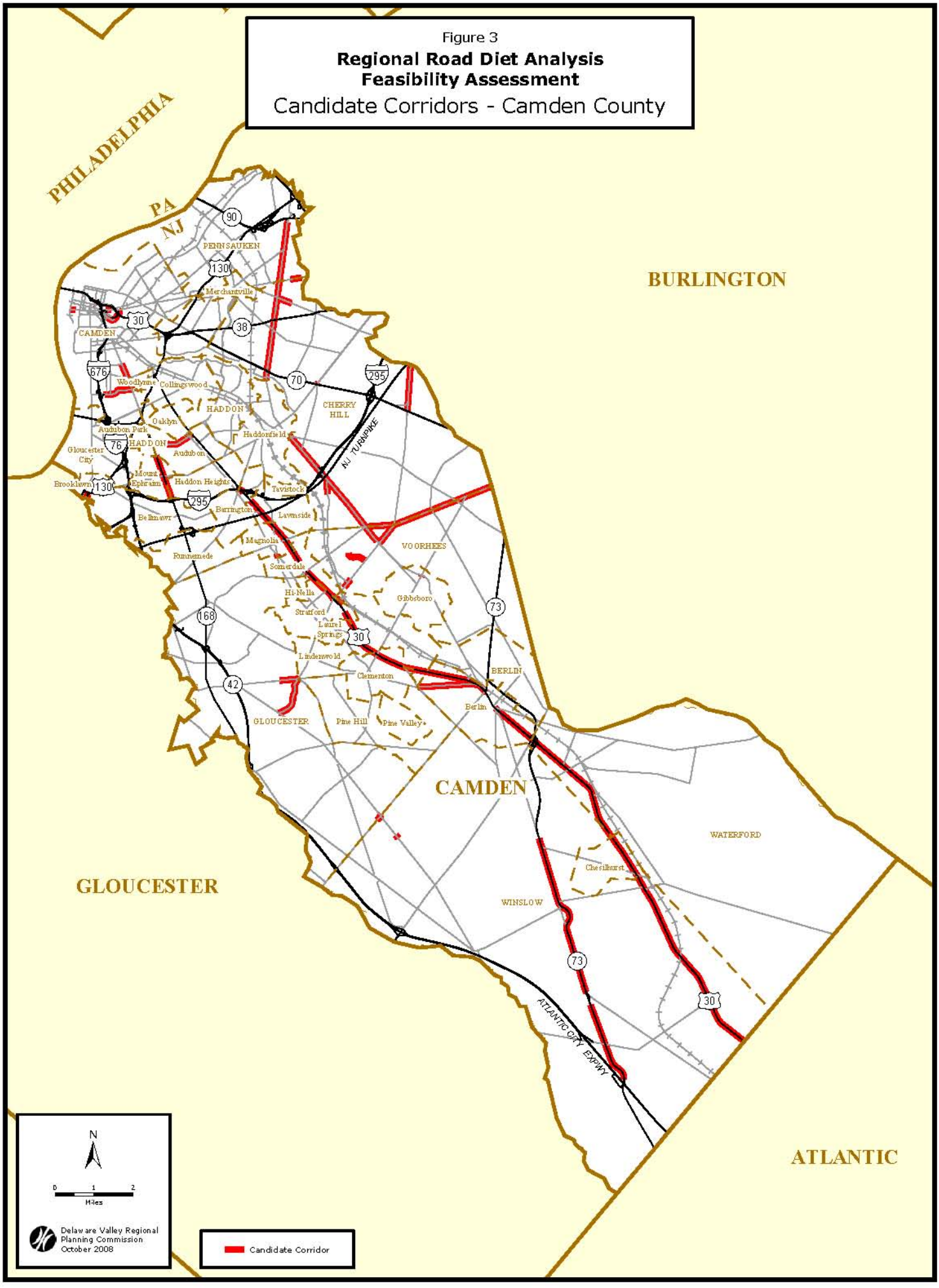


Figure 2
Regional Road Diet Analysis
Feasibility Assessment
Candidate Corridors - Burlington County
BUCKS
MERCER
MONMOUTH
OCEAN
PHILADELPHIA
CAMDEN
GLOUCESTER
ATLANTIC
PA
NJ
Bordentown
Fieldsboro
BORDENTOWN
CHESTERFIELD
FLORENCE
NORTH HANOVER
MANSFIELD
Burlington
Beverly
EDGEWATER PARK
BURLINGTON
DELANCO
RIVERSIDE
WILLINGBORO
NJ TURNPIKE
SPRINGFIELD
Wrightstown
NEW HANOVER
WESTAMPTON
EASTAMPTON
Riverton
Palmyra
DELRAN
CINNAMINSON
MOUNT HOLLY
MOORESTOWN
HAINESPORT
Pemberton
PEMBERTON
LUMBERTON
MAPLE SHADE
MOUNT LAUREL
BURLINGTON
SOUTHAMPTON
MEDFORD
Medford Lakes
EVESHAM
WOODLAND
TABERNACLE
SHAMONG
WASHINGTON
BASS RIVER
G.S. PARKWAY
206
68
295
130
38
73
70
72
9
N
0
2
4
Miles
Delaware Valley Regional Planning Commission
October 2008
Candidate Corridor

Figure 3

Regional Road Diet Analysis
Feasibility Assessment

Candidate Corridors - Camden County



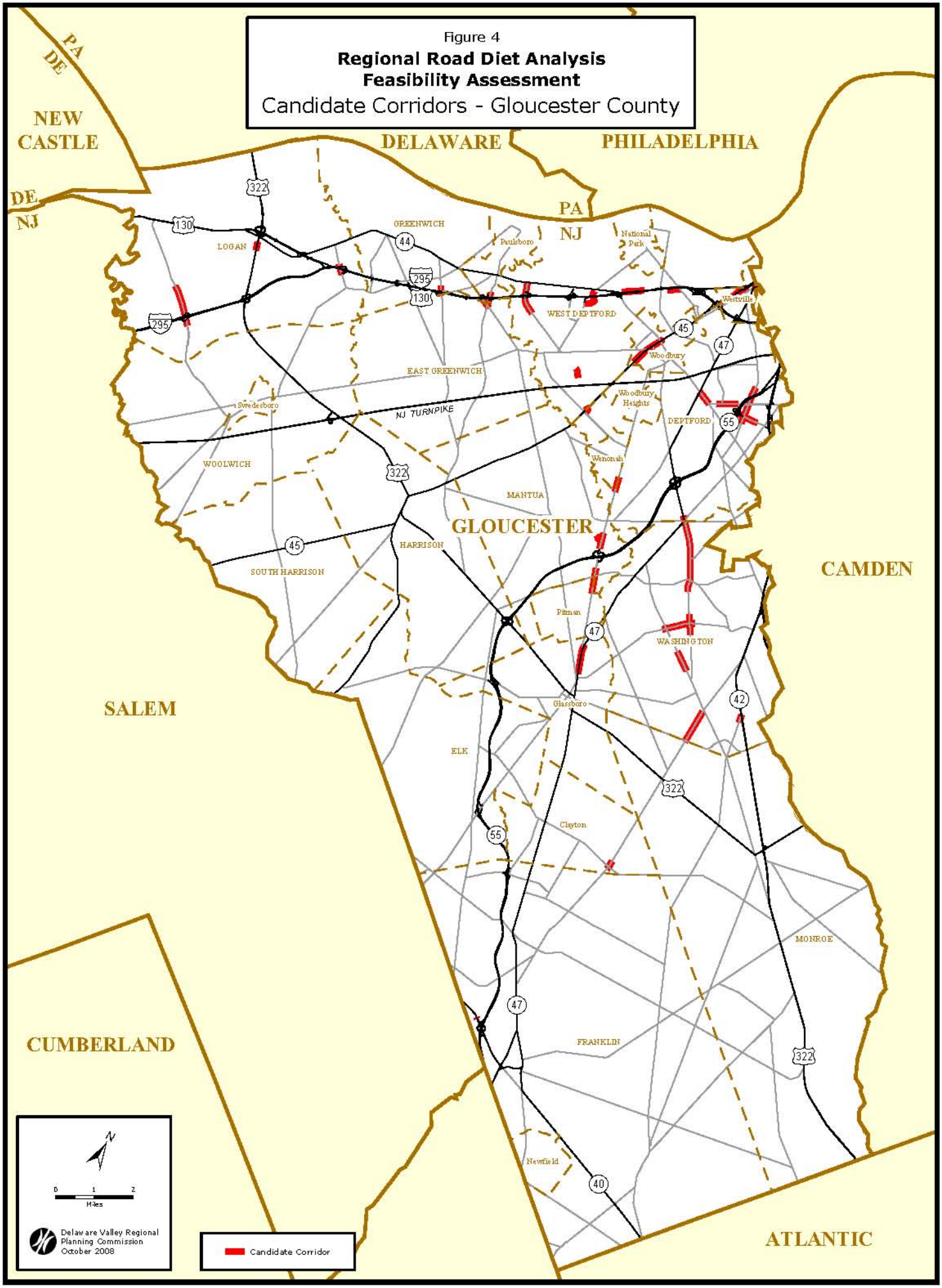


Figure 4
Regional Road Diet Analysis
Feasibility Assessment
Candidate Corridors - Gloucester County
PA
DE
NEW CASTLE
DE
NJ
DELAWARE
PHILADELPHIA
PA
NJ
GREENWICH
LOGAN
Paulsboro
National Park
WEST DEPTFORD
Westville
Woodbury
EAST GREENWICH
Woodbury Heights
Swedesboro
NJ TURNPIKE
DEPTFORD
WOOLWICH
Wenonah
MANTUA
GLOUCESTER
HARRISON
SOUTH HARRISON
CAMDEN
Pitman
WASHINGTON
SALEM
Glassboro
ELK
Clayton
MONROE
CUMBERLAND
FRANKLIN
Newfield
ATLANTIC
322
130
295
44
45
47
55
42
40
0 1 2
Miles
Delaware Valley Regional Planning Commission
October 2008
Candidate Corridor

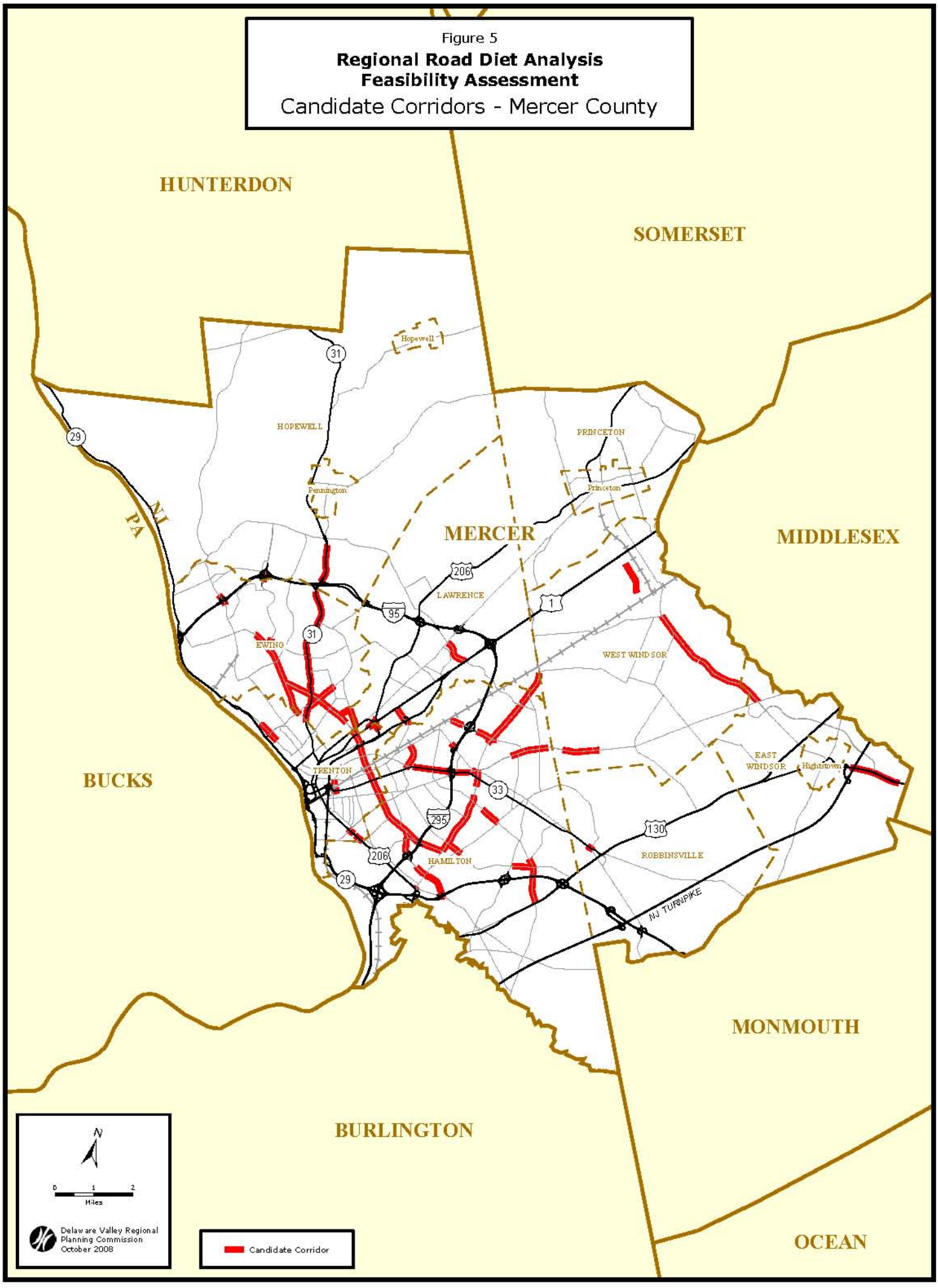


Figure 5
Regional Road Diet Analysis
Feasibility Assessment
Candidate Corridors - Mercer County
HUNTERDON
SOMERSET
MIDDLESEX
BUCKS
BURLINGTON
MONMOUTH
OCEAN
MERCER
NJ
PA
Hopewell
HOPEWELL
Pennington
PRINCETON
Princeton
LAWRENCE
EWING
WEST WINDSOR
EAST WINDSOR
Hightstown
TRENTON
HAMILTON
ROBBINSVILLE
NJ TURNPIKE
29
31
206
95
1
33
295
130
N
0 1 2
Miles
Delaware Valley Regional Planning Commission
October 2008
Candidate Corridor

3.0 GUIDELINES

In determining the feasibility of a roadway for a road diet certain parameters need to be considered. These parameters are discussed here to give the reader a basis for the evaluation and analysis that follows for each location. Parameters to be assessed when a road diet conversion is considered include:

- roadway function and its environment
- traffic volumes and level of service
- access points, turning volumes and patterns
- frequent stop and slow-moving vehicles
- weaving and speed
- delay
- pedestrian and bicycle activity
- crash types and severity
- cost
- parallel routes
- education and outreach

Roadway Function and Environment

The intended objective of the roadway must be evaluated, specifically with regard to possible trade-offs between mobility, access, and safety. The surrounding land uses should support the conversion. The existing and intended function of the roadway must be considered to determine the feasibility for conversion. The feasibility of converting a four-lane undivided roadway to three-lanes is more likely to succeed if the roadway is already acting as a defacto three-lane roadway. Careful study of the potential for increases in modes is usually necessary.

Traffic Volumes

Knowledge of existing and future ADT and peak-hour volumes is needed before a four-lane undivided to three-lane conversion can be recommended as a feasible improvement alternative. The peak-hour volumes typically represent 8-12% of ADT on the roadway. In general, road diets operate most successfully on roadways with less than 20,000 ADT. Roadways carrying higher volumes may experience congestion and diversion to parallel routes when possible. In the study *Guidelines for the Conversion of Urban Four-lane Undivided Roadways To Three-Lane Two-Way Left-Turn Facilities,* Keith Knapp*,* CTRE, Iowa State University, the case studies (Iowa) and simulation sensitivity analysis support conversion feasibility suggestion as follows:

- Operationally feasible at or below 750 vehicles per hour per direction (vphpd) directional peak
- At 750 – 875 vphpd directional peak, consider more cautiously
- At 875 – 1,000 vphpd directional peak, expect reduced arterial level of service (LOS)

Access Points, Turning Volumes and Patterns

The safety and operations of four-lane roadways tend to decrease with increased through and turning volumes. Turn volumes and patterns should be assessed when considering a roadway conversion to determine operational impacts. Four-lane undivided roadways tend to operate similar to a three-lane road as access points and left-turns increases. As a result, roadways with a greater number of access points will be better candidates for road diet conversions.

Frequent Stop and Slow-moving Vehicles

The number and frequency of slow-moving vehicles using the roadway and/or those making frequent stops must be considered when evaluating for road diet application. These vehicles will have a greater impact on the operation of a three-lane roadway than on a four-lane roadway. The primary reason for the increased impact along three-lane roadways is a result of the inability of other automobiles to legally pass frequent-stop and/or slow-moving vehicles. The feasibility of a road diet conversion may be uncertain if there is a large number of frequent-stop and/or slow-moving vehicles using the roadway especially during peak travel periods. One potential mitigation measure to minimize the impact of frequent-stop vehicles is to provide pull-out areas at specific locations along the corridor. This lends itself to the ease of entering and exiting the travel lanes and allows through traffic to pass easily.

Weaving and Speed

The weaving and speeds experienced on a four-lane roadway vary when compared to those on a three-lane roadway. The average vehicle speed and speed variability usually decreases with a road diet conversion from a four-lane roadway to a three-lane cross-section. The need to “calm” or reduce vehicle speeds is often a reason for road diet conversions. The inability to change lanes or pass along a three-lane roadway results in lower vehicle speed variability than along a four-lane undivided roadway. Weaving or lane changing should not occur along a three-lane roadway. Lane changing along four-lane undivided roadways is done for lane positioning purposes and to bypass turning vehicles. The ability to make these maneuvers decreases as volumes increase, however, and it can have safety impacts. The change in weaving and speeds is dependent on the current operation of the four-lane roadway; the impacts should be small if the existing roadway is already operating as a defacto three-lane roadway.

Delay

Vehicle delay and queue must be considered when assessing the feasibility of a roadway for dieting. The road diet conversion includes geometric changes that can impact through vehicle delay and queues. Whereas, through vehicle delay related to left-turn traffic can be expected to decrease, the reduction in through lanes may result in a larger increase of peak-hour segment and/or intersection through vehicle delay. This difference in delays and queues can be mitigated by several engineering design elements including optimizing and coordinating signals, adding right-turn lanes, consolidating driveways, and redesigning intersection curb radii.

Pedestrian and Bicycles Activity

Level of existing or potential pedestrian and bicycle activities must be determined when evaluating for a road diet conversion as well as their safety. Separate bike lanes and/or sidewalks can be added using the extra right-of-way. For pedestrians and bicyclists, the somewhat slower and more consistent speeds of the road diet conversion are more desirable. A three-lane roadway produces fewer conflict points between vehicles and crossing pedestrians, and the complexity of a pedestrian crossing the roadway is reduced.

Crash Types and Severity

As mentioned earlier road diet projects have experienced a reduction in the rate and frequency of crashes and their severity. One objective of a road diet conversion is safety of all road users. The expected reduction in crashes and severity that results from a road diet conversion may primarily be the result of a reduction in speed and speed variability along the roadway, a decrease in the number of conflict points between vehicles, and improved sight distance for left-turn vehicles on the converted roadway.

Cost

Usually, converting from four-lanes to three does not require additional right-of-way; the existing cartway is reallocated and requires only re-striping. Occasionally, limited right-of-way acquisition maybe needed for right-turn lanes or intersection reconstruction to enhance the roadway operation. The cost for road diet conversion is significantly lower when compared to a roadway widening.

Parallel Routes

Depending on the traffic volume, a road diet may result in slower speeds and some decrease in level of service. If parallel routes exist which offer an alternative, there may be some diversion. Therefore, the potential impacts to parallel routes should be considered when evaluating for road diet.

Education and Outreach

Education and outreach play a critical role in the success of a road diet. Many projects have demonstrated that public opposition is strong in the early stages of a project. However, with committed stakeholders, and an organized education and outreach program skeptics can be enlightened about the benefits.

4.0 CR 634 (PARKWAY AVENUE), EWING TOWNSHIP, MERCER COUNTY

4.1 CHARACTERISTICS

The study area consists of a 2.11 mile section of Parkway Avenue (CR 634) in Ewing Township, Mercer County. The study area begins just west of Scotch Road at milepost 2.0 and continues to the Parkside Avenue (CR 636) intersection. Parkway Avenue is functionally classified as an urban minor arterial and runs in a west-east direction. It travels from River Road (NJ 175) east to Ingham Avenue, for 4.93 miles.

There are several major roads that connect with Parkway Avenue including, Bear Tavern Avenue/Grand Avenue (CR 579), Scotch Road (CR 611), Olden Avenue (CR 622), Parkside Avenue (CR 636), Pennington Road (NJ 31), and Prospect Street (CR 626), as shown in ***Figure 6***. The speed limit varies throughout Parkway Avenue, but is 40 MPH in the study area. Parkway Avenue is a regionally significant roadway serving both local and through traffic.

In the study area, Parkway Avenue is four-lanes, with two lanes in each direction and no shoulders. There are a total of twenty-seven intersections in the study area, nine are four-legged intersections and eighteen are "T" intersections. Of the twenty-seven intersections, five are signalized. In addition to the intersections there are a large number of driveways, approximately fifty-one driveways located on the north side and seventy-seven driveways located on the south side of Parkway Avenue. Due to the many opportunities to make left-turns (some within a few feet of each other) as evidenced by numerous driveways and intersecting side streets there is the potential for significant weaving and queues.

Parkway Avenue – two travel lanes in each direction, sidewalks of varying width throughout the corridor
Source: DVRPC, 2008

Sidewalk of varying width is available throughout the study corridor except from the western end to Scotch Road where it is intermittent. Crosswalks are available at the five signalized intersection in the study corridor and Hillcrest Avenue. Inconsistent use of crosswalks for side streets and large driveways for commercial and institutional activities does not provide a safe pedestrian environment. There are no bike lanes or share-the-road advisory signs in the corridor.

Land Use

The land use in the corridor is a mix of residential, commercial, institutional, and community uses, as shown in ***Figure 7***. On the north side of CR 634 from the western end of the study area to CR 636, there are 118 parcels, of which one hundred are single

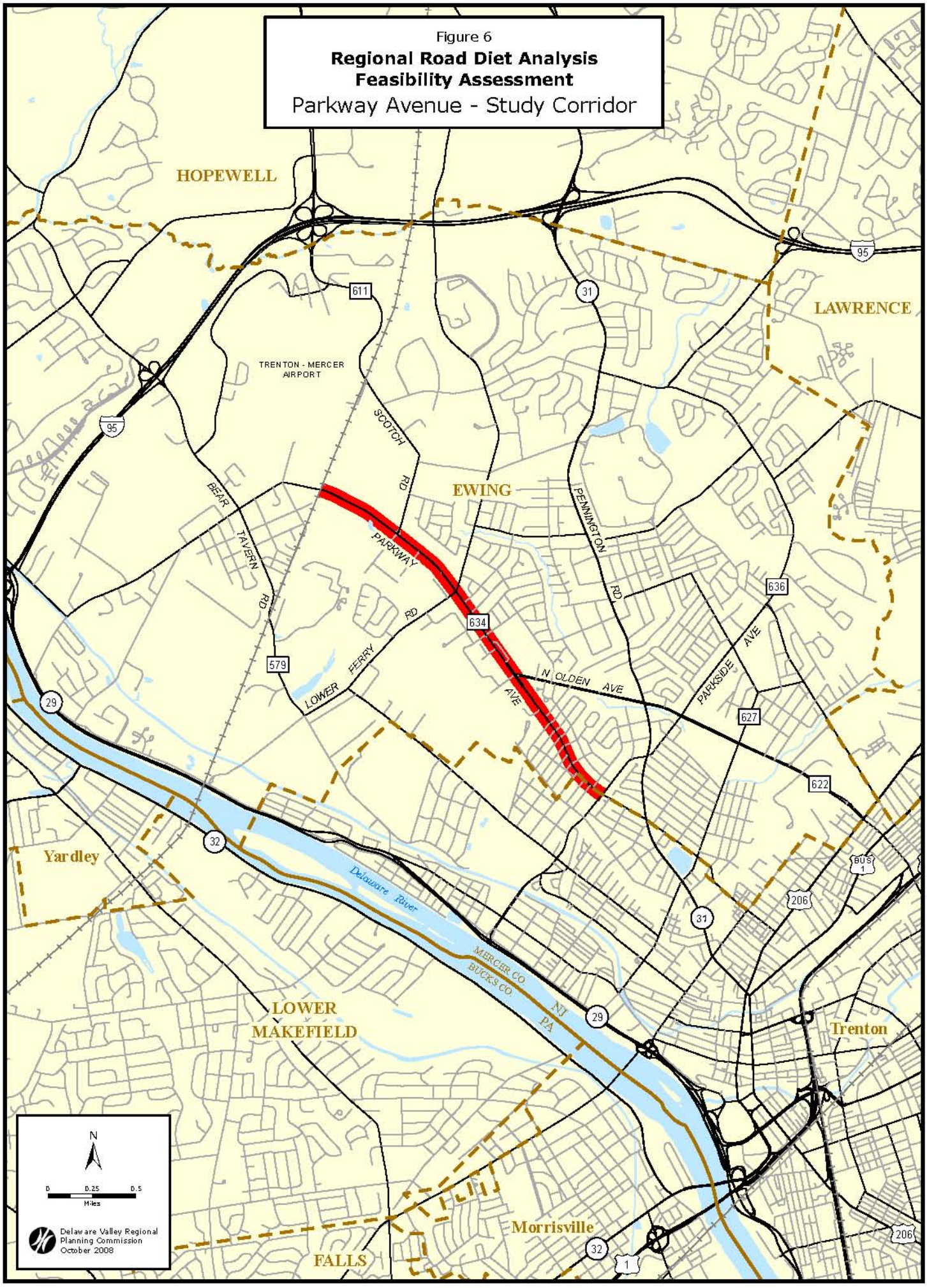


Figure 6
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue - Study Corridor
HOPEWELL
LAWRENCE
EWING
TRENTON - MERCER AIRPORT
SCOTCH RD
BEAR TAVERN RD
PARKWAY
PENNINGTON RD
N OLDEN AVE
LOWER FERRY RD
PARKSIDE AVE
Yardley
LOWER MAKEFIELD
Morrisville
FALLS
Trenton
Delaware River
MERCER CO
BUCKS CO
NJ
PA
611
31
95
636
634
579
627
622
29
32
206
BUS 1
1
N
0
0.25
0.5
Miles
Delaware Valley Regional Planning Commission
October 2008

Figure 7

Regional Road Diet Analysis Feasibility Assessment

Parkway Avenue - Land Use

Delaware Valley Regional Planning Commission
October 2008

Figure 8

Regional Road Diet Analysis
Feasibility Assessment

Parkway Avenue - Transit

family detached residences, seventeen are commercial properties, and one is an educational institution (Ewing Senior High School). On the south side there are 130 parcels, of which ninety-one are single family detached residences, thirty-one are commercial properties, and eight are community services, including Parkway Elementary School, Covenant Presbyterian Church, and New Jersey Department of Transportation office. Additionally, Trenton Mercer Airport is located to the direct west of the study area. The schools in the corridor provide bus service to township neighborhoods and contribute to traffic volumes along the study area on school days.

Land use on Parkway Avenue is a mix of residential, commercial and institutional
Source: DVRPC, 2008

Transit

The New Jersey Transit Route 607 bus operates along the study corridor. This bus route travels in a predominantly east-west direction from Independence Plaza in Hamilton Township serving areas of the City of Trenton and Ewing Township where it ends at Scenic Drive. This service has variable headways. In the AM peak (6:00 AM – 9:00 AM) headways are twenty to thirty minutes in both directions; and sixty minute headways during the midday hours. During the afternoon peak (4:00 PM – 7:00 PM) headways are thirty minutes and late evening service varies between sixty and ninety minute headways. Saturdays and Sundays service on the 607 bus operates at ninety minute intervals. Westbound, between 6:05 AM and 10:15 PM, twenty-three buses serve the study area with six trips each in the morning and afternoon peak periods. There are twenty-two trips daily weekday in the eastbound direction between 6:26 AM and 9:08 PM serving the study corridor with seven trips during each peak period. On Saturdays and Sundays there are ten trips in each direction. According to the bus schedule the trip through the 2.1 mile study area takes approximately eight minutes in each direction. There are thirteen official bus stops in each direction in the study corridor, see ***Figure 8***. Average daily weekday ridership for this route was 1,076 in 2007, while Saturday and Sunday ridership averages were 402 and 251, respectively, for the same period.

Traffic Counts

Several average annual daily traffic (AADT) volumes were taken along Parkway Avenue in the study area, as shown in ***Figure 9***. Between Lower Ferry Road and Stratford Avenue five counts were recorded in each direction. In the westbound direction, the counts were taken between March and July 2006, and the AADT ranged from 5,115 vehicles to 11,600 vehicles. In the eastbound direction, the counts were taken between February 2005 and July 2006, and the AADT ranged from 5,364 vehicles to 12,370 vehicles. The eastbound AADT average at this location was 9,026 and the westbound 8,657. Other AADT along Parkway Avenue was recorded between Lower Ferry Road and Gold Street; in 2006 8,745 vehicles were recorded in the westbound direction and 8,613 in the eastbound direction. AADTs east of North Olden Avenue were approximately 5,000 vehicles in each direction.

Manual turning movement counts were taken at ten intersections along the study corridor – Scotch Road, Lower Ferry Road, NJ DOT employee parking lot driveway, Farrell Avenue, Ewing High School entrance and exit, North Olden Avenue, Sutherland Avenue, Berwyn Avenue, and Parkside Avenue, see ***Figure 10***. These manual counts were taken between February 20th and April 10th 2008 for the weekday peak period, 6:00 – 9:00 AM and 4:00 – 7:00 PM. The morning peak-hour was 7:30 – 8:30 AM and the afternoon peak-hour was 4:15 – 5:15 PM.

All the intersections counted east of North Olden Avenue recorded less than 750 vehicles per hour per direction (vphpd) directional peak. For the remaining intersections only Farrell Avenue recorded less than 750 vehicles per hour per direction for all approaches during the peak-hour. The eastbound approaches of the Lower Ferry Road, NJDOT driveway and North Olden Avenue intersections had vphpd of 877, 764, and 1,028, respectively during the afternoon peak whereas westbound approaches of NJDOT driveway, Lower Ferry Road, and Scotch Road intersections had vphpd of 799, 930, 803, respectively during the same peak. Only the high school entrance and exit had morning peak vphpd of over 750.

Congestion Management Process

Parkway Avenue is a regionally significant roadway serving both local and through traffic. The study area is included in the NJ 31 corridor in *DVRPC's Congestion Management Process (CMP)*. Eight criteria are used to identify corridors in the CMP. They are as follows: current daily congestion; current peak-hour congestion; heavily used roads and intermodal facilities; future daily congestion from the traffic model simulation; future peak-hour congestion from the traffic model simulation; frequent crash-related congestion; intermodal importance; and land use. In the study area on Parkway Avenue from Parkside Avenue to North Olden Avenue, four or five of the eight criteria are met; and from North Olden Avenue to Scotch Road, three or four of the eight criteria are met.

Crashes

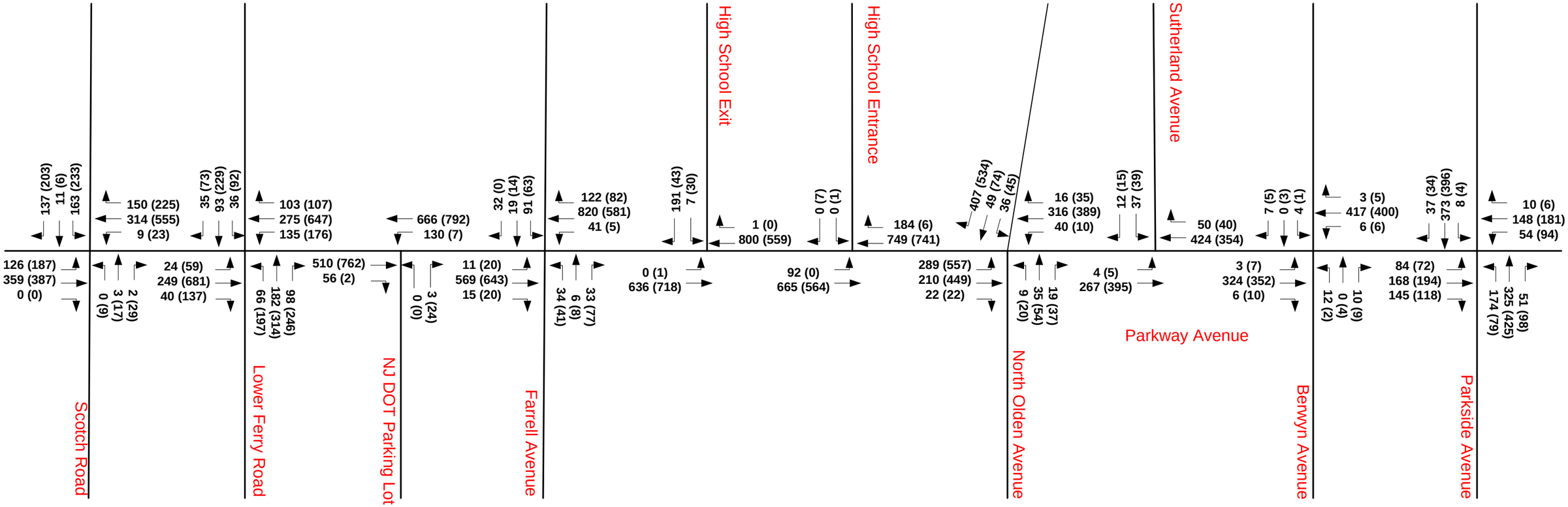
Ewing Township Police Department provided crash data for the study area on Parkway Avenue. The data provided consisted of complete year crash data for 2006 and 2007,


Figure 9
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue - Traffic Counts
9,277 (2000)
8,939 (2008)
20,465 (2000)
14,600 (2000)
14,555 (2003)
12,869 (2004)
EWING
8,684 (2006)
EB 8,613 (2009)
WB 8,745 (2006)
21,720 (2009)
6,175 (2006)
EB 4,771 (2005)
WB 5,062 (2006)
22,822 (2007)
11,031 (2006)
10,220 (2004)
13,403 (2003)
13,330 (2004)
Trenton
Delaware River
27,004 (2003)
27,569 (2004)
DVRPC Traffic Count*
NJDOT Traffic Count*
* Average Annual Daily Traffic (AADT) Volume*
DVRPC Aerial Imagery, Spring 2005

Figure 10
Regional Road Diet Analysis – Feasibility Assessment
Parkway Avenue
Existing Peak Hour Turning Movement Counts

Peak Hours
AM: 7:30 - 8:30
PM: 4:15 - 5:15

AM (PM)



SCHEMATIC NOT TO SCALE

Delaware Valley Regional Planning Commission
May 2008

and partial year data for 2008. Only the complete year data were used in this analysis. Both reportable and non-reportable data were included. Non-reportable crashes are crashes which result in less than five hundred dollars worth of property damage and no injury. Over the period there were 121 crashes of which seven were non-reportable. ***Table 1*** shows a breakdown of crashes by collision type, location of crashes, severity lighting conditions, and road surface conditions. ***Table 2*** shows a comparison of crash characteristics with corresponding year New Jersey averages for the statewide county road system. Individual crash details are shown in the ***Appendix B***.

Table 1 Parkway Avenue Crash Data Summary

	2006		2007		Total	
	Crash	%	Crash	%	Crash	%
Reportable	60	93.75%	54	94.74%	114	94.21%
Non-Reportable	4	6.25%	3	5.26%	7	5.79%
Collision Type						
Rear-End	17	26.56%	15	26.32%	32	26.45%
Angle	11	17.19%	11	19.30%	22	18.18%
Same Direction Sideswipe	8	12.50%	1	1.75%	9	7.44%
Opposite Direction Sideswipe	1	1.56%	1	1.75%	2	1.65%
Left Turn	13	20.31%	14	24.56%	27	22.31%
Hit Fixed Object	10	15.63%	10	17.54%	20	16.53%
Hit Non-fixed Object	~	~	1	1.75%	1	0.83%
Backing	1	1.56%	1	1.75%	2	1.65%
Overturned	2	3.13%	~	~	2	1.65%
Hit Animal	1	1.56%	3	5.26%	4	3.31%
Intersection Type						
At Intersection	11	17.19%	12	21.05%	23	19.01%
Not at Intersection	53	82.81%	45	78.95%	98	80.99%
Severity Type						
Fatality Report	~	~	~	~	0	0.00%
Injury Report	11	17.19%	17	29.82%	28	23.14%
Property Damage Only Report	53	82.81%	40	70.18%	93	76.86%
Lighting Condition						
Day	52	81.25%	40	70.18%	92	76.03%
Dusk/Dawn	~	~	~	~	0	0.00%
Night	12	18.75%	17	29.82%	29	23.97%
Road Surface Condition						
Dry	50	78.13%	43	75.44%	93	76.86%
Wet	14	21.88%	9	15.79%	23	19.01%
Snow	~	~	1	1.75%	1	0.83%
Ice	~	~	2	3.51%	2	1.65%
Slush	~	~	2	3.51%	2	1.65%

Source: Ewing Township Police Department

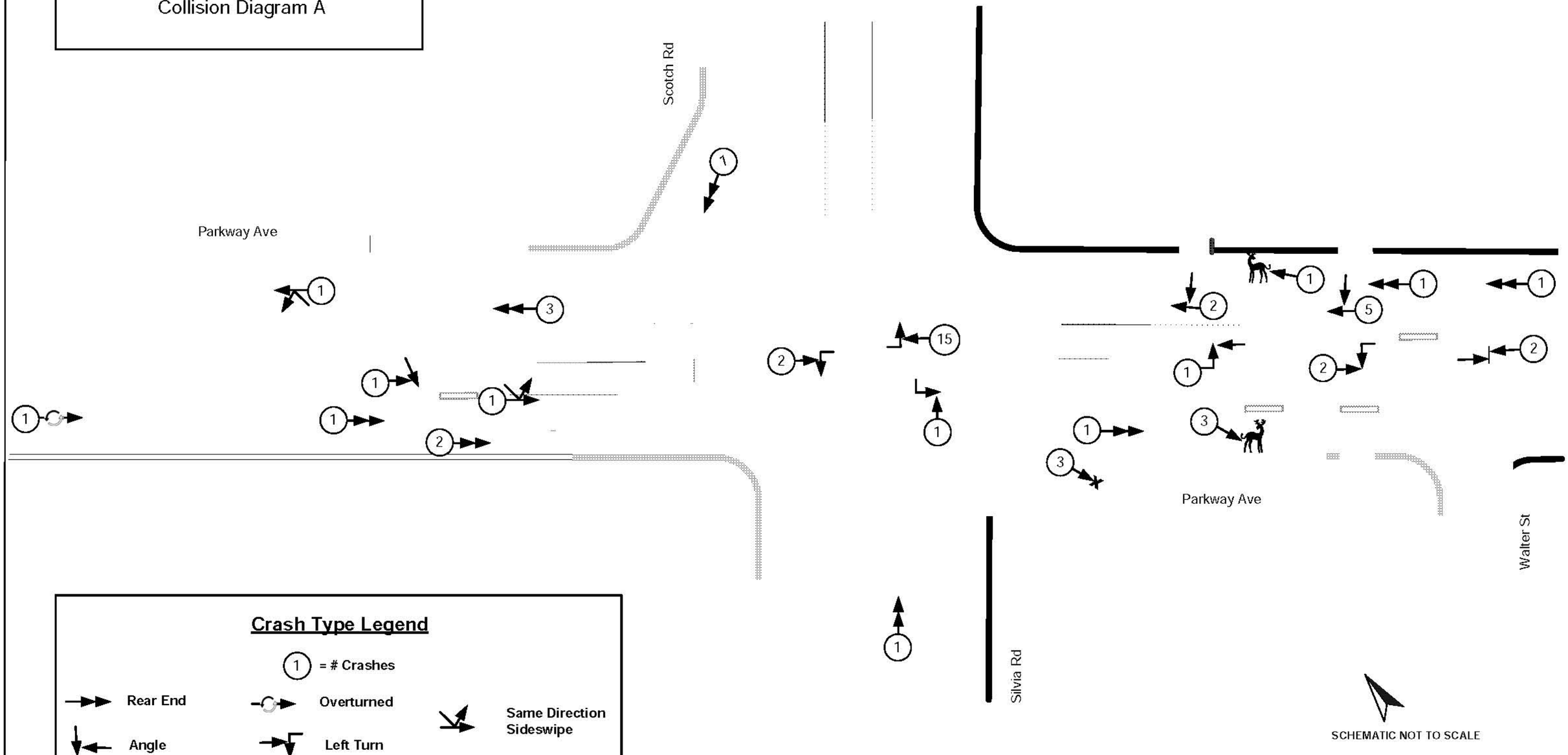
Table 2 Parkway Avenue Crash Data Comparison with NJ Statewide Averages

CR 634 Parkway Avenue Police Reprt Summary	2006 %	2006 NJ Statewide County Road Average	2007 %	2007 NJ Statewide County Road Average
Reportable	93.75%	~	94.74%	~
Non-Reportable	6.25%	~	5.26%	~
Collision Type				
Rear-End	26.56%	30.32%	26.32%	30.63%
Angle	17.19%	18.09%	19.30%	19.58%
Same Direction Sideswipe	12.50%	11.45%	1.75%	11.39%
Opposite Direction Sideswipe	1.56%	~	1.75%	~
Left Turn	20.31%	7.89%	24.56%	5.66%
Hit Fixed Object	15.63%	11.89%	17.54%	12.76%
Hit Non-fixed Object	~	0.47%	1.75%	0.41%
Backing	1.56%	2.00%	1.75%	2.20%
Overturned	3.13%	0.76%	~	0.71%
Hit Animal	1.56%	3.80%	5.26%	3.97%
Intersection Type				
At Intersection	17.19%	39.52%	21.05%	38.75%
Not at Intersection	82.81%	60.45%	78.95%	61.21%
Severity Type				
Fatality Report	~	0.0027	~	0.25%
Injury Report	17.19%	29.16%	29.82%	28.29%
Property Damage Only Report	82.81%	70.57%	70.18%	71.46%
Lighting Condition				
Day	81.25%	70.25%	70.18%	70.94%
Dusk/Dawn	~	3.84%	~	3.85%
Night	18.75%	25.49%	29.82%	24.80%
Road Surface Condition				
Dry	78.13%	77.54%	75.44%	75.43%
Wet	21.88%	19.67%	15.79%	19.00%
Snow	~	1.00%	1.75%	2.10%
Ice	~	1.13%	3.51%	2.29%
Slush	~	~	3.51%	~

Source: Ewing Township Police Department

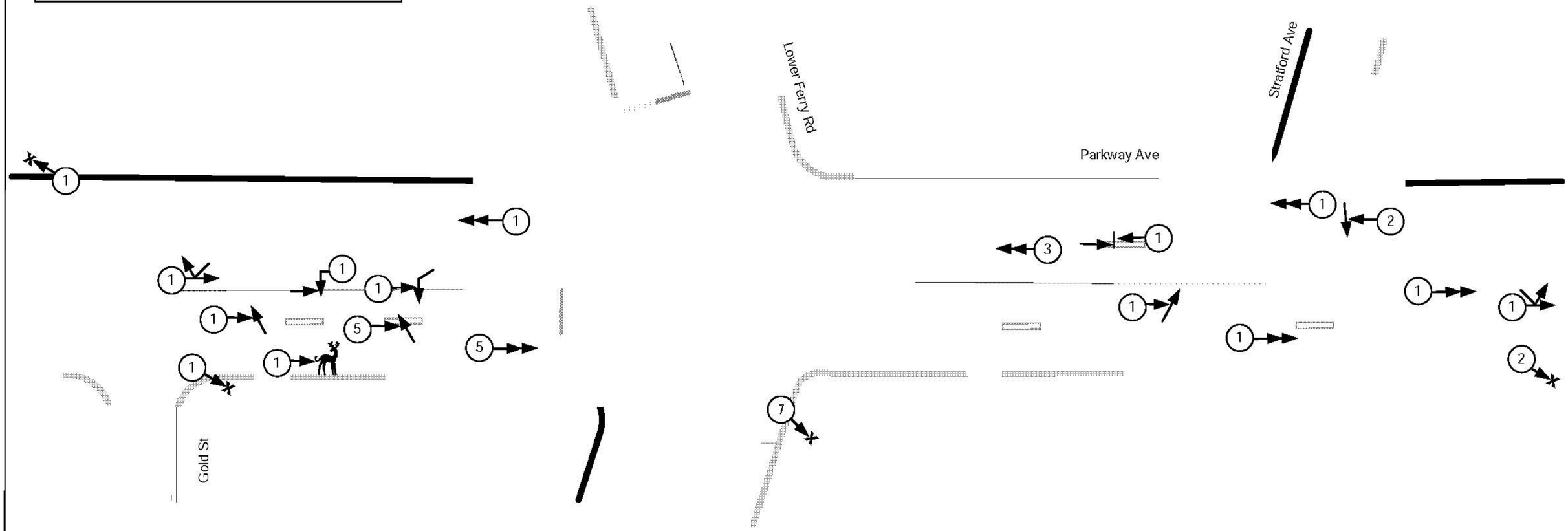
Although rear-end crashes makes up the highest percentage of total crashes for all years in the study area, this crash type average is lower than the statewide averages for corresponding years. Left-turn crashes are the second highest crash type in 2006 and 2007, 20.3 and 24.5% respectively. This exceeds the statewide averages which is 7.9% in 2006 and 5.7% in 2007. The angle crash averages are comparable to the statewide averages for corresponding years. Of note is the percentage of crashes which occurred at intersection versus those occurring mid-block. In 2006 and 2007, 17.2 and 21%, respectively of the total crashes occurred at intersection while the statewide averages were 39.5 and 38.8%. In analyzing the crash data, there were twenty-seven left-turn

Figure 11
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue
Collision Diagram A



Delaware Valley Regional Planning Commission
June 2008

Figure 12
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue
Collision Diagram B



Crash Type Legend

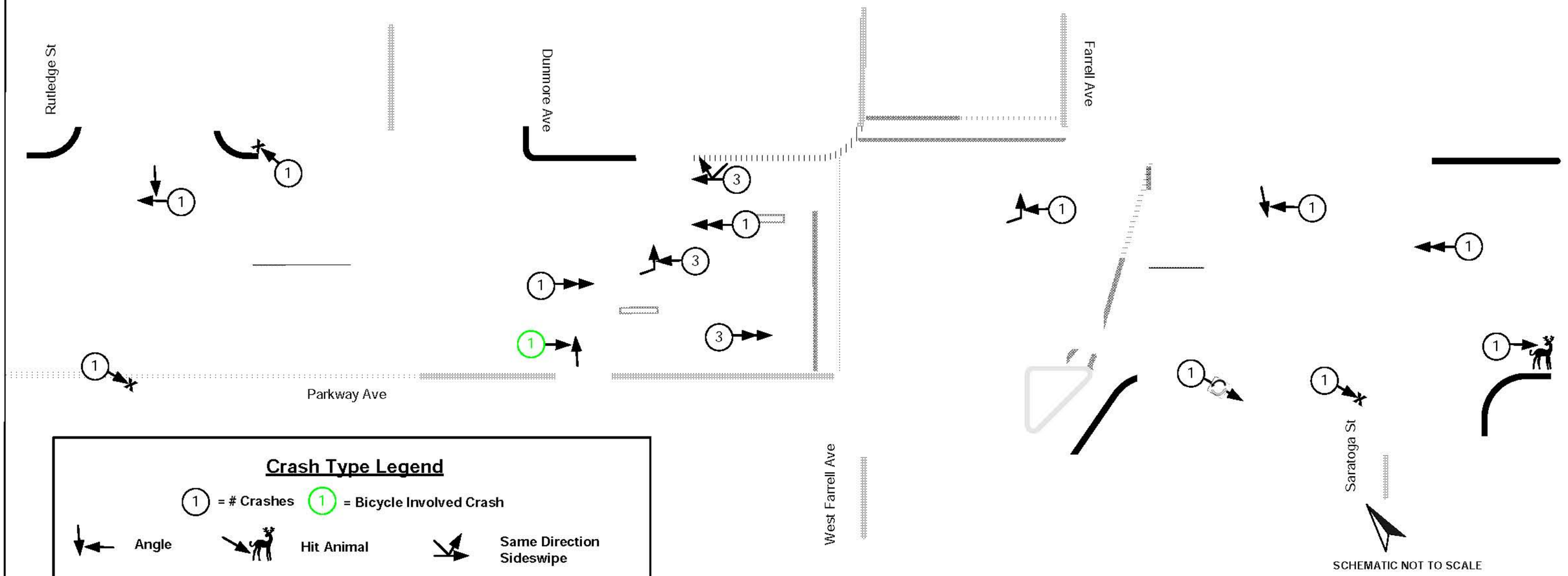
(1) = # Crashes

- Angle
- Rear End
- Left Turn
- Hit Animal
- Hit Fixed Object
- Same Direction Sideswipe

SCHEMATIC NOT TO SCALE

Delaware Valley Regional Planning Commission
June 2008

Figure 13
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue
Collision Diagram C



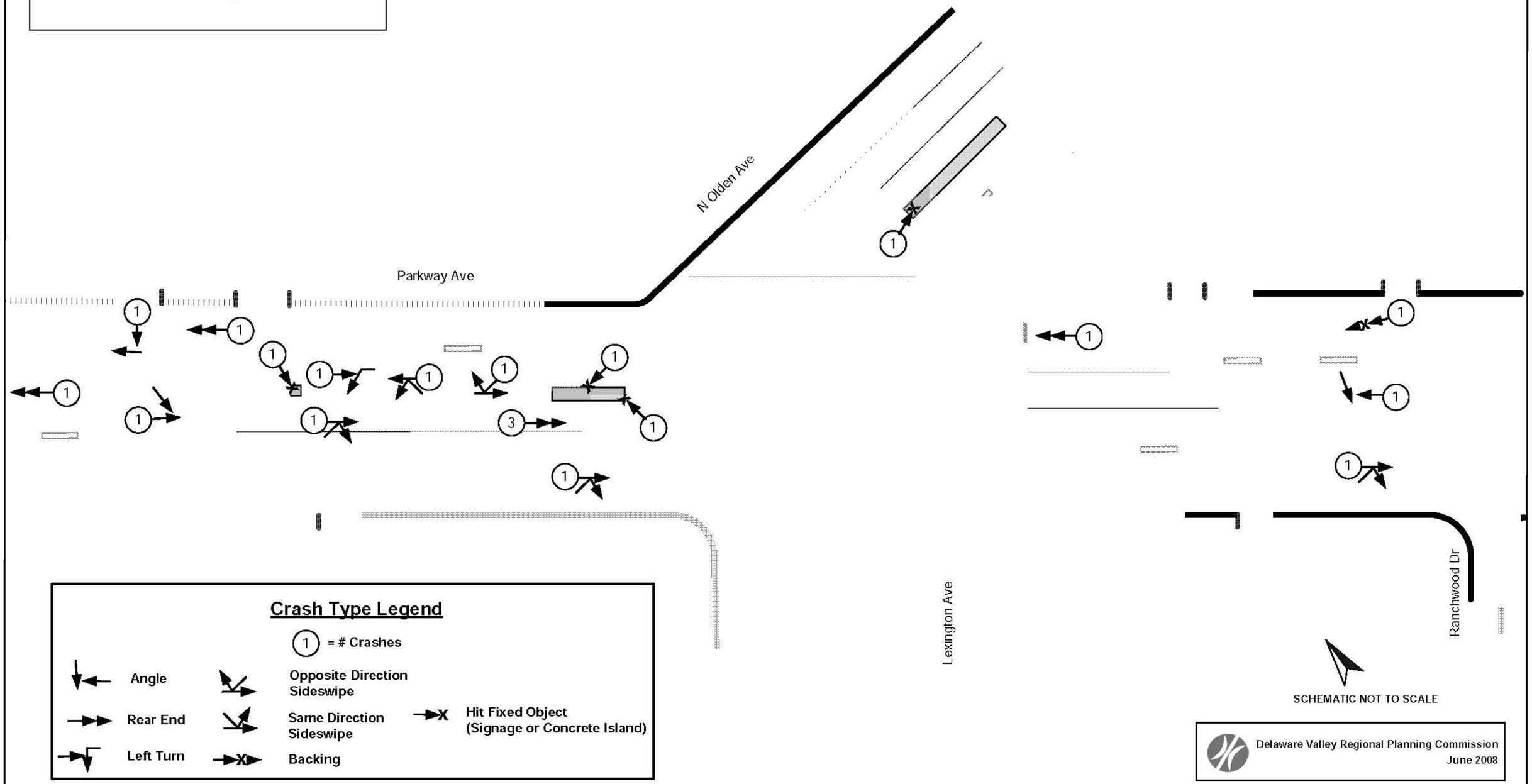
Crash Type Legend

(1) = # Crashes (1) = Bicycle Involved Crash

- Angle
- Hit Animal
- Same Direction Sideswipe
- Rear End
- Hit Fixed Object
- Opposite Direction Sideswipe
- Left Turn
- Head On
- Overturned

Delaware Valley Regional Planning Commission
June 2008

Figure 14
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue
Collision Diagram D



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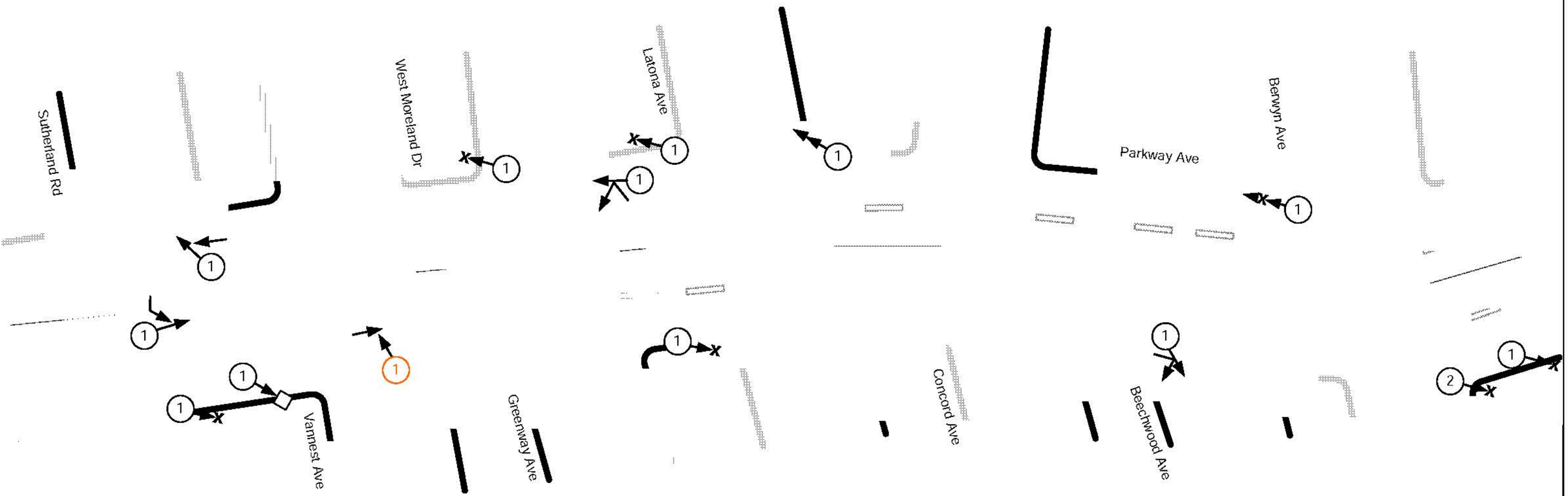
June 2008

Figure 15
Regional Road Diet Analysis
Feasibility Assessment
Parkway Avenue
Collision Diagram E



Crash Type Legend

(1) = # Crashes (1) = # School Bus Involved Crash

- Angle
- Rear End
- Same Direction Sideswipe
- Left Turn
- Left Turn
- Backing
- Hit Fixed Object
- Hit Non-fixed Object

SCHEMATIC NOT TO SCALE

Delaware Valley Regional Planning Commission
June 2008

crashes of which thirteen (48%) did not occur at an intersection. Of the thirty-seven rear-end crashes thirty-three (89%) did not occur at an intersection. Additionally, twenty (77%) of the angle crashes did not occur at an intersection. ***Figures 11-15*** are collision diagrams showing location of each crash. The majority of the crashes occurred during daylight hours and on dry road surface.

With a road diet conversion there is the potential to reduce the number of crashes along the corridor. Rear end crashes represent the highest percentage of crashes for both years studied; the reduction in speed and speed variability which can accompany the conversion will minimize the likelihood of this crash type. Slower speeds will impact other crash types as well as crash severity. The percentage of left turn crashes for 2006 and 2007 far exceed the statewide averages both each year. A road diet conversion will provide improved sight distance and a decrease in the number of conflict points for left turning vehicles. This will generate a reduction in crashes. The road diet conversion will accommodate left turning movements from the numerous driveways in the corridor more efficiently by motorists being able to concentrate on only one lane of traffic at a time and using the two way left turn lane to complete the turn.

4.2 SIMULATION

In order to understand the impacts of a road diet application upon a study roadway, alternatives must be considered. Each alternative must provide various measures of effectiveness (MOE) that allow comparison between alternatives. For this analysis, two related measures were considered: average travel time and average travel speed for the Parkway Avenue corridor.

SimTraffic serves as an effective tool for ascertaining the effects of roadway design, presence actuation, queue interactions, and signal progression; qualities that deterministic models are less sensitive to. Unfortunately, it is unable to simulate mid-block or at intersection left-turns beyond the specific locations where turning movement data was gathered. SimTraffic provides for variability by employing a range of vehicle and driver parameters that generate unique traffic behaviors in each simulation. As a result, peak-hour MOE's were averaged from five sixty-minute simulations of each alternative.

Four road diet alternatives were evaluated for Parkway Avenue. Each alternative represents a progressively more involved scenario, from adjustments to roadway geometry, to signal timing revision, and eventually to signal coordination.

Utilizing this methodology, average travel times and speeds were calculated for both directions of the Parkway Avenue corridor, for each of the scenarios during the morning and afternoon peak-hours, see ***Table 3*****.** The complete output from the simulation is shown in ***Appendix C***.

TABLE 3 – PARKWAY AVENUE SUMMARY OF MEASURES OF EFFECTIVENESS

Scenario	Direction of Travel	Distance (miles)	Average Travel Time (seconds)	Average Speed (MPH)	Difference in Travel Time from Existing Conditions (seconds)	Difference in Speed from Existing Conditions (MPH)	% Difference from Existing Travel Time	% Difference from Existing Average Speed
AM Peak - Existing Conditions	Westbound	2.5	320	28.1	N/A	N/A	N/A	N/A
	Eastbound	2.4	301	28.7	N/A	N/A	N/A	N/A
AM Peak - Alternative 1	Westbound	2.5	365	24.7	45.0	-3.5	14.1%	-12.3%
	Eastbound	2.4	318	27.2	17.0	-1.5	5.6%	-5.3%
AM Peak - Alternative 2	Westbound	2.5	355	25.4	35.0	-2.8	10.9%	-9.9%
	Eastbound	2.4	315	27.4	14.0	-1.3	4.7%	-4.4%
AM Peak - Alternative 3	Westbound	2.5	344	26.2	24.0	-2.0	7.5%	-7.0%
	Eastbound	2.4	304	28.4	3.0	-0.3	1.0%	-1.0%
AM Peak - Alternative 4	Westbound	2.5	321	28.0	1.0	-0.1	0.3%	-0.3%
	Eastbound	2.4	297	29.1	-4.0	0.4	-1.3%	1.3%
AM Peak - Alternative 4A	Westbound	2.5	327	27.5	7.0	-0.6	2.2%	-2.1%
	Eastbound	2.4	289	29.9	-12.0	1.2	-4.0%	4.2%
PM Peak - Existing Conditions	Westbound	2.5	371	24.3	N/A	N/A	N/A	N/A
	Eastbound	2.4	361	23.9	N/A	N/A	N/A	N/A
PM Peak - Alternative 1	Westbound	2.5	600	15.0	229.0	-9.3	61.7%	-38.2%
	Eastbound	2.4	795	10.9	434.0	-13.1	120.2%	-54.6%
PM Peak - Alternative 2	Westbound	2.5	421	21.4	50.0	-2.9	13.5%	-11.9%
	Eastbound	2.4	462	18.7	101.0	-5.2	28.0%	-21.9%
PM Peak - Alternative 3	Westbound	2.5	401	22.4	30.0	-1.8	8.1%	-7.5%
	Eastbound	2.4	449	19.2	88.0	-4.7	24.4%	-19.6%
PM Peak - Alternative 4	Westbound	2.5	513	17.5	142.0	-6.7	38.3%	-27.7%
	Eastbound	2.4	747	11.6	386.0	-12.4	106.9%	-51.7%
PM Peak - Alternative 4A	Westbound	2.5	396	22.7	25.0	-1.5	6.7%	-6.3%
	Eastbound	2.4	408	21.2	47.0	-2.8	13.0%	-11.5%

Source: DVRPC 2008

Existing Conditions
During the morning peak-hour, the average travel time for traversing the Parkway Avenue corridor was slightly over five minutes, for an average speed of 28 to 29 MPH, depending upon direction of travel. The Parkway Avenue intersections at Parkside Avenue and Olden Avenue contribute the most delay, regardless of direction.

During the afternoon peak-hour, the average speed is comparable per direction, at about 24 MPH, for a travel time of roughly six minutes; this is a 20% increase in travel time from the morning peak-hour. The Parkway Avenue intersections that produce the most delay are at Lower Ferry Road and at Olden Avenue.

Alternative 1
This scenario is the simplest of the four alternatives, as it exclusively considers the impact of reducing the cross-section of Parkway Avenue from four to three-lanes. Between intersections, this alternative provides a single travel lane in each direction, separated by a two-way left-turn lane (TWLTL). Excess pavement can be converted to shoulders in each direction which can be utilized by buses to pull out of the travel way and by bike traffic. According to the New Jersey Straight Line Diagrams, Parkway Avenue right of way width is 48 feet from Parkside Avenue to Scotch Road and 57 feet from Scotch Road to just west of the end of the study area. At the selected intersections, each approach leg of Parkway Avenue was afforded an exclusive left-turn lane and a shared through and right-turn lane. Conversely, all of the existing intersection controls, including the current signal timings were left in their present forms, as were all the channelized right-turn lanes.

During the morning peak-hour, the average speed for westbound travel time is approximately 25 MPH, for a travel time of just over six minutes; a 14% increase from existing conditions. The intersections that produce the most delay for westbound vehicles are at Olden Avenue and Farrell Avenue. For the eastbound direction, average travel speed is roughly 27 MPH, for a travel time of five minutes and twenty seconds; a 6% increase from existing conditions. Delay upon eastbound Parkway Avenue vehicles is greatest at the intersections with Parkside Avenue and with Olden Avenue.

During the afternoon peak-hour, travel times have increased substantially for either direction of Parkway Avenue. Average westbound travel time is ten minutes for an average speed of 15 MPH, a 38% reduction in speed from existing conditions. Both of the intersections at Lower Ferry Road and Olden Avenue contribute significant delays to westbound Parkway Avenue movement. Eastbound travel time averages about thirteen minutes for an average speed of 11 MPH, which equates to a 55% decrease in speed from existing conditions. This is primarily due to the intersection at Lower Ferry Road, where almost 75% of eastbound delay is incurred.

Alternative 2
This scenario builds upon the initial alternative with additional modifications at three specific intersections. At the intersection with Scotch Road, the westbound Parkway Avenue approach is provided an exclusive right-turn lane that leads directly into the

existing channelized right-turn lane as shown in ***Figure 16***. At the intersection of Parkway Avenue and Lower Ferry Road, the geometry was further modified to include exclusive right-turn lanes for both approaches of Parkway Avenue, see ***Figure 17***. With regards to signal timing adjustments, a presence-actuated left-turn phase was installed for eastbound Parkway Avenue, thus providing "dual opposing lefts" at this location. At the intersection with Olden Avenue, the eastbound Parkway Avenue approach is afforded an additional exclusive left-turn lane, to match the two receiving lanes along Olden Avenue as shown in ***Figure 18***.

For the morning peak-hour, average westbound travel time is approximately six minutes for an average speed of 25 MPH. This represents a slight improvement from the *Alternative 1* scenario, though it is thirty-five seconds longer or 3 MPH slower than existing conditions. Similar to the previous scenario, the locations with the greatest delay upon westbound vehicles are the intersections with Olden Avenue and Farrell Avenue. The eastbound Parkway Avenue corridor's travel time averages five minutes and fifteen seconds for an approximate average speed of 27 MPH. This is a marginal improvement from the previous *Alternative 1* scenario, and thus remains slightly slower (1.3 MPH) than existing conditions. The intersections at Parkside Avenue and Olden Avenue contribute the greatest amounts of delays for eastbound vehicles.

For the afternoon peak-hour, westbound travel times average seven minutes for an average speed of 21 MPH. This is a three minute or 6 MPH improvement from the *Alternative 1* scenario; however this is fifty seconds or 3 MPH slower than existing conditions. Combined, the intersections at Olden Avenue and Lower Ferry Road contribute about 50% of all delay for westbound travel. Eastbound travel time averages seven and a half minutes for an average speed of 19 MPH. Compared to the previous *Alternative 1* scenario, this represents a five and a half minute reduction in travel time and an 8 MPH increase in speed, though this is still one minute and thirty seconds or 5 MPH slower than existing conditions. The intersections at Olden Avenue and Lower Ferry Road contribute the most delay for eastbound vehicles, though the latter constitutes 50% of the total delay in this direction.

Alternative 3

This scenario is only slightly different than *Alternative 2*. Whereas it is currently split-phased, the signal timing at the Olden Avenue intersection is adjusted to allow concurrent through-movements along Parkway Avenue. The signal timing for the Olden Avenue and Lexington Avenue approaches remains split-phased.

During the morning peak-hour, average westbound travel time is five minutes and forty-five seconds for an average speed of 26 MPH. This is a ten second and 1 MPH improvement from the previous *Alternative 2* scenario, and only twenty-four seconds and 2 MPH slower than existing conditions. The intersections at Farrell Avenue and Olden Avenue produce the greatest amount of delay for westbound travel. Average eastbound travel time is approximately five minutes for an average speed of 28 MPH. Similar to westbound travel, this represents a ten second or 1 MPH improvement from the *Alternative 2*, and when compared to existing conditions, these differences in travel

Figure 16

Regional Road Diet Analysis
Feasibility Assessment

Parkway Ave. & Scotch Rd.
Intersection Improvement

Figure 17

Regional Road Diet Analysis
Feasibility Assessment

Parkway Ave. & Lower Ferry Rd.
Intersection Improvement

Figure 18

Regional Road Diet Analysis
Feasibility Assessment

Parkway Ave. & N. Olden Ave.
Intersection Improvement

Delaware Valley Regional
Planning Commission
October 2008

time and speed are negligible. The intersections with the greatest amount of delay for eastbound travel are at Parkside Avenue and Farrell Avenue.

During the afternoon peak-hour, average westbound travel time is about six and a half minutes for an average speed of 22 MPH. This corresponds to a twenty second or 1 MPH improvement from *Alternative 2*, but is still a half minute or 2 MPH slower than existing conditions. Similar to previous scenarios, the intersections with Olden Avenue and Lower Ferry Road continue to create the most delay upon afternoon westbound travel. For the eastbound direction, travel time averages seven and a half minutes for an average speed of 19 MPH. This corresponds to a ten second or a half MPH improvement from the previous scenario. However, this is still ninety seconds or 5 MPH slower than existing conditions. The intersections at Parkside Avenue and Lower Ferry Road produce the greatest amounts of delay for eastbound travel, with the latter contributing over 60% of all eastbound delay.

Alternative 4
This scenario employs the attributes of all prior alternatives but considers signal coordination for five signalized intersection between the Marrazzo's Shopping Center and North Olden Avenue, inclusive.

For the morning peak-hour, average westbound travel time is approximately five and a half minutes for an average speed of 28 MPH. This is twenty seconds and 2 MPH faster than *Alternative 3*, and is comparable to existing conditions. The intersections at Olden Avenue and Parkside Avenue contribute the greatest amount of delay upon westbound travel. Eastbound travel time averages five minutes for an average speed of 29 MPH. Though this is only a few seconds and a half MPH faster than *Alternative 3*, it represents a half MPH improvement over existing conditions. Similar to previous scenarios, the intersection at Parkside Avenue contributes the most delay to morning eastbound travel.

For the afternoon peak-hour, westbound travel time averages eight and a half minutes for an average speed of 18 MPH. This is two minutes or 5 MPH slower than the *Alternative 3*, thus representing a 7 MPH decrease in speed from existing conditions. Most of this delay is at the intersections with Lower Ferry Road and Olden Avenue. Eastbound travel time averages twelve and a half minutes for an average speed of 12 MPH. This corresponds to a five minute increase in travel time and 8 MPH decrease in speed from the previous scenario. Compared to existing conditions, this represents a doubling of travel time and consequently a 50% reduction of average speed. The vast majority or 83% of this eastbound delay is experienced at the intersection with Lower Ferry Road.

Alternative 4A
This scenario employs the attributes of *Alternative 4* with signal timing and geometric modifications at the Lower Ferry Avenue intersection. These include a shift of green time from the side street approaches to the Parkway Avenue approaches, and the introduction of an exclusive left-turn lane for the southbound Lower Ferry Avenue

approach. This scenario addresses the significant delay imparted at this intersection upon drivers traversing the Parkway Avenue corridor, which is especially substantial for *Alternative 4*'s eastbound direction during the afternoon peak hour. This delay was a product of signal optimization from the previous scenario that sought to reduce overall intersection delay by transferring green time away from the Parkway Avenue approaches and onto the Lower Ferry Avenue approaches.

For the morning peak hour, westbound travel time averages five and a half minutes for a 28 MPH average speed. This is a marginal two percent increase from *Alternative 4* and existing conditions. The intersections of Olden Avenue and Parkside Avenue contribute the most delay, from 19 to 29 seconds, upon westbound travel. The average eastbound travel time is slightly below six minutes, for an average speed of 30 MPH. This represents a minor four percent improvement from *Alternative 4* and existing conditions. The intersection of Parkside Avenue contributes the most delay or a third of total delay for eastbound travel.

For the afternoon peak hour, westbound travel time averages six and a half minutes for an average speed of 23 MPH. This is almost a two minute improvement from *Alternative 4* and represents less than a 2 MPH of six percent decrease in speed from existing conditions. Similar to prior scenarios, the intersections of Olden Avenue and Lower Ferry Avenue contribute the most delay upon westbound travel. Average eastbound travel times are slightly less than seven minutes for a speed of about 21 MPH. This represents over a five minute improvement from *Alternative 4* and is less than a minute slower than existing conditions. The approach to the Lower Ferry Avenue continues to contribute over 50% of total eastbound delay, though it is significantly less than the previous scenario.

4.3 FINDINGS

- There are vast fluctuations in the AADT along Parkway Avenue; when averaged they are well below the 20,000 AADT threshold where generally road diets operate most successfully.
- Only the eastbound approach of the Olden Avenue/Parkway Avenue intersection carried more than 1,000 vphpd during the peak-hour, the level at which LOS is reduced with road diet conversions and may result in traffic diversion to parallel routes.
- Buses currently stop in the travel way.
- There are no shoulders or pedestrian buffers along the roadway.
- Bicyclists have to travel in the same lanes as motor vehicles.
- At the high school in the 2008 school year, 1,172 students are enrolled and only 577 are bussed daily; the remainder travels by car, public transit, bicycle, or walk to school. The current conditions for the safety to pedestrians, bicyclists and transit are deficient.
- High number of opportunities to make left-turns in both directions of Parkway Avenue.

- There are a high percentage of mid-block crashes; many are left-turn and angle crashes which are generally highest at intersections. Rear-end crashes are also highest mid-block and may be indicative of vehicles suddenly stopping to make left-turn and rear-ended by unprepared drivers.
- A study in Iowa documented in the December 2006 ITE Journal article *Safety Impacts of "Road Diet" in Iowa"* examined 15 road diet sites and 15 control sites. Two different approaches were used in the analysis to examine the effectiveness of road diets on the roadways in Iowa. Overall the study found a 25% reduction in crash frequency per mile; 19% reduction in crash rate; a 34% reduction in injury crashes as well as a reduction in the severity of the crashes that do occur; and a significant reduction in the number of crash types related to left turns and stopped vehicles. Other case studies have shown average reduction of crashes as low as 6% and as high as 75%.
- Road diet application of a given roadway seeks to accommodate all modes of travel. It can improve the safety of a roadway through the reduction of conflict points. As it currently exists and functions, Parkway Avenue is skewed toward vehicle travel. The road diet application can improve the accommodation for and safe travel of pedestrians and bicyclists. Additionally, it can be more accommodating to transit operations and their passengers.
- Simulation and subsequent analysis of each scenario reveals that a basic road diet application has an initially negative impact upon MOE's for the Parkway Avenue corridor, a reduction in average speed ranging from 2 to 13 MPH.
    - This impact is more pronounced for the afternoon peak-hour due to greater overall vehicular volumes on the corridor's road network.
    - However, this initially negative impact can be diminished by various geometric and timing designs at the specific intersections that contribute the greatest amount of delay.
    - Such designs can be accommodated within existing curb-to-curb right-of-way, while permitting a typical road diet three-lane cross-section for the remainder of the study roadway.
    - As a result, MOE's comparable to existing conditions for Parkway Avenue are achieved for the morning peak-hour, while slightly slower MOE's are realized for the afternoon peak-hour.
- In the study corridor only a limited number of the Parkway Avenue intersection approaches had exclusive left turn lanes; the eastbound approach at the Scotch Road intersection and the east and westbound approaches at N. Olden Avenue. The analysis was unable to simulate the movements and impacts of most mid-block and intersection turns due to a lack of volume data for such movements. Thus the MOE's for existing conditions may prove more optimistic than actual roadway operations due to an inability to comprehensively simulate mid-block or at intersection queuing and bottlenecking at locations without exclusive left-turn lanes. As a result, the comparison of road diet alternatives to existing conditions may represent a conservative perspective on the effectiveness of such alternatives.

4.4 RECOMMENDATIONS

Based upon the comparable MOE's yielded by multiple simulations, the potential to reduce the delay incurred at select congested intersections, and improved roadway safety resulting from a reduction in conflict points, it is recommended to pursue the implementation of the *Alternative 4A* to the study area of the Parkway Avenue corridor. This scenario's morning peak hour average travel times were comparable to existing conditions in both directions. During the afternoon peak hour, average travel times increased within seven to 13% of existing conditions for a reduction in speed of only three MPH. The reduction in physical capacity via the road diet is offset via exclusive at-intersection left-turn lanes and adjustments to the signal phasing and timing, on both the individual intersection and corridor levels. However, delays along side street approaches may increase due to a prioritization of green time towards the Parkway Avenue approaches.

Although the implementation of any road diet application must consider anticipated growth of volume along Parkway Avenue, a balance must be achieved between vehicular mobility, the demand for safety, and the accommodation of alternative modes of travel. Nonetheless, traffic may be diverted to alternate/parallel routes with a drop in speeds or level of service. This should be taken into consideration for implementation.

Existing Parkway Avenue configuration with pedestrian crossing
Source: DVRPC 2008

Rendering of the road diet conversion of Parkway Avenue with pedestrian refuge island at crossing
Source: DVRPC 2008

5.0 NJ 47 (DELSEA DRIVE), GLASSBORO, GLOUCESTER COUNTY

5.1 CHARACTERISTICS

The study area consists of a 0.63 mile section of NJ 47 (Delsea Drive) in Glassboro Borough, Gloucester County. The study area begins at Market Place and ends at Heston Road/William Dalton Drive, as shown in ***Figure 19***. This section of NJ 47 is functionally classified as an urban principal arterial and runs in a north-south direction. NJ 47 travels from Atlantic Avenue in Wildwood City, Cape May County north to NJ 130 in Brooklawn Borough, Camden County. There are several major roads that connect with NJ 47 throughout its length, including: US 40, US 322, NJ 55, I-295, Garden State Parkway, and US 130. For a portion of its length it runs parallel to NJ 55 and in many cases is used as an alternate for that highway.

The roadway cross-section throughout the study area varies. The north section has a five-lane cross-section; at the intersection of Heston Road/William Dalton Drive with NJ 47, NJ 47 consists of two lanes in each direction and a dedicated left-turn lane. This configuration transitions into two lanes in each direction and a two-way left-turn lane moving south for approximately 500 feet. At this point, the cross-section changes to four-lanes, two lanes in each direction to Greentree Road. Beyond the intersection of Greentree Road southbound NJ 47 tapers from two lanes to one and northbound is one lane. Shoulder is only available south of Greentree Road on the northbound side of NJ 47. Directly adjacent to the southern end of the study corridor, NJ 47 currently operates as a three lane cross section with one lane in each direction separated by a two way left turn lane in the center. On street parking is not available in the study area on NJ 47.

Section of study area – NJ47; unaccommodating to safe bicycle and pedestrian travel
Source: DVRPC, 2008

NJ 47 has a total of four intersections in the study area, one form a four-legged intersection and three are "T" intersections. Of the four intersections, two are signalized. The speed limit from Market Place to Bristol Drive is 35 MPH and from Bristol Drive to Heston Road/William Dalton Drive is 45 MPH.

In addition to the four intersections already mentioned, there are a number of driveways in the study corridor. There are approximately seventeen driveways located along the east side and eleven driveways on the west side of NJ 47. These all present opportunities for left-turns from both direction of travel and can potentially create unsafe movements.

Sidewalk of varying width is available throughout the study corridor except from Bristol Drive south to the end of the study area along the southbound side of NJ 47. Crosswalks are only available at the two signalized intersection in the study corridor.


Figure 19
Regional Road Diet Analysis
Feasibility Assessment
NJ 47 (N. Delsea Dr.) - Study Corridor
MANTUA
55
47
553
WASHINGTON
Pitman
WOODBURY RD
N DELSEA DR
651
ALT 553
MAIN ST
WILLIAM L DALTON DR
GREENTREE RD
322
HARRISON
MULLICA HILL RD
HESTON RD
634
FISH POND RD
689
NEW ST
Glassboro
MONROE
E HIGH ST
322
GLASSBORO RD
S DELSEA DR
47
BUCK RD
RICHWOOD - AURA RD
55
ELK
553
Clayton
N
0
0.25
0.5
Miles
Delaware Valley Regional Planning Commission
October 2008

The number of driveways used for commercial uses creates inconsistent opportunities for pedestrian activity. In locations where sidewalks are available, they are interrupted by large driveways without pedestrian crossings. There are no bike lanes or share-the-road advisory signs in the corridor. Public transit does not operate along NJ 47 within the study corridor.

Land Use

As shown in ***Figure 20***, the current land use along NJ 47 is predominantly commercial. On the eastern side of NJ 47 from Market Place to Heston Road/William Dalton Drive there are approximately nineteen parcels, all are commercial and setback from the roadway. The commercial uses include retail stores, restaurant and automotive businesses. On the west side of NJ 47 there are eleven parcels, of which eight are commercial. The Manahath Cemetery backs up to NJ 47. A middle school and baseball complex are located in the vicinity of Fish Pond Road directly south of the study area. These facilities have the potential to generate bicycle and pedestrian traffic.

Land use in the study area is predominantly commercial. There are a large number of driveways on both sides of the roadway
Source: DVRPC, 2008

Traffic Counts

For this study average annual daily traffic (AADT) volumes were taken at two locations along the study area on NJ 47, as shown in ***Figure 21*** in March and April 2008. AADT of approximately 17,000 vehicles were recorded in the south of the study area and approximately 20,000 in the northern section of the study area. The directional split for the traffic counts between Market Place and Spencer Avenue is 10,567 vehicles northbound and 6,399 vehicles southbound in 2008. The complete forty-eight hour count is available in ***Appendix A***. The other AADT was recorded south of the Heston Road/William Dalton Drive intersection. In the southbound direction AADT was 9,515 vehicles whereas, the northbound direction AADT was 10,641. At both locations the southbound direction has lower traffic volumes than the northbound direction but difference is greater for the location in the south of the study area.

Turning movement counts were taken at four intersections in the study area - Heston Road/William Dalton Drive, Shopping Center entrance, Bristol Drive, and Greentree Road, see ***Figure 22***. The collective morning peak-hour was 8:00 – 9:00 AM and the collective afternoon peak-hour was 5:00 – 6:00 PM. All the intersections counted in the study corridor recorded less than 750 vehicles per hour per direction (vphpd) during the AM peak-hour for the NJ 47 approaches except the northbound approach at the Heston Road/William Dalton Drive intersection which was 757 vehicles. For the afternoon peak, all the NJ 47 approaches were over 750 vphpd directional peak. No NJ 47 approach recorded 1,000 or higher vphpd directional peak.

Congestion Management Process

NJ 47 is a regionally significant roadway serving both local and through traffic. The study area is included in the US 322 and Cross Keys corridor in *DVRPC's Congestion Management Process (CMP)*. Eight criteria are used to identify corridors in the CMP. They are as follows: current daily congestion; current peak-hour congestion; heavily used roads and intermodal facilities; future daily congestion from the traffic model simulation; future peak-hour congestion from the traffic model simulation; frequent crash-related congestion; intermodal importance; and land use. The study area of NJ 47 meets less than three of the eight CMP criteria.

Crashes

Glassboro Police Department provided crash data for the study area on NJ 47. The data provided consisted of crash data for the years 2004 to 2007. Both reportable and non-reportable data were included. Non-reportable crashes are crashes which result in less than five hundred dollars worth of property damage and no injury. Over the study period there were 172 crashes of which twenty-nine were non-reportable. ***Table 4*** shows a breakdown of crashes by collision type, location of crashes, crash severity, lighting conditions, and road surface conditions. ***Table 5*** shows a comparison of crash characteristics with corresponding year New Jersey averages for the statewide state road system. Individual crash details are shown in ***Appendix B***.

Rear-end crashes make up the highest percentage of total crashes for all years except 2004 in the study area. Compared to the statewide average for the state road system, averages fluctuate from year to year from almost 21% less than the statewide average in 2004 to approximately 2% higher in 2006. Angle crashes represent the highest percentage of all crashes in 2004 while they are the second highest in 2005 and 2006. They represent a greater percentage of the total for all years than their respective yearly statewide averages. In 2004, angle crash average was approximate three times higher than the 2004 statewide average. Left-turn crash averages for the study corridor far exceed the statewide averages for all years analyzed. For the study corridor left-turn crashes made up between 10.53% (2005) and 20.93% (2007) of the year's crash total while the statewide averages ranged from 3.35% (2007) to 4.29% (2006). Only in 2007 was the sideswipe crash average higher in the study corridor than for the statewide state road system. In 2006 there were no head-on collisions recorded but in 2004 the corridor average was more than four times higher than the statewide average; in 2005 and 2007 corridor averages were also higher than the statewide averages. Of note is the percentage of crashes which occurred at intersection versus those occurring mid-block. For the analysis years, the study area intersection crash averages ranged from a low of 36.36% in 2006 to a high of 55.81 in 2007; the corresponding low and high for the yearly statewide averages for the study period was 28.31% in 2007 and 39.75 in 2005.

There were twenty-five left-turn crashes in the corridor of which ten (40%) did not occur at an intersection. Of the sixty-three rear-end crashes forty (63%) did not occur at an intersection. Additionally, twenty-nine (67%) of the angle crashes and two (33%) of the head-on crashes did not occur at an intersection. ***Figures 23-25*** are collision diagrams

Table 4 **NJ 47 – Crash Data Summary**

	2004		2005		2006		2007		Total	
	Crash	%	Crash	%	Crash	%	Crash	%	Crash	%
*Reportable	50	86.21%	27	71.05%	28	84.85%	38	88.37%	143	83.14%
Non-Reportable	8	13.79%	11	28.95%	5	15.15%	5	11.63%	29	16.86%
Collision Type										
Rear End	14	24.14%	17	44.74%	16	48.48%	16	37.21%	63	36.63%
Angle	21	36.21%	10	26.32%	5	15.15%	7	16.28%	43	25.00%
Left Turn	8	13.79%	4	10.53%	4	12.12%	9	20.93%	25	14.53%
Sideswipe	7	12.07%	5	13.16%	3	9.09%	9	20.93%	24	13.95%
Hit Parked Vehicle	1	1.72%	~	~	1	3.03%	~	~	2	1.16%
Head-on	4	6.90%	1	2.63%	~	~	1	2.33%	6	3.49%
Other	3	5.17%	1	2.63%	3	9.09%	~	~	7	4.07%
Pedacyclist	~	~	~	~	1	3.03%	~	~	1	0.58%
Backing	~	~	~	~	~	~	1	2.33%	1	0.58%
Intersection Type										
Intersection	24	41.38%	20	52.63%	12	36.36%	24	55.81%	80	46.51%
Not at Intersection	34	58.62%	18	47.37%	21	63.64%	19	44.19%	92	53.49%
Severity Type										
Fatality	~	~	~	~	~	~	~	~	~	~
Injured	14	24.14%	12	31.58%	15	45.45%	8	18.60%	49	28.49%
Property Damage Only	44	75.86%	26	68.42%	18	54.55%	35	81.40%	123	71.51%
Lighting Condition										
Day	45	77.59%	32	84.21%	25	75.76%	33	76.74%	135	76.34%
Dusk/Dawn	1	1.72%	~	~	1	3.03%	1	2.33%	3	1.08%
Night	12	20.69%	6	15.79%	7	21.21%	9	20.93%	34	22.58%
Road Surface Condition										
Dry	44	75.86%	32	84.21%	27	81.82%	36	83.72%	139	80.81%
Wet	13	22.41%	5	13.16%	6	18.18%	7	16.28%	31	18.02%
Ice/Snow	1	1.72%	1	2.63%	~	~	~	~	2	1.16%

Source: Glassboro Police Department

Table 5 **NJ 47 – Crash Data Comparison with NJ Statewide Averages**

	2004	2004 NJ Statewide State Road Average	2005	2005 NJ Statewide State Road Average	2006	2006 NJ Statewide State Road Average	2007	2007 NJ Statewide State Road Average
*Reportable	86.21%	~	71.05%	~	84.85%	~	88.37%	~
Non-Reportable	13.79%	~	28.95%	~	15.15%	~	11.63%	~
Collision Type								
Rear End	24.14%	45.32%	44.74%	44.98%	48.48%	46.09%	37.21%	45.67%
Angle	36.21%	12.39%	26.32%	12.28%	15.15%	10.79%	16.28%	11.11%
Left Turn	13.79%	3.83%	10.53%	3.78%	12.12%	4.29%	20.93%	3.35%
Sideswipe	12.07%	16.45%	13.16%	16.67%	9.09%	16.36%	20.93%	16.50%
Hit Parked Vehicle	1.72%	1.49%	~	1.40%	3.03%	1.33%	~	1.34%
Head-on	6.90%	1.50%	2.63%	1.39%	~	2.01%	2.33%	1.82%
Other	5.17%	3.26%	2.63%	3.55%	9.09%	0.27%	~	0.75%
Pedacyclist	~	0.51%	~	0.51%	3.03%	0.48%	~	0.52%
Backing	~	~	~	~	~	~	2.33%	~
Intersection Type								
Intersection	41.38%	36.61%	52.63%	39.75%	36.36%	29.26%	55.81%	28.31%
Not at Intersection	58.62%	63.40%	47.37%	60.25%	63.64%	70.74%	44.19%	71.49%
Severity Type								
Fatality	~	0.31%	~	0.34%	~	0.33%	~	0.34%
Injured	24.14%	30.04%	31.58%	29.42%	45.45%	29.66%	18.60%	28.31%
Property Damage Only	75.86%	69.65%	68.42%	70.24%	54.55%	70.01%	81.40%	71.35%
Lighting Condition								
Day	77.59%	70.36%	84.21%	70.71%	75.76%	69.07%	76.74%	70.05%
Dusk/Dawn	1.72%	*29.28%	~	*28.92%	3.03%	4.17%	2.33%	3.96%
Night	20.69%		15.79%		21.21%	26.49%	20.93%	25.72%
Road Surface Condition								
Dry	75.86%	73.94%	84.21%	75.36%	81.82%	76.86%	83.72%	75.21%
Wet	22.41%	22.43%	13.16%	19.62%	18.18%	21.30%	16.28%	20.43%
Ice/Snow	1.72%	3.25%	2.63%	4.60%	~	0.64%	~	1.73%

Source: Glassboro Police Department and New Jersey Department of Transportation Crash Database.

** Data Set is combination of Dusk, Dawn, and Night*

Figure 20

Regional Road Diet Analysis
Feasibility Assessment

NJ 47 (N. Delsea Dr.) - Land Use

Figure 21

Regional Road Diet Analysis
Feasibility Assessment
NJ 47 (N. DELSEA DR.) - Traffic Counts

Figure 22
Regional Road Diet Analysis – Feasibility Assessment
NJ 47
Existing Peak Hour Turning Movement Counts

Peak Hours
AM: 8:00 - 9:00
PM: 5:00 - 6:00

AM (PM)

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May 2008

Crash Type Legend

(1) = # Crashes

- Rear End
- Same Direction Sideswipe
- Left Turn
- Hit Pedestrian
- Head On
- Backing
- Hit Fixed Object
- Hit Non-fixed Object
- Angle

Figure 23
Regional Road Diet Analysis
Feasibility Assessment
NJ 47 (Delsea Drive)
Collision Diagram A

Greentree Road

Spencer Avenue

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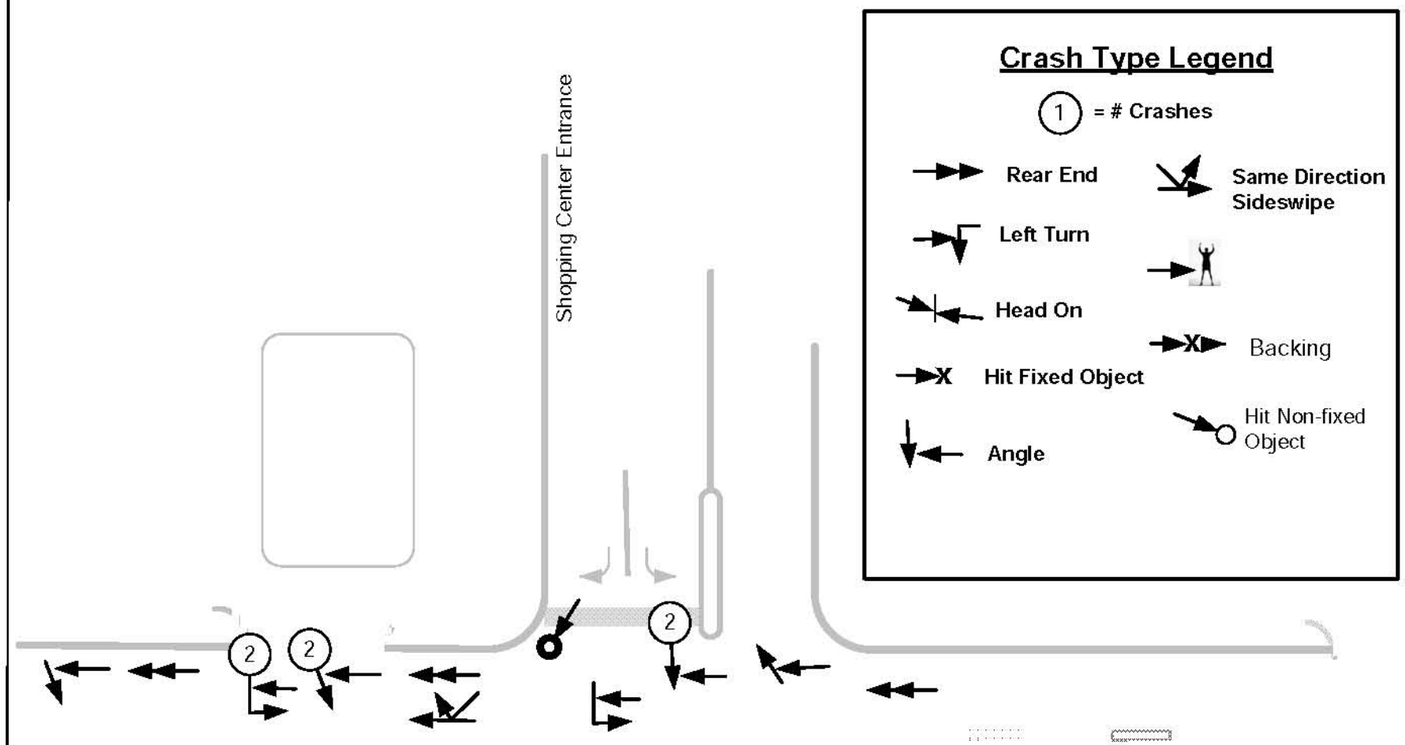
Figure 24
Regional Road Diet Analysis
Feasibility Assessment
NJ 47 (Delsea Drive)
Collision Diagram B



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June 2008

Crash Type Legend

- Rear End
- Left Turn
- Head On
- Hit Fixed Object
- Angle
- (1) = # Crashes
- Same Direction Sideswipe
- Hit Pedestrian
- Backing
- Hit Non-fixed Object

Figure 25
Regional Road Diet Analysis
Feasibility Assessment
NJ 47 (Delsea Drive)
Collision Diagram C

Heston Road

Delsea Drive

William Dalton Drive

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June 2008

showing locations of each crash. The majority of the crashes occurred during daylight hours and on dry road surface.

5.2 SIMULATION

In order to understand the impacts of a road diet application upon the study roadway, measures of effectiveness (MOE) must be provided for each alternative to allow cross-comparison. For the NJ 47 corridor, two related measures were considered, average travel time and average travel speed. These MOE's were generated for existing conditions, as well as for two road diet alternatives. Neither alternative incorporated signal timing revisions, and thus solely relied upon adjustments to roadway geometry.

SimTraffic, a stochastic traffic-modeling software was utilized to measure these MOE's via simulation of the study roadway under the various alternatives. By incorporating turning movement volumes, intersection geometry and spacing, and signal timing, *SimTraffic* serves as an effective tool for ascertaining the effects of roadway design, presence actuation, queue interactions, and signal progression; qualities that deterministic models are less sensitive to. It is unable to simulate mid-block or at intersection left-turns beyond the specific locations where turning movement data was gathered. *SimTraffic* provides for variability by employing a range of vehicle and driver parameters that generate unique traffic behaviors in each simulation. As a result, peak-hour MOE's were averaged from five sixty-minute simulations of each alternative.

Utilizing the *SimTraffic* software, average travel times and speeds were calculated for both directions of the study portion of Delsea Drive, for existing conditions and each of the two road diet scenarios, during their morning and afternoon peak-hours, see ***Table 6.*** The complete output from the simulation is shown in ***Appendix C***.

Existing Conditions

During the morning peak-hour, the average travel time for the length of the study roadway was approximately ninety seconds in either direction, for an average speed of 31 MPH. The majority of vehicular delay was experienced at or along the approach to the intersection of Heston Road/William Dalton Drive and NJ 47. This intersection performs at an overall level-of-service (LOS) of C, with overall delays averaging twenty-one seconds. The north and southbound approaches both operate at a LOS of B, with average delays between thirteen and fifteen seconds.

During the afternoon peak-hour, average travel times were approximately 110 seconds, slightly longer than the morning peak-hours, thus providing slower average speeds of 26 MPH. This is primarily due to a 55% increase in overall network volume from the morning peak-hour. The most delay was incurred at the NJ 47 approaches to the intersection with Heston Road/William Dalton Drive. This intersection experienced an average overall delay of thirty-seven seconds for a LOS of D. The north and southbound approaches both operate at LOS of C, with average delays between twenty-five and twenty-eight seconds.

Table 6 – NJ 47 SUMMARY OF MEASURES OF EFFECTIVENESS

Scenario	Direction of Travel	Distance (miles)	Average Travel Time (seconds)	Average Speed (MPH)	Difference in Travel Time from Existing Conditions (seconds)	Difference in Speed from Existing Conditions (MPH)	% Difference from Existing Travel Time	% Difference from Existing Average Speed
AM Peak - Existing Conditions	Northbound	0.8	93.7	30.7	N/A	N/A	N/A	N/A
	Southbound	0.8	91.7	31.4	N/A	N/A	N/A	N/A
AM Peak - Alternative 1	Northbound	0.8	100.0	28.8	6.3	-1.9	6.7%	-6.3%
	Southbound	0.8	97.4	29.6	5.7	-1.8	6.2%	-5.9%
AM Peak - Alternative 2	Northbound	0.8	98.0	29.4	4.3	-1.3	4.6%	-4.4%
	Southbound	0.8	95.0	30.3	3.3	-1.1	3.6%	-3.5%
PM Peak - Existing Conditions	Northbound	0.8	112.0	25.7	N/A	N/A	N/A	N/A
	Southbound	0.8	112.5	25.6	N/A	N/A	N/A	N/A
PM Peak - Alternative 1	Northbound	0.8	120.1	24.0	8.1	-1.7	7.2%	-6.7%
	Southbound	0.8	259.6	11.1	147.1	-14.5	130.8%	-56.7%
PM Peak - Alternative 2	Northbound	0.8	121.5	23.7	9.5	-2.0	8.5%	-7.8%
	Southbound	0.8	118.6	24.3	6.1	-1.3	5.4%	-5.1%

Source: DVRPC, 2008

Alternative 1
According to NJDOT's Straight Line Diagram, the existing 4-lane cross section of the study area is 48 feet wide and the 5-lane section is 66 feet wide. This scenario introduces a consistent three-lane road diet cross-section for the length of the study area of NJ 47 except for 400 feet along the northbound approach where the second northbound travel lane is retained from the intersection of NJ 47 with Heston Road/William Dalton Drive to the driveway serving the Blockbuster store and BP gas station. Excess pavement width can be used to accommodate shoulders in each direction which can be used for bicycle travel or they can be designated bike lanes. To accommodate for the removal of one southbound travel lane, the curbside lane at the southbound approach at the intersection of NJ 47 with Heston Road/William Dalton Drive is reassigned to an exclusive right-turn lane from the current shared through and right-turn lane designation. No lane re-assignment is necessary for the northbound approach at the intersection of NJ 47 and Greentree Road as there is currently only a single northbound approach lane. The signal timings of the affected signalized intersections were not revised for this alternative.

During the morning peak-hour, average travel time was approximately one hundred seconds in either direction, for an average speed of 29 MPH, which represents a 6% reduction in average travel speed from existing conditions. Similar to existing conditions, the greatest delay is experienced along the approach to the intersection of NJ 47 and Heston Road/William Dalton Drive. This intersection performed at an overall LOS of C with twenty-two seconds of average delay. The north and southbound approaches operate at LOS of B, averaging thirteen to sixteen seconds of delay.

During the afternoon peak-hour, average travel time is 120 seconds for the northbound direction and 260 seconds for the southbound direction. These translate into average speeds of 24 and 11 MPH for the north and southbound directions, respectively. Although, this represents only a 7% decrease in speed for northbound vehicles, it corresponds to a 57% reduction in speed for southbound vehicles. Similar to existing conditions, the largest proportion of delay is experienced along the approach to the intersection of NJ 47 with Heston Road/William Dalton Drive; the increase in delay for southbound vehicles constitutes a LOS of F. The northbound approach continues to operate at a LOS of C, with twenty-six seconds of average delay, and the overall intersection is at a LOS of E with overall average delays of sixty-six seconds.

Alternative 2:
*S*imilar to *Alternative 1*, this scenario introduces a three-lane road diet cross-section along the study portion of NJ 47 while retaining two northbound travel lanes between the intersection of NJ 47, Heston Road/William Dalton Drive and the driveway serving Blockbuster and BP gas station. The southbound approach lane configuration for the NJ 47, Heston Road/William Dalton Drive intersection remains the same but to accommodate the southbound transition from two lanes to one for the road diet conversion a lane merge is employed in the vicinity of the driveways serving the Wendy's Restaurant and Rite Aid Pharmacy, see ***Figure 26***. Exact geometrics for the taper for the lane merge were not utilized for the simulation; this should be established

with an in-depth engineering study and in accordance with NJDOT Design Manual. The signal timings of the affected signalized intersections were not revised for this alternative.

During the morning peak-hour, average travel time was approximately ninety-five seconds in either direction, providing an average speed of 30 MPH. This represents a 6% reduction in speed from existing conditions, and an improvement over *Alternative 1*. As with previous scenarios, the intersection of NJ 47 and Heston Road/William Dalton Drive generates the most delay within the study area. The overall delay at this intersection averages twenty seconds for a LOS of B, while the north and southbound approaches operate at LOS of B with eleven to fifteen seconds of delay.

During the afternoon peak-hour, in either direction, average travel time was roughly 120 seconds for an average speed of 24 MPH. These measures constitute a 5-7% reduction in speed from existing conditions. However, compared to *Alternative 1*, travel time and travel speed for the southbound direction is improved by 54% and 118%, respectively. Similar to previous scenarios, the intersection of NJ 47 and Heston Road/William Dalton Drive experience the greatest amount of vehicular delay within the study area. The intersection averages an overall delay of thirty-six seconds for a LOS of D, though the north and southbound approaches operate at LOS of C with an average delay of twenty-five seconds.

5.3 FINDINGS

- There are fluctuations in the AADT along the study area on NJ 47. For the two locations counted, both fell below 20,000 AADT thresholds, where generally road diets operate most successfully however one was very close to this threshold.
- Of the intersections for which turning movement counts were taken no approach recorded 1,000 or higher vphpd directional peak-hour; the level at which LOS may be noticeably reduced with road diet conversions.
- There are no shoulders or pedestrian buffers along the roadway.
- Bicyclists have to travel in the same lanes as motor vehicles. Large number of bicyclists and pedestrians were observed along NJ 47 in the study area.
- There are a high number of opportunities to make left-turns in both directions of the study corridor.
- Left-turn and angle crashes, which generally occur at intersections, have large portions occurring at mid-block locations in the study area – 40% for left-turns and 67% for angle crashes. This could indicate unsafe left-turns at driveways. A road diet application will reduce conflict points and improve sight distance for these movements.
- Rear-end crashes are also higher at mid-block locations and may be indicative of vehicles suddenly stopping to make left-turns and consequently being rear-ended by unprepared drivers. Left-turning traffic utilizes a separate designated left-turn lane in a road diet conversion.

Figure 26

Regional Road Diet Analysis
Feasibility Assessment

NJ 47 (N. Delsea Dr.), Heston Rd /William L. Dalton Dr.
Intersection Improvement

- The percentage of sideswipe crashes increased drastically in 2007. A road diet application can address this crash type by the reduced opportunities to change lanes.
- Road diet application of a given roadway seeks to accommodate all modes of travel. It can improve the safety of a roadway through the reduction of conflict points, average speeds and its variability, and improved sight distance for turning traffic. NJ 47, as it currently exists and functions are skewed toward vehicle travel. The road diet application can improve the accommodation and safe travel of pedestrians and bicyclists.
- Simulation and subsequent analysis of each scenario reveals that a basic road diet application results in:
    - Greater travel time during the afternoon peak-hour than during the morning peak-hour.
    - During the morning peak-hour, both road diet alternatives contributed only slight increases in travel time for either direction.
    - Conversely, during the afternoon peak-hour, *Alternative 1* was responsible for a dramatic increase in travel time with a corresponding decrease in travel speed for the southbound direction, mainly due to large delay increases at the intersection of NJ 47and Heston Road/William Dalton Drive.
    - *Alternative 2* did not have such an impact upon the study roadway, instead only slight increases in travel times for both directions of travel were experienced during either peak-hour.
- The methodology was unable to simulate mid-block movements and their impact on arterial flow at locations where explicit volume data was not available. This should have little effect along the northern portion of the study roadway, from Heston Road and William Dalton Drive to the driveway serving Firestone and the Gloucester County Federal Bank, where a two-way left-turn-lane (TWLTL) already exists. There are several commercial driveway locations along the remainder of the study roadway where turning movement volume data was not acquired. Thus the MOE's for existing conditions may prove more optimistic than actual roadway operations due to an inability to comprehensively simulate mid-block queuing and bottlenecking at locations without an exclusive left-turn lane or TWLTL. As a result, the comparison of road diet alternatives to existing conditions may represent a conservative perspective on the effectiveness of such alternatives.

5.4 RECOMMENDATIONS

Simulation of existing conditions and two road diet alternatives along the study area of NJ 47 provided two interrelated MOE's for each scenario, average travel time, and average travel speed. Traditional delay and LOS measures for the approaches and overall intersection were also collected. Based upon MOE's comparable to existing conditions, a reduction in conflict points along the roadway, and the ability to better accommodate non-automotive modes of transportation, it is recommended to pursue the implementation of *Alternative 2* along the study area of NJ 47. This scenario yielded

average travel times and speeds within ten seconds and 2 MPH of existing conditions, respectively. Although a lane merge was employed by this scenario, in order to reflect the southbound transition from two through lanes into one, a specific taper length was not utilized. As a result, the exact location and geometric standards to safely and efficiently accommodate vehicular flow at the lane merge must be determined through an engineering analysis. Additionally, the implementation of a road diet application along NJ 47 must balance the competing interests of current and future vehicular mobility with the demand for safety and alternative modes of transportation.

Existing NJ 47 configuration with bicyclists and motor vehicles sharing the same travel lane
Source: DVRPC 2008

Rendering of the road diet conversion of NJ 47 with bicyclist using shoulder/bike lane
Source: DVRPC 2008

6.0 CR 644 (HADDONFIELD ROAD), PENNSAUKEN, CAMDEN COUNTY

6.1 CHARACTERISTICS

The study area consists of a 1.0 mile stretch of CR 644 (Haddonfield Road) in Pennsauken Township, New Jersey, shown in ***Figure 27***. The study area begins at the intersection of CR 644 and New York Avenue, and continues on until the intersection of CR 644 and Wyndam Road. CR 644 is functionally classified as an urban principal arterial and runs in a north-south direction. It travels from CR 561 (Ellis Road) north to US 130. The speed limit varies throughout the roadway but is 45 MPH in the study area. The land use in the corridor is predominantly commercial, residential and recreational.

There are several major roads that connect with Haddonfield Road in Camden County. In Haddonfield Borough, Haddonfield Road connects with CR 561 (Ellis Road), NJ 41/ CR 573 (East Kings Highway), and CR 642 (Maple Avenue). In Cherry Hill Township, Haddonfield Road connects with CR 758 (Coles Mill Road/ Pardee Lane), CR 628 (Park Boulevard), NJ 70 (Marlton Pike), CR 626 (West Chapel Avenue), NJ 38, and CR 616 (Church Road). In Pennsauken Township, Haddonfield Road connects with CR 537 (Maple Avenue), CR 621 (Park Avenue), NJ 90, NJ 73, and US 130.

Large number of driveways for access to the many commercial facilities on Haddonfield Road. Sidewalks are not available in this section of the study area.
Source: DVRPC, 2008

Haddonfield Road is two lanes in each direction through the study area, there is no available shoulder and sidewalks are sporadic. Along Haddonfield Road in the study area there are a total of nineteen intersections, three are four-legged intersections and fifteen are "T" intersections. Of the nineteen intersections, four are signalized. In addition to the intersections several driveways access Haddonfield Road. There are approximately twenty-eight driveways located on the east side and thirty-four driveways located on the west side of Haddonfield Road. Due to the number of driveways, un-signalized side streets and opportunities to make left-turns there is the potential for significant conflicts.

Sidewalks are not consistently available along the study area, and in locations where they are available, they are interrupted by large driveways without pedestrian crossings. Crosswalks are inconsistent at major intersection and generally non-existent at others. There are no bike lanes or share-the-road advisory signs in the corridor.

Land Use

The land use in the area immediately surrounding the study area is a mixture of recreational, commercial, light industrial, residential, wooded, and utility uses, as shown in ***Figure 28***. There are a number of business and commercial properties, offices, and

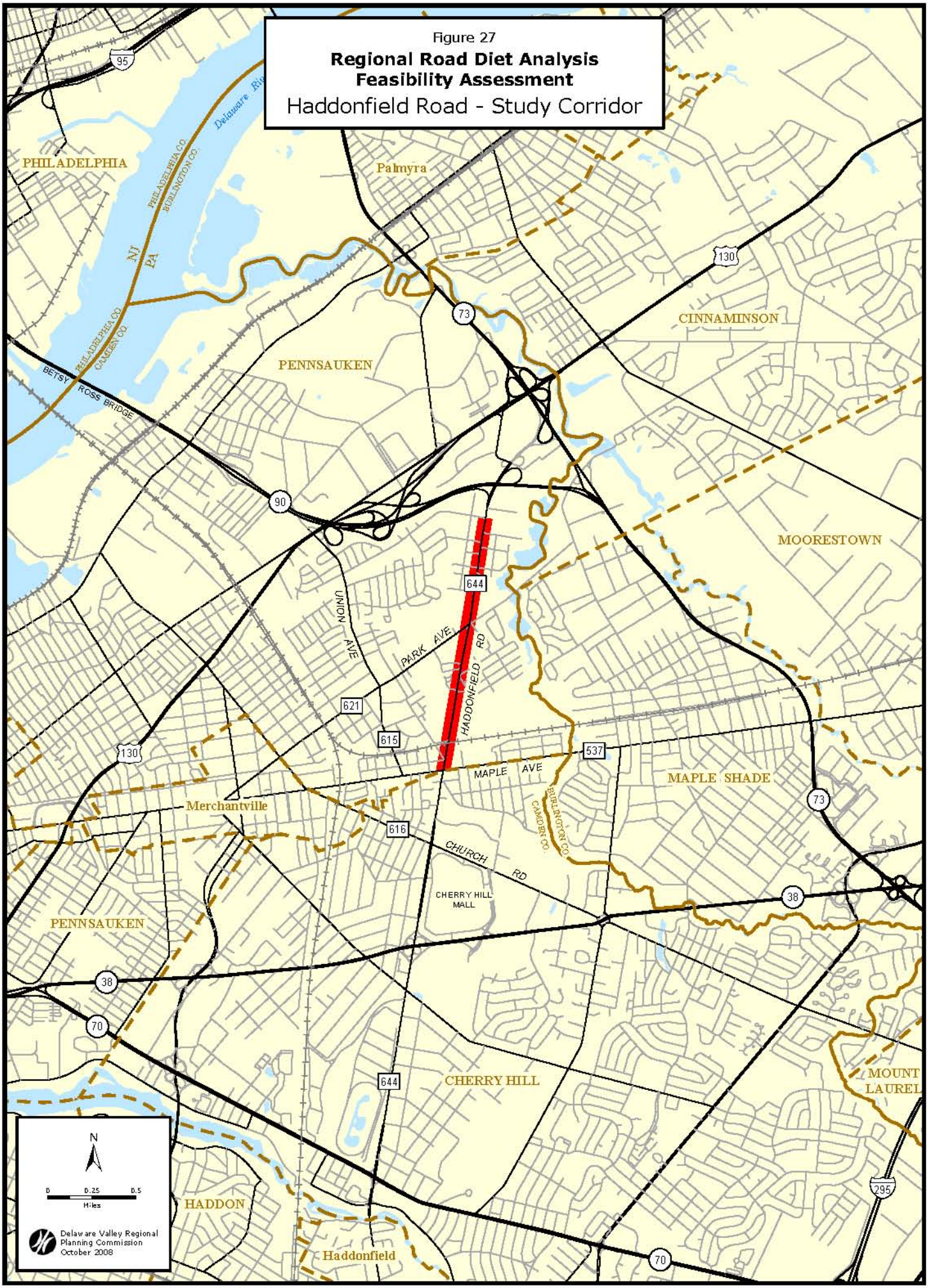


Figure 27
Regional Road Diet Analysis
Feasibility Assessment
Haddonfield Road - Study Corridor
PHILADELPHIA
Palmyra
CINNAMINSON
PENNSAUKEN
MOORESTOWN
Merchantville
MAPLE SHADE
CHERRY HILL
HADDON
Haddonfield
MOUNT LAUREL
PENNSAUKEN
CHERRY HILL MALL
BETSY ROSS BRIDGE
UNION AVE
PARK AVE
HADDONFIELD RD
MAPLE AVE
CHURCH RD
644
621
615
616
537
95
130
73
90
38
70
295
N
0 0.25 0.5
Miles
Delaware Valley Regional Planning Commission
October 2008

single-family detached housing. The Pennsauken Country Club and recreation grounds are located along the study area. The neighboring areas are mainly residential, commercial, and office use. Pennsauken Intermediate School located on Park Avenue and George B. Fine Elementary School located on Gladwyn Avenue just west of the study corridor while the Woodlawn Avenue Sports Complex is located to the east. These facilities have the potential to generate heavy pedestrian and bicycle traffic through the study corridor. South of the study area, the Cherry Hill Mall is located as well as the shopping areas at the Garden State Park.

Transit

The New Jersey Transit Route 404 bus operates along a portion of Haddonfield Road within the study corridor, between Park Avenue and Maple Avenue. This bus route operates in a predominantly west-east direction from the City of Philadelphia through Pennsauken to the Cherry Hill Mall. It serves the Walter Rand Transportation Center in the City of Camden where connections can be made to the PATCO line, the River Line, and a number of other bus routes.

The route 404 bus operates thirty-six daily weekday trips eastbound between 5:02 AM and 12:15 AM. The headways vary throughout the day ranging from ten minutes in the afternoon peak to sixty-five minutes at nights. There are twenty-five and thirteen trips on Saturdays and Sundays respectively eastbound. The headways on these days also vary but are forty minutes on Saturdays and sixty minutes on Sundays during daytime operation. There are thirty-one daily weekday trips westbound between 5:10 AM and 11:22 PM. Headways vary throughout the day, ranging from five minutes to sixty-five minutes. There are twenty-four westbound trips on Saturday and twelve on Sunday. The headways vary but operate every forty minutes on Saturday and every sixty minutes on Sundays during daytime hours. There are nine morning peak period trips westbound and six eastbound and there are six evening peak period trips westbound and eight eastbound trips.

According to the schedule the trip through the study area is approximately three minutes. As shown in ***Figure 29***, there are six official bus stops in each direction in the study area. The weekday bi-directional ridership for the 404 bus route was 1,822 passengers in 2007.

Traffic Counts

Average annual daily traffic (AADT) volumes were taken on Haddonfield Road in the study area, as shown in ***Figure 30*** in March 2008. AADT of 15,748 vehicles were recorded between Park Avenue and Githens Avenue. The directional split for the traffic count indicated 6,999 vehicles northbound and 8,749 vehicles southbound. The complete forty-eight hour count is available in ***Appendix A***. Two counts were recorded on Haddonfield Road outside the study area – south of Maple Avenue in Cherry Hill Township where approximately 25,000 vehicles were recorded in 2006, and north of NJ 90, approximately 15,000 vehicles were recorded also in 2006.

Turning movement counts were taken at four intersections in the study corridor – Wyndam Road, Irving Avenue, Park Avenue, and New York Avenue, see ***Figure 31***. Vehicles were counted between 6:00 AM and 9:00 AM for the morning peak period and between 4:00 PM and 7:00 PM for the afternoon peak. The collective morning peak-hour was 7:45 – 8:45 AM and the afternoon collective peak-hour was 5:15 – 6:15 PM. Only the southbound approach of the Haddonfield Road/New York Avenue intersection recorded more than 750 vehicles per hour per direction (vphpd) directional peak for the morning. Both Haddonfield Road approaches for the New York Avenue intersection and the Park Avenue intersection and the southbound approach at Wyndam Road recorded more than 750 vehicles per hour per direction (vphpd) directional peak for the afternoon. No approach in the study corridor recorded 1,000 or higher vphpd directional peak. None of the Haddonfield Road intersection approaches showed exceptionally high left-turn movement. However, at Park Avenue and Wyndam Road intersections right-turns at the Haddonfield Avenue approaches were high during the afternoon peak.

Congestion Management Process

Haddonfield Road is a regionally significant roadway serving both local and through traffic. The study area is included in the US 130 corridor in *DVRPC's Congestion Management Process (CMP)*. Eight criteria are used to identify corridors in the CMP. They are as follows: current daily congestion; current peak-hour congestion; heavily used roads and intermodal facilities; future daily congestion from the traffic model simulation; future peak-hour congestion from the traffic model simulation; frequent crash-related congestion; intermodal importance; and land use. The study corridor is located in Sub-corridor F – categorized as developed arterial. Very appropriate strategies from the CMP include – computerized traffic signals, enhanced transit amenities and safety, center turn lanes, more frequent transit or more hours of service, and major reconstruction with minor capacity. The study area of Haddonfield Road meets less than three of the eight CMP criteria.

Left turning vehicle from driveway has to consider three lanes of traffic to safely make that movement
Source: DVRPC, 2008

Crashes

Crash data was acquired from New Jersey Department of Transportation crash database for the years 2004, 2005 and 2006. There were 163 reportable crashes in the study corridor between 2004 and 2006, as shown in ***Table 7***. The highest number of crashes for the three year period was recorded in 2005 at sixty-six crashes. There was one fatality for the study period which occurred in 2004 but overall approximately 71% of the crashes resulted in property damage only and 28% resulted in injuries of varying severity. Compared to the annual statewide averages for the county road system, as

Figure 28

Regional Road Diet Analysis
Feasibility Assessment

Haddonfield Road - Land Use

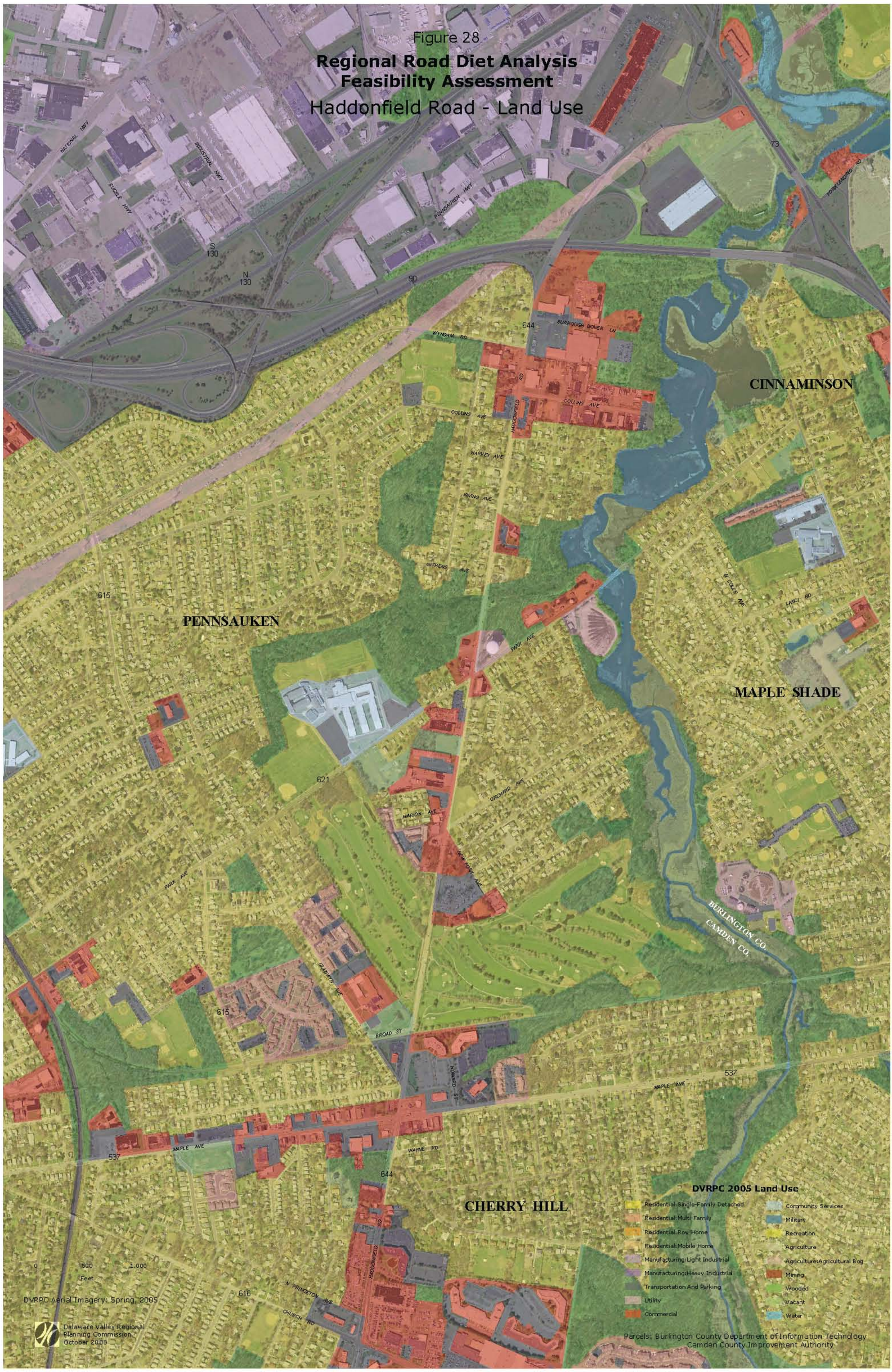


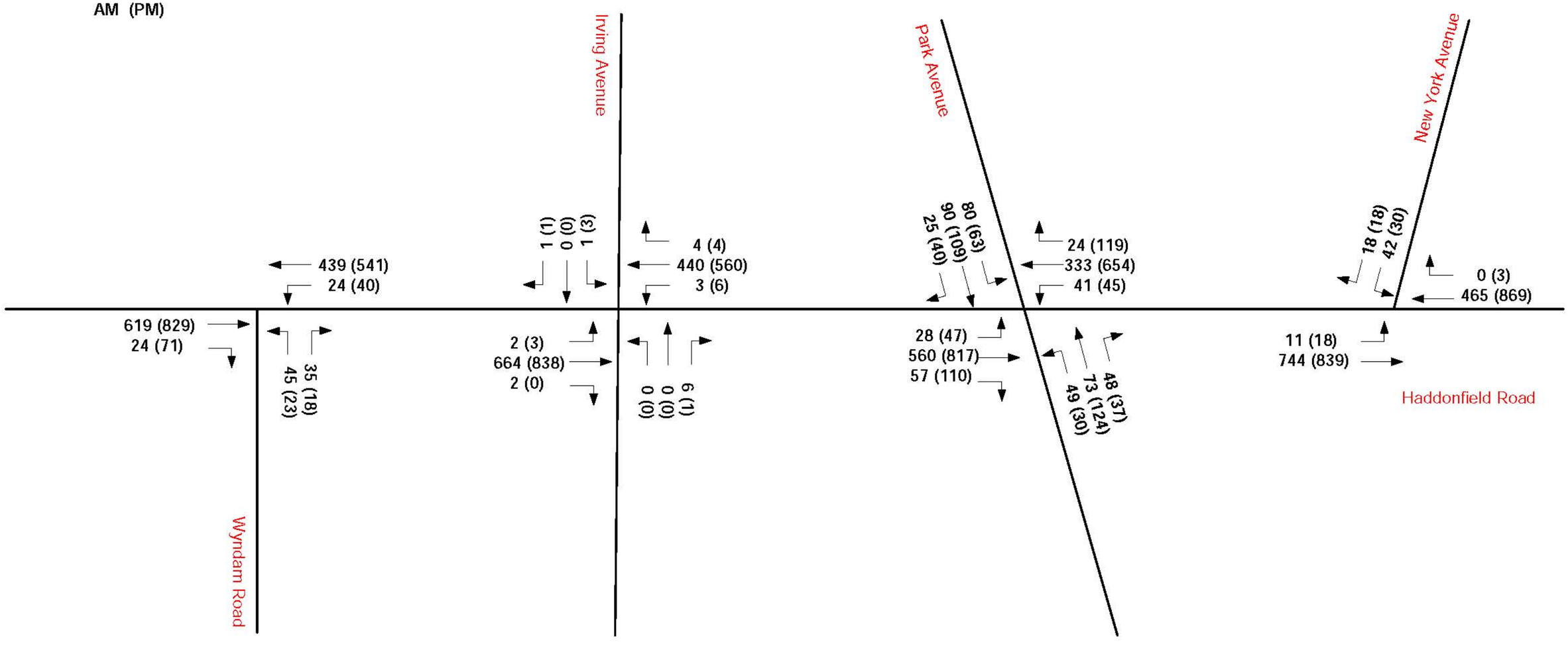

Figure 29
Regional Road Diet Analysis
Feasibility Assessment
Haddonfield Road - Transit
CINNAMINSON
MAPLE SHADE
PENNSAUKEN
CHERRY HILL
BURLINGTON CO.
CAMDEN CO.
404
407
409
419
455
NJ Transit Bus Route 404
Other NJ Transit Bus Routes
NJ Transit Bus Stop
(along study corridor)
DVRPC Aerial Imagery: Spring, 2005
Delaware Valley Regional
Planning Commission
October 2009


Figure 30
Regional Road Diet Analysis
Feasibility Assessment
Haddonfield Road - Traffic Counts
39,528 (2000)
34,897 (2002)
35,536 (2003)
36,407 (2004)
15,282 (2006)
37,221 (2003)
38,543 (2004)
40,407 (2006)
26,308 (2003)
28,826 (2004)
26,204 (2006)
20,984 (2002)
21,368 (2003)
21,892 (2004)
CINNAMINSON
3,722 (2006)
15,748 (2008)
PENNSAUKEN
MAPLE SHADE
BURLINGTON CO.
CAMDEN CO.
4,622 (2000)
CHERRY HILL
26,218 (2006)
DVRPC Aerial Imagery, Spring, 2005
Delaware Valley Regional Planning Commission
October, 2009
DVRPC Traffic Count*
NJDOT Traffic Count*
* Average Annual Daily Traffic (AADT) Volume

Figure 31
Regional Road Diet Analysis – Feasibility Assessment
HADDONFIELD ROAD
Existing Peak Hour Turning Movement Counts

Peak Hours
AM: 7:45 - 8:45
PM: 5:15 - 6:15

AM (PM)



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Delaware Valley Regional Planning Commission
May 2008

Table 7 Haddonfield Road – Crash Data Summary

	2004		2005		2006		Total	
	Crash		Crash		Crash		Crash	
Reportable	52		66		45		163	
Collision Type								
Rear-End	30	57.69%	30	45.45%	25	55.56%	85	52.15%
Right Angle	3	5.77%	7	10.61%	7	15.56%	17	10.43%
Sideswipe	6	11.54%	16	24.24%	7	15.56%	29	17.79%
Left Turn	5	9.62%	3	4.55%	2	4.44%	10	6.13%
Hit Fixed Object	4	7.69%	5	7.58%	2	4.44%	11	6.75%
Hit Non-fixed Object					1	2.22%	1	0.61%
Opposite Direction (Head-On, Angular)	1	1.92%	2	3.03%			3	1.84%
Pedalcyclist					1	2.22%	1	0.61%
Other	3	5.77%	3	4.55%			6	3.68%
Intersection Type								
At Intersection	9	17.31%	39	59.09%	6	13.33%	54	33.13%
Not at Intersection	42	80.77%	27	40.91%	39	86.67%	108	66.26%
Severity Type								
Fatality	1	1.92%					1	0.61%
Injured	14	26.92%	15	22.73%	17	37.78%	46	28.22%
Property Damage Only	37	71.15%	51	77.27%	28	62.22%	116	71.17%
Lighting Condition								
Day	39	75.00%	45	68.18%	33	73.33%	117	71.78%
Dusk/Dawn	1	1.92%	3	4.55%	3	6.67%	7	4.29%
Night	12	23.08%	18	27.27%	9	20.00%	39	23.93%
Road Surface Condition								
Dry	41	78.85%	43	65.15%	27	60.00%	111	68.10%
Wet	10	19.23%	17	25.76%	18	40.00%	45	27.61%
Icey/Snowy	1	1.92%	6	9.09%			7	4.29%

Source: New Jersey Deapartment of Transportation Crash Database

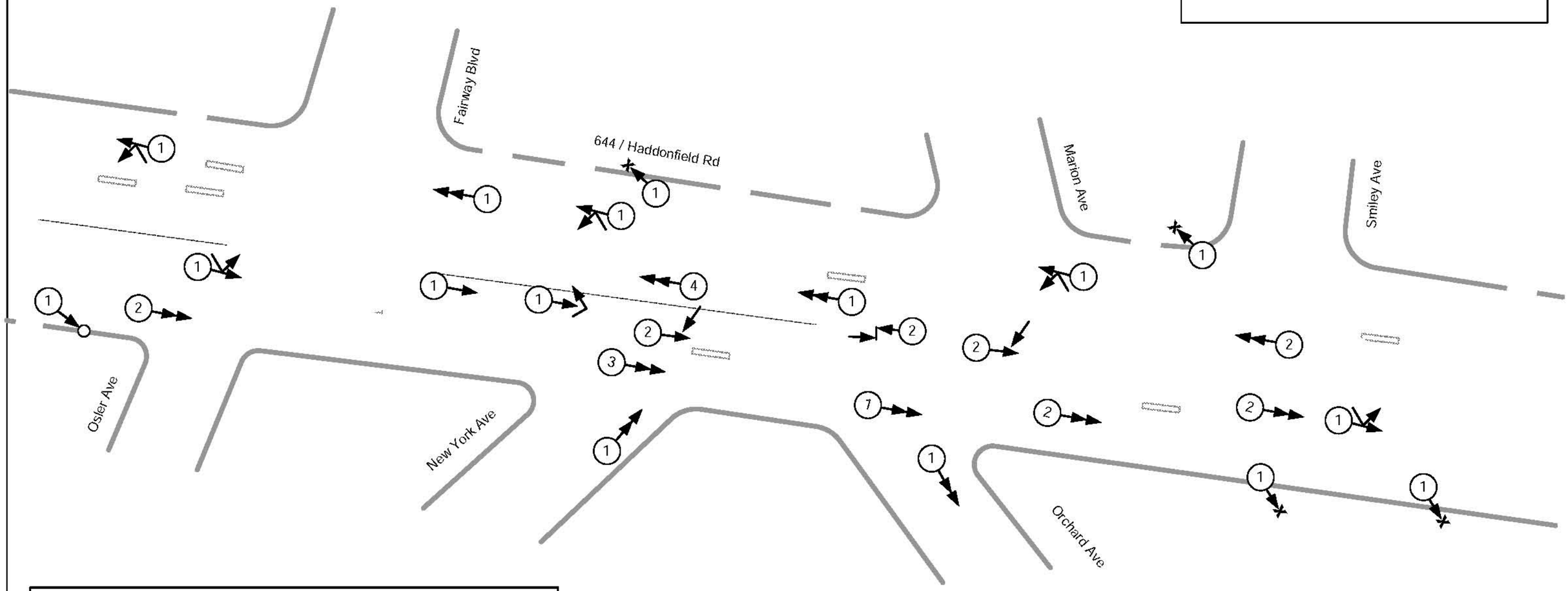
Table 8 Crash Data Comparison with NJ Statewide Averages Summary

CR 644 Haddonfield Ave. Pennsauken Twp., Camden County	2004	2004 NJ Statewide County Road Average	2005	2005 NJ Statewide County Road Average	2006	2006 NJ Statewide County Road Average
*Reportable	52	~	66	~	45	~
Collision Type						
Rear-End	57.69%	29.48%	45.45%	29.82%	55.56%	30.32%
Right Angle	5.77%	21.07%	10.61%	20.18%	15.56%	18.09%
Sideswipe	11.54%	10.91%	24.24%	11.07%	15.56%	11.45%
Left Turn	9.62%	6.36%	4.55%	6.69%	4.44%	7.89%
Hit Fixed Object	7.69%	12.39%	7.58%	12.35%	4.44%	11.89%
Hit Non-fixed Object	~	~	~	~	2.22%	0.47%
Opposite Direction (Head-On, Angular)	1.92%	2.81%	3.03%	2.58%	~	3.73%
Pedalcyclist	~	0.96%	~	1.00%	2.22%	1.01%
Other	5.77%	4.16%	4.55%	4.38%	~	0.20%
Intersection Type						
Intersection	17.31%	44.92%	59.09%	49.18%	13.33%	39.52%
Not at Intersection	80.77%	54.98%	40.91%	50.73%	86.67%	60.45%
Severity Type						
Fatality	1.92%	0.23%	~	0.25%	~	0.27%
Injured	26.92%	29.94%	22.73%	29.33%	37.78%	29.16%
Property Damage Only	71.15%	69.83%	77.27%	70.42%	62.22%	70.57%
Lighting Condition						
Day	75.00%	70.65%	68.18%	71.38%	73.33%	70.25%
Dusk/Dawn	1.92%	28.83%	4.55%	27.99%	6.67%	3.84%
Night	23.08%		27.27%		20.00%	25.49%
Road Surface Condition						
Dry	78.85%	72.59%	65.15%	74.49%	60.00%	77.54%
Wet	19.23%	21.67%	25.76%	19.09%	40.00%	19.67%
Ice/Snow	1.92%	5.30%	9.09%	6.02%	~	1.13%

Source: New Jersey Deapartment of Transportation Crash Database

** Data Set is combination of Dusk, Dawn, and Night*

Figure 32
Regional Road Diet Analysis
Feasibility Assessment
CR 644 (Haddonfield Road)
Collision Diagram A



Crash Type Legend

(1) = # Crashes

- Rear End
- Angle
- Head On
- Same Direction Sideswipe
- Hit Fixed Object
- Hit Non-fixed Object
- Left Turn / U- Turn
- Other

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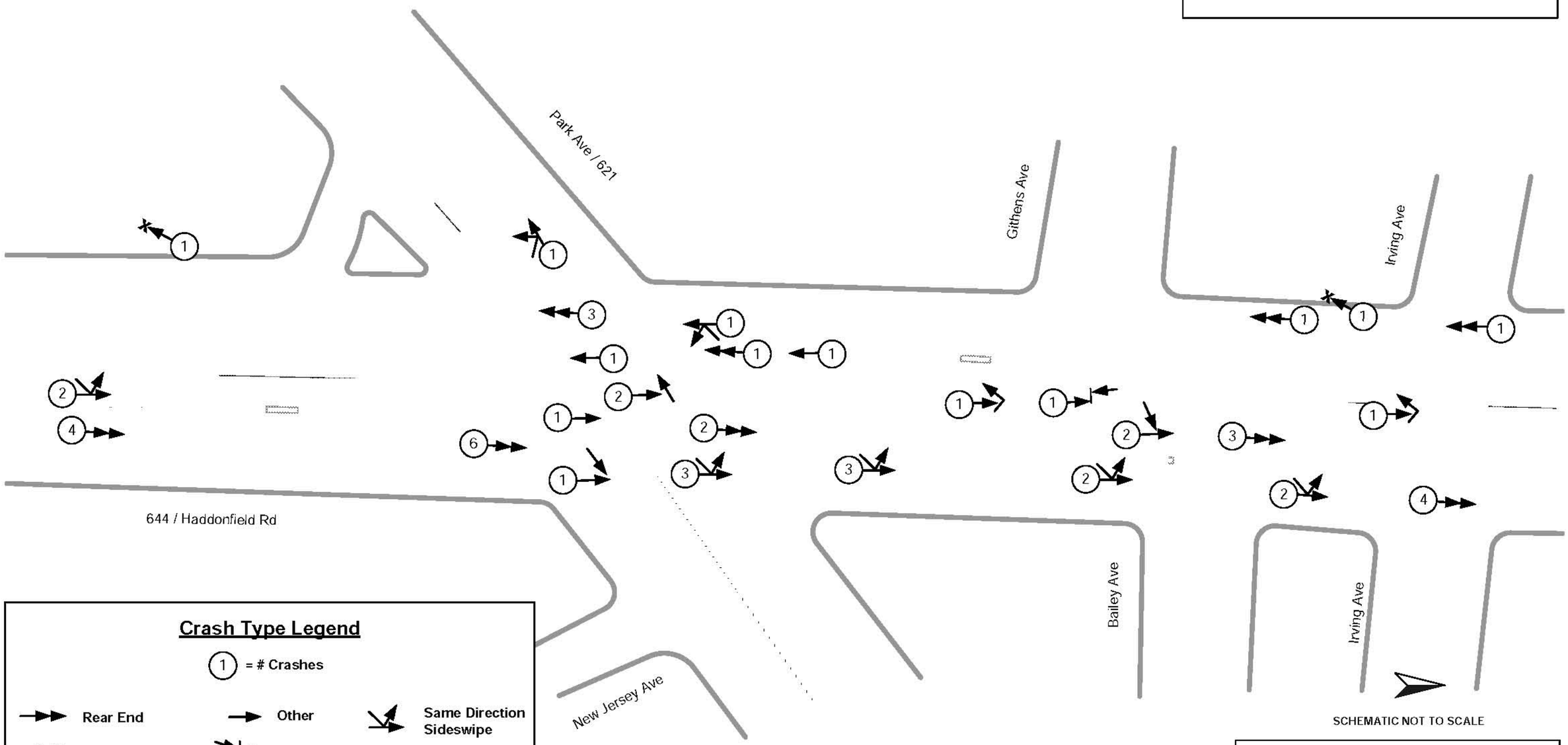
Delaware Valley Regional Planning Commission
October 2008

Figure 33
Regional Road Diet Analysis
Feasibility Assessment
CR 644 (Haddonfield Road)
Collision Diagram B



Crash Type Legend

(1) = # Crashes

- Rear End
- Other
- Same Direction Sideswipe
- Hit Fixed Object
- Head On
- Angle
- Left Turn / U- Turn

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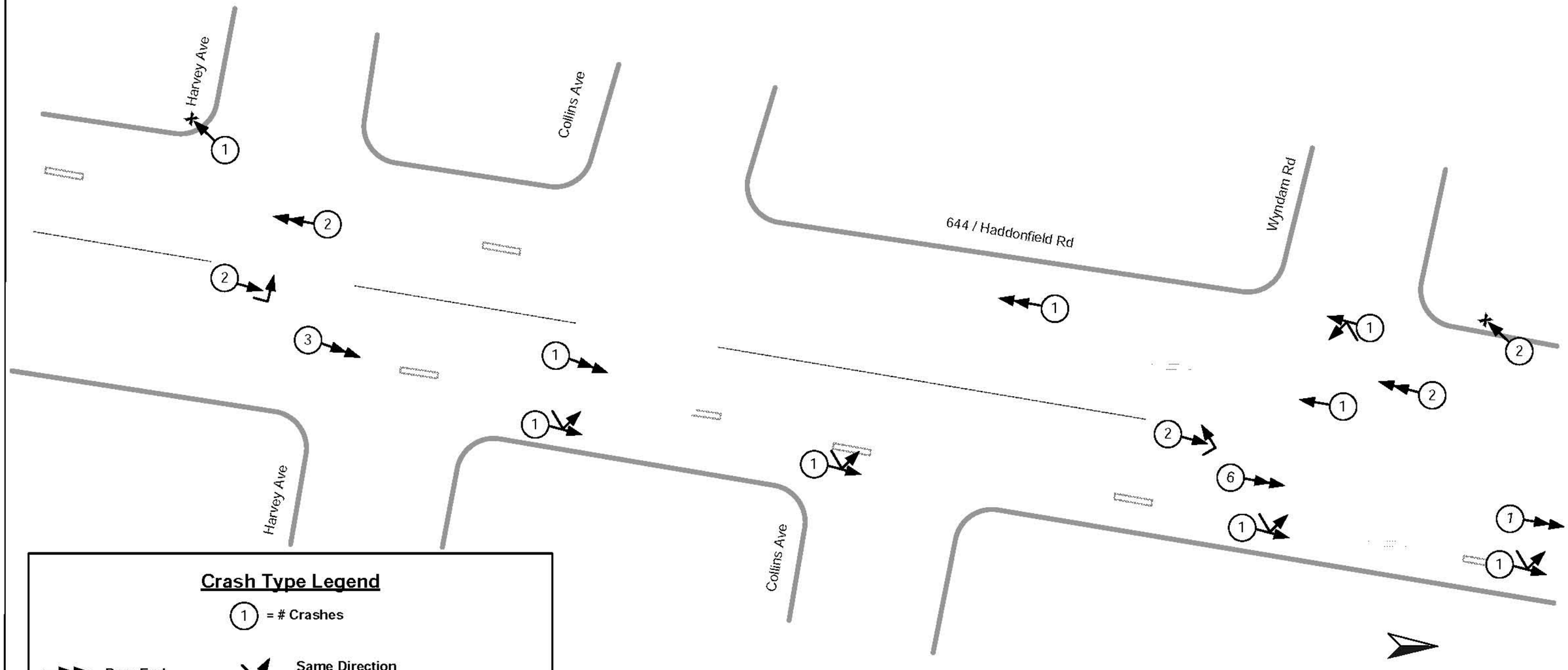
Delaware Valley Regional Planning Commission
October 2008

Figure 34
Regional Road Diet Analysis
Feasibility Assessment
Haddonfield Road
Collision Diagram C



shown in ***Table 8***, only in 2006 was the corridor injury average greater than the statewide average. Rear-end crashes had the highest number of crashes of all crash types for all study years. In 2004 and 2006 this crash type was more than 50% of that year's crash total, compared to the statewide averages which were 29.48% in 2004, 29.82% in 2005 and 30.32% in 2006. Sideswipe crashes were the second highest crash total for the study period. The sideswipe crash averages (11.54% in 2004, 24.24% in 2005, 15.56% in 2006) were higher than the statewide county road averages (10.91% in 2004, 11.07% in 2005, 11.45% in 2006). There was one crash involving a bicyclist in the study corridor in 2006.

Haddonfield Road – four travel lanes; mixed land use
Source: DVRPC, 2008

Only in 2005 did the average crashes occurring at intersections (59.09%) in the study area exceed the statewide average for the county road system (49.18%). In 2004 intersection crashes were 17.31% of the corridor's crash total and in 2006 it was 13.33% while the statewide averages were 44.92% and 39.52%, respectively. ***Figures 32-34*** are collision diagrams showing location of each crash. The majority of the crashes in the corridor occurred on dry road surface and during the daytime hours. Crash details are shown in ***Appendix B***.

6.2 SIMULATION

In order to understand the impacts of a road diet application upon the study roadway, various measures of effectiveness (MOE) must be provided for each alternative to allow cross-comparison. For the length of the Haddonfield Road corridor, two related measures were considered, average travel time and average travel speed. Although the distance between the study area's outermost intersections is 1.0 mile, an additional 0.2 to 0.3 miles of roadway was included in the simulations to better understand the behavior of vehicles upon approaching the road dieted area. These MOE's were generated for existing conditions, as well as for six road diet alternatives. Each of the alternatives incorporated incremental differences in roadway geometry or signal timing.

SimTraffic, a stochastic traffic-modeling software was utilized to measure these MOE's via simulation of the study roadway under the various alternatives. By incorporating

turning movement volumes, intersection geometry and spacing, and signal timing, *SimTraffic* serves as an effective tool for ascertaining the effects of roadway design, presence actuation, queue interactions, and signal progression; qualities that deterministic models are less sensitive to. Turning movement volumes were acquired at four Haddonfield Road intersections – Wyndam Road, Irving Avenue, Park Avenue, and New York Avenue. Roadway geometry was gathered from aerial photography and verified through subsequent field visits. The most recently available signal timing plans were dated from the 1970s, as a result each of the three signalized intersections were manually timed in the field. The software is unable to simulate mid-block or at-intersection left-turns beyond the four intersections where turning movement data was gathered. Therefore, simulations of the existing conditions scenarios may exhibit better performance measures than actually observed due to the absence of mid-block left-turning vehicles blocking the inside travel lane. *SimTraffic* provides for variability by employing a range of vehicle and driver parameters that generate unique traffic behaviors in each simulation. As a result, peak-hour MOE's were averaged from five sixty-minute simulations of each alternative.

Utilizing the *SimTraffic* software, average travel times and speeds were calculated for both directions of the study portion of Haddonfield Road, for existing conditions and each of the six road diet scenarios, during their morning and afternoon peak-hours, see ***Table 9*****.** The complete output from the simulation is shown in ***Appendix C***.

Existing Conditions
During the morning peak-hour, north and southbound average travel times were 112 and 102 seconds, respectively, which corresponded to average speeds of 39 MPH. The intersection at Park Avenue provided the most arterial delay along the corridor of seven seconds. This intersection performed at an overall LOS of B, while the northbound and southbound approaches (including left and right-turning vehicles) operated at a LOS of A with approximately eight seconds of delay.

During the afternoon peak-hour, average travel times ranged from 113 to 118 seconds, and provided average speeds of 35 to 37 MPH, depending upon direction of travel. These speeds are slightly slower than during the morning peak-hour, which can be attributed to a 38% increase in overall network volume for the afternoon peak-hour. The intersection at Park Avenue contributes the most arterial delay to vehicles traversing the corridor, averaging thirteen to eighteen seconds of delay per vehicle. This intersection operates at an overall LOS of C with an average delay of twenty-two seconds; the Haddonfield Road approaches (including left and right-turning vehicles) experience average delays of thirteen to eighteen seconds per vehicle, for LOS of B.

Alternative 1
This scenario considers a corridor-wide road diet conversion from four travel lanes to two travel lanes with a center two-way left-turn-lane (TWLTL). At the approaches to intersections, an exclusive left-turn lane is provided via the TWLTL. To provide a smooth transition for the single receiving lane entering the road diet portion of the study

TABLE 3 – PARKWAY AVENUE SUMMARY OF MEASURES OF EFFECTIVENESS

Scenario	Direction of Travel	Distance (miles)	Average Travel Time (seconds)	Average Speed (MPH)	Difference in Travel Time from Existing Conditions (seconds)	Difference in Speed from Existing Conditions (MPH)	% Difference from Existing Travel Time	% Difference from Existing Average Speed
AM Peak - Existing Conditions	Westbound	2.5	320	28.1	N/A	N/A	N/A	N/A
	Eastbound	2.4	301	28.7	N/A	N/A	N/A	N/A
AM Peak - Alternative 1	Westbound	2.5	365	24.7	45.0	-3.5	14.1%	-12.3%
	Eastbound	2.4	318	27.2	17.0	-1.5	5.6%	-5.3%
AM Peak - Alternative 2	Westbound	2.5	355	25.4	35.0	-2.8	10.9%	-9.9%
	Eastbound	2.4	315	27.4	14.0	-1.3	4.7%	-4.4%
AM Peak - Alternative 3	Westbound	2.5	344	26.2	24.0	-2.0	7.5%	-7.0%
	Eastbound	2.4	304	28.4	3.0	-0.3	1.0%	-1.0%
AM Peak - Alternative 4	Westbound	2.5	321	28.0	1.0	-0.1	0.3%	-0.3%
	Eastbound	2.4	297	29.1	-4.0	0.4	-1.3%	1.3%
AM Peak - Alternative 4A	Westbound	2.5	327	27.5	7.0	-0.6	2.2%	-2.1%
	Eastbound	2.4	289	29.9	-12.0	1.2	-4.0%	4.2%
PM Peak - Existing Conditions	Westbound	2.5	371	24.3	N/A	N/A	N/A	N/A
	Eastbound	2.4	361	23.9	N/A	N/A	N/A	N/A
PM Peak - Alternative 1	Westbound	2.5	600	15.0	229.0	-9.3	61.7%	-38.2%
	Eastbound	2.4	795	10.9	434.0	-13.1	120.2%	-54.6%
PM Peak - Alternative 2	Westbound	2.5	421	21.4	50.0	-2.9	13.5%	-11.9%
	Eastbound	2.4	462	18.7	101.0	-5.2	28.0%	-21.9%
PM Peak - Alternative 3	Westbound	2.5	401	22.4	30.0	-1.8	8.1%	-7.5%
	Eastbound	2.4	449	19.2	88.0	-4.7	24.4%	-19.6%
PM Peak - Alternative 4	Westbound	2.5	513	17.5	142.0	-6.7	38.3%	-27.7%
	Eastbound	2.4	747	11.6	386.0	-12.4	106.9%	-51.7%
PM Peak - Alternative 4A	Westbound	2.5	396	22.7	25.0	-1.5	6.7%	-6.3%
	Eastbound	2.4	408	21.2	47.0	-2.8	13.0%	-11.5%

Source: DVRPC 2008

roadway, the outer travel lane for the entering approaches are reassigned from a shared through and right-turn lane into an exclusive right-turn lane. All of these modifications are plausible within the existing cart way. According to the NJDOT Straight Line Diagram Haddonfield Road throughout the study area is 50 feet wide. The excess pavement width can be converted to multi-use shoulders which would enable buses to pull over out of the travelway when picking up or dropping off passengers and utilized for bicycle travel. The signal timings for the three signalized intersections were not modified for this scenario.

During the morning peak-hour, average travel times were 113 to 118 seconds, accounting for average speeds of 35 and 37 MPH for the south and northbound directions, respectively. Compared to existing conditions, these MOE's represent a five and 10% decline in performance for north and southbound vehicles, respectively. The intersection at Park Avenue contributed the most delay for vehicles traveling in either direction along the corridor, including 44% of the total delay for southbound vehicles. This intersection operated at a LOS B with an overall average delay of eighteen seconds per vehicle. The northbound and southbound Haddonfield Road approaches experienced an average of nine and twelve seconds of delay, respectively.

During the afternoon peak-hour, the average travel times for northbound and southbound vehicles were 136 and 163 seconds, providing average speeds of 32 and 24 MPH, respectively. Compared to existing conditions, this represents a 5 MPH or 13% reduction in average speed for northbound vehicles, and a 9 MPH or 31% decrease in speed for southbound travel. The intersections at New York Avenue and Park Avenue contributed the most delay for both north and southbound vehicles. When combined, they contributed thirty-four seconds or 76% of the total delay upon northbound vehicles however the Park Avenue intersection alone contributed over sixty-three seconds of the seventy-nine seconds of total delay experienced by southbound vehicles. The Park Avenue intersection operates at an overall LOS of D, and contributes an average overall delay of forty-six seconds per vehicle. Due to the large delays experienced by southbound vehicles, this southbound Haddonfield Road approach operates at a LOS of E whereas the northbound approach performs at a LOS of B. This imbalance is due to the predominance of southbound vehicles, which is approximately 40% greater than the opposing northbound volume, during either peak period.

Alternative 2

The scenario builds upon *Alternative 1* road diet conversion with intersection modifications. Whereas a three-lane cross-section is utilized in the previous scenario for each of the Haddonfield Road approaches at the intersection with Park Avenue, *Alternative 2* incorporates four-lane cross-sections: exclusive left-, through-, and right-turn lanes with a single receiving lane. Compared to *Alternative 1*, these cross-sections will provide greater capacity at the intersection while still providing a single travel lane for Haddonfield Road downstream of the intersection. None of the timing plans for the three signalized intersections were revised for this alternative.

During the morning peak-hour, average travel times ranged from 111 to 117 seconds for an average speed of approximately 36 MPH. This is less than a ten second increase in travel time and within 3 MPH for either direction of existing conditions. Compared to the previous alternative, travel times and speeds are marginally better. Similar to prior scenarios, the intersection at Park Avenue has the most arterial delay for both north and southbound travel, though it is a relatively small overall delay. This intersection operates at an overall LOS B with an average of seventeen seconds of delay. The north and southbound Haddonfield Road approaches experience ten seconds or less of delay, for a LOS of A.

During the afternoon peak-hour, the average travel time was approximately 123 seconds, for average speeds of 33 to 35 MPH, depending on direction. Compared to existing conditions, these represent declines in MOE of less than ten seconds and 3 MPH. They also represent significant improvements from *Alternative 1*; travel time is improved by twelve to forty-one seconds. For northbound travel, the New York Avenue intersection provides the greatest amount of arterial delay, whereas the Park Avenue intersection contributes the most arterial delay for southbound vehicles. The Park Avenue intersection operates at an overall LOS of C with an average of twenty-one seconds of overall delay. The north and southbound approaches experience eleven and twenty seconds of delay, respectively.

Alternative 2a

This alternative is a modification of the previous scenario, *Alternative 2*. The *Alternative 2* proposed four-lane cross-section along both Haddonfield Road approaches to the Park Avenue intersection is replaced with a three-lane cross-section for the northbound approach only as shown in ***Figure 32***. This maintains the higher capacity four-lane cross-section for the more heavily traveled southbound approach, while providing a more consistent travel path for vehicles on Haddonfield Road. This scenario is feasible within the existing curb-to-curb right-of-way. None of the timing plans for the three signalized intersections were revised for this alternative.

During the morning peak-hour, average travel times ranged from 111 to 118 seconds, providing average travel speeds of about 36 MPH. These MOE's are within ten seconds or 3 MPH of existing conditions. Compared to the previous *Alternative 2*, northbound travel is slightly slower, while southbound vehicles are unaffected. The approaches to the Park Avenue intersection contribute the most arterial delay upon north and southbound Haddonfield Road travel. This intersection operates at an LOS of B with an average seventeen seconds of overall delay per vehicle. The northbound and southbound Haddonfield Road approaches experience only eight to ten seconds of delay.

During the afternoon peak-hour, average travel times ranged from 121 to 134 seconds, for average speeds of roughly 32 MPH. Compared to existing conditions, travel time for northbound vehicles increased by sixteen seconds with a corresponding speed reduction of 4 MPH, while southbound travel is only slightly diminished by eight seconds

and 2 MPH. Compared to the previous *Alternative 2,* northbound travel experiences a ten second or 3 MPH decrease in speed, while southbound travel remains unchanged. The Park Avenue intersection contributes the most delay for travel along the corridor, contributing about 50% of all delay for north and southbound travel. The overall intersection averages twenty-five seconds of delay, for LOS C. The north and southbound Haddonfield Road approaches experience average delays of nineteen and twenty-one seconds, respectively.

Alternative 3
This alternative builds upon *Alternative 1* by incorporating the road diet conversion with signal timing revisions at the Park Avenue and New York Avenue intersections. These timing revisions include new cycle lengths and splits, as well as time-based coordination between the two intersections. This alternative assumes that no additional infrastructure, such as loop detectors and solid-state controllers would be necessary for full implementation. Analyses that focused exclusively upon retiming the Park Avenue intersection revealed that an increased throughput for southbound vehicles at Park Avenue would overwhelm the adjacent downstream intersection at New York Avenue. This is due to their proximity and New York Avenue signal's shorter and fixed-time cycle length.

During the morning peak-hour, average travel time for either direction range from 111 to 115 seconds, for corresponding average speeds of 36 to 38 MPH. These MOE's represent a four to nine second increase in travel time, and a 1 to 3 MPH decline in travel speed, from existing conditions. In comparison to the relatively similar *Alternative 1*, average travel times and speeds are better. The intersection of Park Avenue contributes about 50% of the total arterial delay for north and southbound travel. This intersection experiences an average overall delay of eighteen seconds, for a LOS of B. The north and southbound Haddonfield Road approaches perform at LOS B, with thirteen to fifteen seconds of delay.

During the afternoon peak-hour, the north and southbound average travel times ranged from 128 to 135 seconds, providing average speeds from 29 to 34 MPH. Northbound travel is ten seconds or 3 MPH slower than existing conditions, while southbound travel experiences a twenty-two second increase or 6 MPH decrease from existing conditions. In comparison to *Alternative 1*, average travel times improve by seven and twenty-eight seconds, with corresponding increases in speed of 2 and 5 MPH for northbound and southbound travel, respectively. The north and southbound approaches to the intersection at Park Avenue contributed the vast majority of delay for vehicles traveling the study area on Haddonfield Road. The overall LOS is D, with thirty-five seconds of average overall delay. The northbound approach experienced twenty-three seconds of delay for a LOS of C, while the southbound approach incurred thirty-seven seconds of delay for a LOS of D.

Figure 35

Regional Road Diet Analysis
Feasibility Assessment

Haddonfield Rd. & Park Ave.
Intersection Improvement

Alternative 4

This scenario combines the geometric attributes of *Alternative 2* with the signal timing revisions of *Alternative 3*. As a result, a three-lane cross-section is applied to the length of Haddonfield Road between Wyndam Road and New York Avenue, minus the north and southbound approaches to the Park Avenue intersection, where a four-lane cross-section is utilized. Additionally, the signal timings at the Park Avenue and New York Avenue intersections were revised and coordinated.

During the morning peak-hour, the north and southbound average travel times ranged from 108 to 116 seconds, resulting in average speeds of about 37 MPH. These MOE's are within six seconds or 2 MPH of existing conditions. Compared to *Alternative 2* and *Alternative 3*, average travel times and speeds are either comparable or slightly better. The approaches to the Park Avenue intersection contributed about 50% of the total delay incurred by north and southbound travel. This intersection performed at an overall LOS of B, with an average delay of seventeen seconds per vehicle. The north and southbound approaches operated with about twelve seconds of delay, for a LOS of B.

During the afternoon peak-hour, both north and southbound travel times averaged roughly 120 seconds, for average speeds of about 35 MPH. These MOE's are within four seconds or 1 MPH of existing conditions. Compared to *Alternative 2*, average travel times and speeds are only marginally improved, though in comparison to *Alternative 3*, there are measurable improvements, including a nineteen second and 5 MPH improvement for southbound vehicles. The Park Avenue intersection contributed over half of all the arterial delay experienced by north and southbound vehicles along the study portion of Haddonfield Road. This intersection operated with an overall average of twenty-three seconds of delay, for a LOS of C. The north and southbound Haddonfield Road approaches at Park Avenue experienced fifteen to twenty seconds of delay, for a LOS of B.

Alternative 4a

This scenario combines the characteristics of two earlier alternatives. The geometry of *Alternative 2a* and the signal timings of *Alternative 3* provide a three-lane Haddonfield Road cross-section except for the southbound approach to Park Avenue with its four-lane cross-section, and with optimized and coordinated signal timings at the Park Avenue and New York Avenue intersections. Similar to *Alternative 2a*, this scenario will provide better alignment for north and southbound through-movements traversing the Park Avenue intersection, while fitting within the existing cartway.

During the morning peak-hour, the north and southbound average travel time was 108 to 116 seconds, for average speeds of approximately 37 MPH. Compared to existing conditions, these MOE's represent a slight decline of six seconds and 2 MPH. Compared to *Alternative 4*, average northbound travel time and speed is marginally longer and slower, while average southbound travel is identical. The Park Avenue intersection was responsible for about half of the total delay experienced by north and southbound travel. Overall LOS was a B at this intersection, with average delays of

seventeen seconds per vehicle. Its north and southbound approaches operate at a LOS of B with approximately thirteen seconds of average delay.

During the afternoon peak-hour, average travel times ranged from 118 to 130 seconds, corresponding to speeds around 33 MPH. Compared to existing conditions, northbound travel is twelve seconds or 3 MPH slower, whereas southbound travel is only six seconds or 2 MPH slower. In comparison to the similar *Alternative 4*, northbound travel is slightly slower by ten seconds and 3 MPH, while southbound travel is only marginally slower by less than two seconds or 1 MPH. The north and southbound approaches to the Park Avenue intersection contribute over 60% of the total arterial delay along Haddonfield Road. This intersection's overall LOS was a C with twenty-seven seconds of average delay per vehicle. The north and southbound approaches experiences approximately twenty-three seconds of delay for a LOS C.

6.3 FINDINGS

- The AADT in the study area on Haddonfield Road is below the 20,000 AADT threshold where generally road diets operate most successfully.
- Of the intersections for which turning movement counts were taken, no approach recorded 1,000 or higher vphpd directional peak; the level at which LOS is likely to be reduced with road diet conversions.
- There are no shoulders or pedestrian buffers along the roadway.
- Sidewalks are inconsistent; in many areas they are not available.
- Bicyclists have to travel in the same lanes as motor vehicles.
- High number of opportunities to make left-turns exist in both directions of the study corridor.
- Left-turn and angle crashes which generally occur at intersections have large portions occurring at mid-block locations – 70% for left-turns and 76% for angle crashes. This could indicate unsafe left-turns at driveways. A road diet application will reduce conflicts and improve sight distance for these movements.
- Rear-end crashes are also highest mid-block (81%) and may be indicative of vehicles suddenly stopping to make left-turn and consequently being rear-ended by unprepared drivers. In road diet conversion, mid-block left-turning traffic and their queues utilize a designated lane (TWLTL).
- Percentage of sideswipe crashes increased drastically in 2005, but fell again in 2006. Road diet application can address this crash type by the reduced opportunity to change lanes.
- A road diet application of a given roadway seeks to accommodate all modes of travel. It can improve the safety of a roadway through the reduction of conflict points, average speeds and their variability, and improved sight distance of turning traffic. Haddonfield Road, as it currently exists and functions is skewed toward vehicle travel. The road diet application can improve the accommodation and safe travel of pedestrians and bicyclists.
- Simulation and subsequent analysis of each scenario reveals that a basic road diet application results in:

  - Longer travel times and slower travel speeds during the afternoon peak-hour in comparison to the morning, which correspond to the greater overall network volumes during the afternoon peak-hour.
  - Southbound travel is more adversely affected by the alternatives; this is a result of a dominant southbound flow during both peak-hours along the study portion of Haddonfield Road.
  - The simulations also reveal that of the four intersections modeled, the intersection at Park Avenue contributes the most delay upon northbound and southbound arterial travel. This is due to its larger side-street volumes which require a longer amount of green time and a greater proportion of the cycle length.
  - *Alternative 2* proposed geometry changes may present safety issues due to the lack of alignment between the exclusive through lane and the single receiving lane. This configuration may be partially mitigated via a minor widening of the intersection along the Haddonfield Road approaches or pavement markings that delineate the appropriate path across the intersection.
  - Although delays were increased and travel speeds slowed for each alternative, level of service remained relatively acceptable for most.

- The *SimTraffic* simulation software was unable to simulate left-turns where no specific turning movement data was provided. As a result, simulations of existing conditions are more optimistic than what actual conditions may allow due to the inability to comprehensively simulate mid-block queuing and bottlenecking at locations without an exclusive left-turn lane or TWLTL. Thus relative to existing conditions, the MOE's for the road diet alternatives provide a conservative comparison since these alternatives incorporate a TWLTL and exclusive left-turn lanes at intersections.

6.4 RECOMMENDATIONS

It is recommended that *Alternative 4a* is pursued for implementation along the study portion of Haddonfield Road. This alternative produced a minor decline in speed for the heavier southbound direction of travel, as well as MOE's for northbound travel that are comparable to those of other alternatives, and a more consistent travel path at the Park Avenue intersection. Converting the road to three-lanes there will result in a reduction in conflict points along the roadway which is expected to result in a reduction of left turn and rear end crashes in the study corridor. The corridor will also be better able to accommodate pedestrian and bicycle modes of transportation and facilitate passenger transit passenger drop off and pick up. This scenario may be implemented with little capital investment, since all improvements will be accommodated within the existing cartway. The implementation of a road diet application along Haddonfield Road can support demand for safe and alternative modes of transportation, while providing efficient vehicular mobility.

Existing Haddonfield Road configuration
Source: DVRPC 2008

Rendering of the road diet conversion of Haddonfield Road with shoulder and sidewalk
Source: DVRPC 2008

7.0 CONCLUSIONS

Smart Transportation encourages looking beyond level of service to measure the operating conditions of a roadway. It is a collaborative approach to provide transportation solutions that strengthen and support communities. Road diets, when used appropriately fit very well within the context of *Smart Transportation*. However, the potential impacts are significant and should be well understood before pursuing. At times, operational sacrifices may be necessary to improve safety.

A road diet conversion of a four-lane roadway to three-lanes (one lane in each direction and a two-way left-turn lane) typically reduces through vehicle delay, crash rates and crash severity. A reduction of average vehicle speeds may result depending on traffic volumes, turn volumes, density of driveways and potential signal timing changes. The traffic calming potential of road diet conversions can be beneficial to candidate roadways.

Road diet conversions have been successfully completed on roadways with an AADT exceeding 20,000 vehicles. With volumes exceeding 20,000 vehicles per day the effects on potential diverted traffic on parallel roadways must be considered because operational performance of the roadway may be affected. Before implementing a road diet conversion a detailed engineering analysis should be conducted. A road diet conversion when done properly and in the correct location can have minimal operational disadvantages. Although road diets may be suitable for a wide-range of roadway characteristics, it is not always the best solution for a candidate roadway.

The three roadways considered in this project are unaccommodating to alternative modes of travel. Additionally, each experienced a high number of crashes and numerous access points. A road diet conversion provides the opportunity to improve bicycle, pedestrian and transit facilities for the safe travel of these road users. It will improve sight distance for turning vehicles and promote slower speeds thus potentially improving throughput and safety.

All stakeholders should be involved in the planning process when considering a road diet conversion. Education and outreach play a critical role in the success of a road diet project. Many projects have demonstrated that public opposition is strong in the early stages of a project. However, with committed stakeholders and an organized education and outreach program skeptics can be enlightened about the benefits. Road diet projects have been shown to promote economic development as well as a safer and more comfortable environment.

"Feasibility Determination Factor Characteristics and Sample Evaluative Questions" table in ***Appendix D*** reproduced from Knapp, Keith, *Guidelines for the Conversion of Urban Four-lane Undivided Roadways to Three-Lane Two-way Left-turn Lane Facilities* can be used as base when determining the feasibility of a roadway for a road diet conversion.

8.0 REFERENCES

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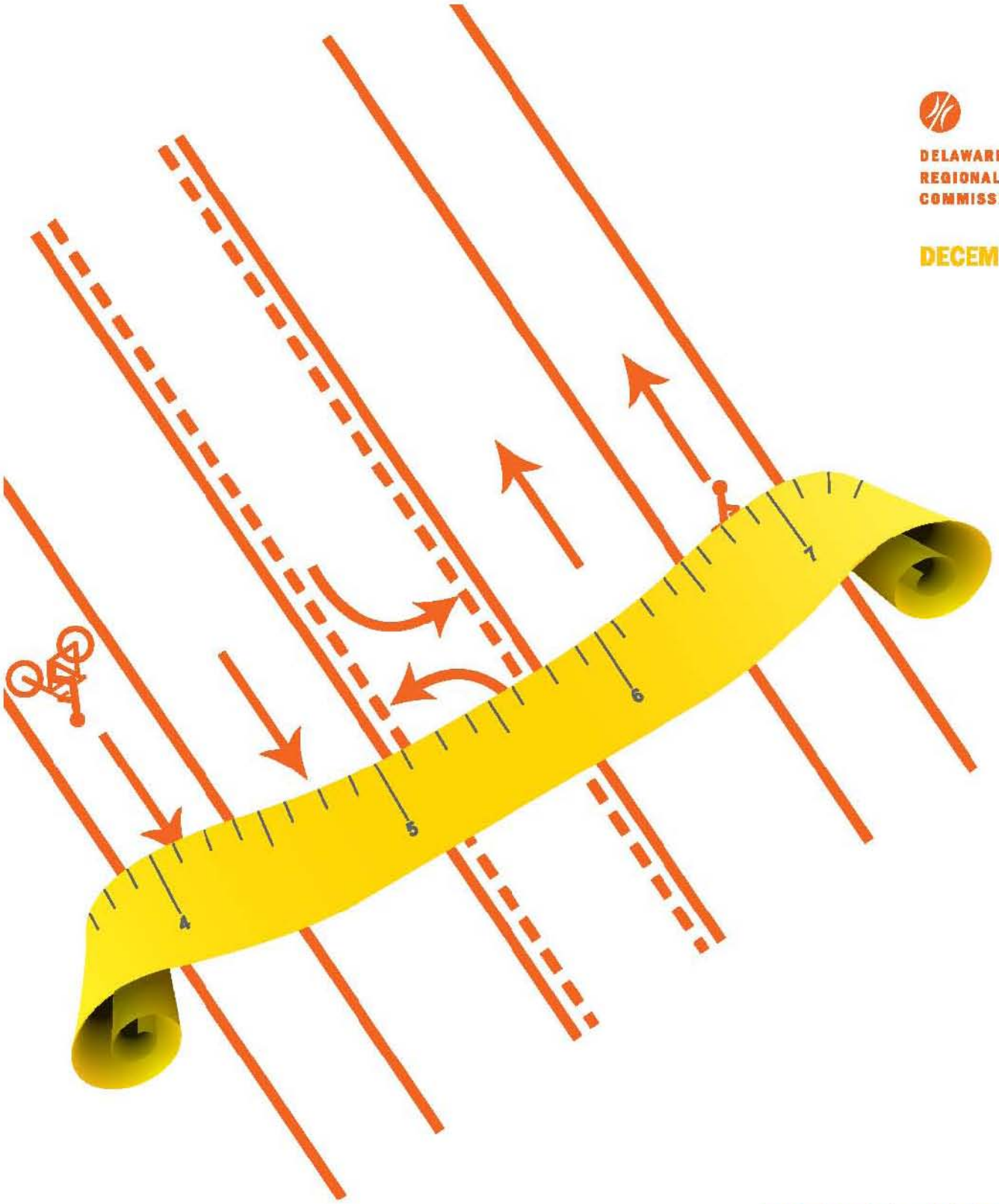

DELAWARE VALLEY
REGIONAL PLANNING
COMMISSION

DECEMBER 2008

APPENDIX

APPENDIX A
TRAFFIC COUNTS

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: BERWYN AVE PARKWAY AVE

DATE: 2/20/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 36AM

AM INTERVAL COUNTS

	BERWYN AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	1	0	2	3	0	0	1	1	0	9	0	9	0	18	0	18	4	27	31
6:15 6:30	2	0	3	5	2	0	0	2	0	26	1	27	0	31	0	31	7	58	65
6:30 6:45	1	0	2	3	1	0	0	1	0	42	0	42	1	92	0	93	4	135	139
6:45 7:00	2	0	0	2	1	0	1	2	0	43	0	43	0	62	0	62	4	105	109
7:00 7:15	1	1	0	2	1	0	1	2	0	42	0	42	1	61	0	62	4	104	108
7:15 7:30	3	0	1	4	1	0	0	1	1	60	3	64	1	124	0	125	5	189	194
7:30 7:45	5	0	3	8	1	0	2	3	1	90	0	91	2	118	1	121	11	212	223
7:45 8:00	1	0	4	5	1	0	1	2	0	78	2	80	3	123	1	127	7	207	214
8:00 8:15	5	0	2	7	0	0	2	2	1	77	2	80	1	82	1	84	9	164	173
8:15 8:30	1	0	1	2	2	0	2	4	1	79	2	82	0	94	0	94	6	176	182
8:30 8:45	1	0	2	3	2	2	1	5	0	81	0	81	0	92	0	92	8	173	181
8:45 9:00	0	1	4	5	2	0	3	5	0	97	1	98	1	82	1	84	10	182	192
TOTALS	23	2	24	49	14	2	14	30	4	724	11	739	10	979	4	993	79	1732	1811

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: BERWYN AVE PARKWAY AVE

DATE: 2/20/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 36PM

PM INTERVAL COUNTS

	BERWYN AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	3	0	1	4	2	0	0	2	2	83	1	86	2	92	1	95	6	181	187
3:15 3:30	2	0	1	3	0	1	0	1	0	64	2	66	6	87	0	93	4	159	163
3:30 3:45	0	0	7	7	2	0	0	2	1	115	1	117	2	95	1	98	9	215	224
3:45 4:00	2	0	2	4	2	1	3	6	0	101	0	101	2	112	2	116	10	217	227
4:00 4:15	2	0	6	8	0	1	2	3	1	113	3	117	2	99	2	103	11	220	231
4:15 4:30	0	1	2	3	0	2	0	2	1	92	1	94	3	96	1	100	5	194	199
4:30 4:45	1	0	5	6	0	0	1	1	4	85	4	93	2	80	0	82	7	175	182
4:45 5:00	1	0	2	3	1	1	3	5	0	93	2	95	1	130	3	134	8	229	237
5:00 5:15	0	3	0	3	0	0	1	1	2	82	3	87	0	94	1	95	4	182	186
5:15 5:30	1	0	3	4	0	0	2	2	2	45	0	47	2	51	3	56	6	103	109
5:30 5:45	4	0	1	5	1	1	5	7	1	88	1	90	1	82	0	83	12	173	185
5:45 6:00	1	1	1	3	1	0	6	7	2	105	4	111	2	115	0	117	10	228	238
6:00 6:15	2	0	3	5	1	0	1	2	0	88	4	92	0	78	3	81	7	173	180
6:15 6:30	3	0	2	5	1	0	2	3	0	55	3	58	3	68	1	72	8	130	138
6:30 6:45	4	0	3	7	0	0	1	1	0	72	2	74	1	48	0	49	8	123	131
6:45 7:00	3	0	2	5	2	0	1	3	1	60	1	62	1	32	1	34	8	96	104
TOTALS	29	5	41	75	13	7	28	48	17	1341	32	1390	30	1359	19	1408	123	2798	2921

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: PARKSIDE AVE PARKWAY AVE

DATE: 2/21/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 35AM

AM INTERVAL COUNTS

	PARKSIDE AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	9	33	9	51	0	33	3	36	9	4	9	22	2	6	0	8	87	30	117
6:15 6:30	23	23	7	53	0	19	2	21	16	16	13	45	6	14	0	20	74	65	139
6:30 6:45	34	44	19	97	1	60	5	66	11	21	27	59	10	15	1	26	163	85	248
6:45 7:00	37	66	11	114	1	37	7	45	6	25	20	51	5	22	2	29	159	80	239
7:00 7:15	40	53	3	96	0	41	4	45	9	10	12	31	3	13	1	17	141	48	189
7:15 7:30	40	51	10	101	0	28	2	30	6	14	17	37	5	25	1	31	131	68	199
7:30 7:45	66	93	12	171	1	87	6	94	21	35	51	107	8	51	5	64	265	171	436
7:45 8:00	31	103	12	146	3	100	12	115	13	30	32	75	14	33	2	49	261	124	385
8:00 8:15	44	75	11	130	3	105	9	117	34	52	42	128	13	27	1	41	247	169	416
8:15 8:30	33	54	16	103	1	81	10	92	16	51	20	87	19	37	2	58	195	145	340
8:30 8:45	35	109	33	177	5	90	10	105	30	68	38	136	24	45	6	75	282	211	493
8:45 9:00	26	57	11	94	4	83	7	94	19	44	23	86	13	33	5	51	188	137	325
TOTALS	418	761	154	1333	19	764	77	860	190	370	304	864	122	321	26	469	2193	1333	3526

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: PARKSIDE AVE PARKWAY AVE

DATE: 2/21/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 35AM

PM INTERVAL COUNTS

	PARKSIDE AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	22	97	11	130	2	77	8	87	14	62	17	93	17	52	5	74	217	167	384
3:15 3:30	17	114	14	145	5	92	9	106	19	79	29	127	12	41	3	56	251	183	434
3:30 3:45	15	100	9	124	1	90	7	98	15	84	32	131	10	39	7	56	222	187	409
3:45 4:00	35	150	12	197	7	141	10	158	17	63	40	120	19	64	5	88	355	208	563
4:00 4:15	19	107	12	138	2	106	8	116	13	49	63	125	33	51	2	86	254	211	465
4:15 4:30	15	111	18	144	3	87	4	94	19	31	23	73	22	35	0	57	238	130	368
4:30 4:45	15	97	16	128	1	110	7	118	19	40	31	90	28	40	2	70	246	160	406
4:45 5:00	17	137	26	180	0	116	11	127	15	57	22	94	24	64	1	89	307	183	490
5:00 5:15	32	80	38	150	0	83	12	95	19	66	42	127	20	42	3	65	245	192	437
5:15 5:30	25	87	29	141	3	137	12	152	30	52	36	118	20	44	3	67	293	185	478
5:30 5:45	21	45	23	89	6	99	12	117	29	54	26	109	13	46	1	60	206	169	375
5:45 6:00	20	87	15	122	3	127	8	138	26	61	34	121	18	59	4	81	260	202	462
6:00 6:15	26	134	19	179	1	174	7	182	14	41	23	78	15	28	2	45	361	123	484
6:15 6:30	14	78	20	112	1	100	9	110	18	37	23	78	13	21	1	35	222	113	335
6:30 6:45	12	44	10	66	2	91	12	105	17	39	27	83	10	17	1	28	171	111	282
6:45 7:00	15	37	12	64	1	85	9	95	14	27	22	63	11	15	1	27	159	90	249
TOTALS	320	1505	284	2109	38	1715	145	1898	298	842	490	1630	285	658	41	984	4007	2614	6621

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: N OLDEN AVE PARKWAY AVE

DATE: 3/6/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 39AM

AM INTERVAL COUNTS

	N OLDEN AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	2	0	2	4	0	23	27	20	15	0	35	2	13	2	17	29	52	81
6:15 6:30	0	1	1	2	4	9	28	41	23	8	1	32	1	16	1	18	43	50	93
6:30 6:45	1	1	2	4	3	6	39	48	18	15	1	34	2	26	3	31	52	65	117
6:45 7:00	0	5	0	5	4	5	58	67	25	19	2	46	2	32	5	39	72	85	157
7:00 7:15	0	3	0	3	2	3	35	40	32	20	2	54	3	45	6	54	43	108	151
7:15 7:30	0	4	3	7	11	10	141	162	45	39	1	85	7	161	2	170	169	255	424
7:30 7:45	4	9	7	20	7	19	107	133	82	50	9	141	7	94	7	108	153	249	402
7:45 8:00	1	5	1	7	15	7	143	165	79	60	1	140	14	90	3	107	172	247	419
8:00 8:15	3	9	6	18	8	9	75	92	71	61	6	138	15	74	5	94	110	232	342
8:15 8:30	1	12	5	18	6	14	82	102	57	39	6	102	4	58	1	63	120	165	285
8:30 8:45	4	7	4	15	6	5	114	125	114	59	5	178	7	79	7	93	140	271	411
8:45 9:00	3	10	5	18	10	27	83	120	64	48	5	117	6	66	6	78	138	195	333
TOTALS	17	68	34	119	80	114	928	1122	630	433	39	1102	70	754	48	872	1241	1974	3215

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: N OLDEN AVE PARKWAY AVE

DATE: 3/31/08
DAY: MONDAY
WEATHER: FAIR

FILE NUMBER: 39PM

PM INTERVAL COUNTS

	N OLDEN AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	1	7	1	9	8	3	69	80	59	36	1	96	3	54	5	62	89	158	247
3:15 3:30	1	8	2	11	23	1	78	102	77	50	1	128	4	60	5	69	113	197	310
3:30 3:45	6	13	5	24	5	4	118	127	151	106	9	266	9	120	8	137	151	403	554
3:45 4:00	1	3	1	5	8	14	56	78	48	66	1	115	5	39	2	46	83	161	244
4:00 4:15	2	7	2	11	12	6	65	83	78	65	3	146	0	48	1	49	94	195	289
4:15 4:30	4	9	6	19	14	5	129	148	172	84	5	261	1	87	5	93	167	354	521
4:30 4:45	4	17	13	34	9	15	109	133	107	133	1	241	4	101	6	111	167	352	519
4:45 5:00	2	13	12	27	18	31	138	187	119	76	5	200	5	108	18	131	214	331	545
5:00 5:15	10	15	6	31	4	23	158	185	159	156	11	326	0	93	6	99	216	425	641
5:15 5:30	2	5	4	11	8	4	129	141	115	55	5	175	6	94	6	106	152	281	433
5:30 5:45	1	7	5	13	8	12	112	132	107	65	2	174	3	82	7	92	145	266	411
5:45 6:00	2	4	2	8	14	23	86	123	95	58	1	154	3	57	5	65	131	219	350
6:00 6:15	2	8	3	13	8	13	62	83	42	36	0	78	1	38	5	44	96	122	218
6:15 6:30	2	6	2	10	8	4	108	120	98	48	3	149	2	40	6	48	130	197	327
6:30 6:45	3	7	3	13	11	9	65	85	68	68	2	138	6	42	2	50	98	188	286
6:45 7:00	1	2	2	5	7	5	51	63	55	40	3	98	4	33	1	38	68	136	204
TOTALS	44	131	69	244	165	172	1533	1870	1550	1142	53	2745	56	1096	88	1240	2114	3985	6099

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: NJDOT PARKING LOT PARKWAY AVE

DATE: 3/4/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 41AM

AM INTERVAL COUNTS

STARTING	NJDOT PARKING LOT								PARKWAY AVE									
TIME	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	0	0	0	0	0	0	0	0	22	0	22	2	42	0	44	0	66	66
6:15 6:30	0	0	0	0	0	0	0	0	0	34	2	36	7	61	0	68	0	104	104
6:30 6:45	0	0	0	0	0	0	0	0	0	43	1	44	4	78	0	82	0	126	126
6:45 7:00	0	0	0	0	0	0	0	0	0	69	3	72	15	108	0	123	0	195	195
7:00 7:15	0	0	0	0	0	0	0	0	0	107	12	119	22	82	0	104	0	223	223
7:15 7:30	0	0	0	0	0	0	0	0	0	117	17	134	25	145	0	170	0	304	304
7:30 7:45	0	0	1	1	0	0	0	0	0	128	12	140	32	154	0	186	1	326	327
7:45 8:00	0	0	0	0	0	0	0	0	0	143	11	154	42	194	0	236	0	390	390
8:00 8:15	0	0	2	2	0	0	0	0	0	114	17	131	34	175	0	209	2	340	342
8:15 8:30	0	0	0	0	0	0	0	0	0	125	16	141	22	143	0	165	0	306	306
8:30 8:45	0	0	0	0	0	0	0	0	0	140	15	155	18	152	0	170	0	325	325
8:45 9:00	1	0	4	5	0	0	0	0	0	127	9	136	17	134	0	151	5	287	292
TOTALS	1	0	7	8	0	0	0	0	0	1169	115	1284	240	1468	0	1708	8	2992	3000

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: NJDOT PARKING LOT PARKWAY AVE

DATE: 3/4/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 41PM

PM INTERVAL COUNTS

	NJDOT PARKING LOT								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	0	0	6	6	0	0	0	0	0	147	1	148	3	142	0	145	6	293	299
3:15 3:30	0	0	9	9	0	0	0	0	0	146	3	149	1	166	0	167	9	316	325
3:30 3:45	1	0	7	8	0	0	0	0	0	172	6	178	3	156	0	159	8	337	345
3:45 4:00	0	0	20	20	0	0	0	0	0	126	2	128	4	166	0	170	20	298	318
4:00 4:15	0	0	12	12	0	0	0	0	0	156	2	158	0	186	0	186	12	344	356
4:15 4:30	0	0	8	8	0	0	0	0	0	174	0	174	3	173	0	176	8	350	358
4:30 4:45	0	0	9	9	0	0	0	0	0	187	1	188	1	197	0	198	9	386	395
4:45 5:00	0	0	4	4	0	0	0	0	0	187	0	187	3	228	0	231	4	418	422
5:00 5:15	0	0	3	3	0	0	0	0	0	214	1	215	0	194	0	194	3	409	412
5:15 5:30	0	0	5	5	0	0	0	0	0	180	0	180	3	164	0	167	5	347	352
5:30 5:45	0	0	0	0	0	0	0	0	0	138	2	140	1	168	0	169	0	309	309
5:45 6:00	0	0	1	1	0	0	0	0	0	150	0	150	0	163	0	163	1	313	314
6:00 6:15	0	0	4	4	0	0	0	0	0	140	1	141	1	134	0	135	4	276	280
6:15 6:30	0	0	3	3	0	0	0	0	0	135	0	135	1	127	0	128	3	263	266
6:30 6:45	0	0	5	5	0	0	0	0	0	128	2	130	0	115	0	115	5	245	250
6:45 7:00	0	0	0	0	0	0	0	0	0	112	0	112	0	107	0	107	0	219	219
TOTALS	1	0	96	97	0	0	0	0	0	2492	21	2513	24	2586	0	2610	97	5123	5220

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: LOWER FERRY RD PARKWAY AVE

DATE: 3/20/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 42AM

AM INTERVAL COUNTS

STARTING	LOWER FERRY RD								PARKWAY AVE										
	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	5	4	7	16	1	2	4	7	4	13	0	17	5	17	2	24	23	41	64
6:15 6:30	10	16	9	35	2	5	6	13	4	18	6	28	12	21	3	36	48	64	112
6:30 6:45	7	7	10	24	2	7	8	17	4	26	7	37	16	43	9	68	41	105	146
6:45 7:00	27	21	9	57	11	6	3	20	5	29	8	42	22	42	10	74	77	116	193
7:00 7:15	20	23	17	60	3	11	4	18	5	42	8	55	16	42	8	66	78	121	199
7:15 7:30	12	38	13	63	4	21	5	30	9	34	6	49	16	56	5	77	93	126	219
7:30 7:45	12	34	20	66	5	17	12	34	11	56	9	76	24	70	19	113	100	189	289
7:45 8:00	22	60	27	109	19	34	9	62	3	76	9	88	36	72	29	137	171	225	396
8:00 8:15	17	40	25	82	5	29	7	41	6	58	11	75	42	61	21	124	123	199	322
8:15 8:30	15	48	26	89	7	13	7	27	4	59	11	74	33	72	34	139	116	213	329
8:30 8:45	21	34	21	76	7	25	4	36	4	55	8	67	30	75	14	119	112	186	298
8:45 9:00	20	32	16	68	6	27	6	39	3	53	7	63	13	83	7	103	107	166	273
TOTALS	188	357	200	745	72	197	75	344	62	519	90	671	265	654	161	1080	1089	1751	2840

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: LOWER FERRY RD PARKWAY AVE

DATE: 3/20/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 42PM

PM INTERVAL COUNTS

	LOWER FERRY RD								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	39	44	37	120	22	27	12	61	6	131	27	164	29	123	17	169	181	333	514
3:15 3:30	49	46	40	135	27	31	14	72	7	142	32	181	36	141	23	200	207	381	588
3:30 3:45	47	61	49	157	22	31	19	72	9	127	41	177	43	129	24	196	229	373	602
3:45 4:00	53	61	39	153	15	46	21	82	9	128	27	164	44	165	29	238	235	402	637
4:00 4:15	63	73	64	200	16	49	12	77	11	142	39	192	34	135	29	198	277	390	667
4:15 4:30	49	57	65	171	25	33	18	76	15	178	42	235	47	158	27	232	247	467	714
4:30 4:45	46	104	58	208	19	79	20	118	14	164	21	199	40	156	23	219	326	418	744
4:45 5:00	61	79	64	204	28	51	19	98	14	176	35	225	54	169	31	254	302	479	781
5:00 5:15	41	74	59	174	20	66	16	102	16	163	39	218	35	164	26	225	276	443	719
5:15 5:30	38	69	44	151	37	50	26	113	9	151	38	198	45	163	42	250	264	448	712
5:30 5:45	23	42	48	113	32	56	17	105	23	153	36	212	39	157	15	211	218	423	641
5:45 6:00	21	32	22	75	17	47	25	89	9	131	29	169	37	126	22	185	164	354	518
6:00 6:15	16	28	32	76	17	41	12	70	15	128	29	172	32	116	12	160	146	332	478
6:15 6:30	20	30	38	88	16	41	7	64	8	88	25	121	27	113	13	153	152	274	426
6:30 6:45	15	28	19	62	19	30	6	55	6	82	18	106	21	105	9	135	117	241	358
6:45 7:00	15	21	23	59	15	22	6	43	10	74	15	99	19	97	7	123	102	222	324
TOTALS	596	849	701	2146	347	700	250	1297	181	2158	493	2832	582	2217	349	3148	3443	5980	9423

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: HIGH SCHOOL EXIT PARKWAY AVE

DATE: 4/10/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 38B AM

AM INTERVAL COUNTS

STARTING TIME	HIGH SCHOOL EXIT 1-NORTHBOUND				2-SOUTHBOUND				PARKWAY AVE 3-EASTBOUND				4-WESTBOUND				N-S	E-W	
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	0	0	0	1	0	0	1	0	27	0	27	0	38	0	38	1	65	66
6:15 6:30	0	0	0	0	0	0	0	0	0	52	0	52	0	67	0	67	0	119	119
6:30 6:45	0	0	0	0	0	0	0	0	0	52	0	52	0	98	0	98	0	150	150
6:45 7:00	0	0	0	0	1	0	1	2	0	100	0	100	0	115	1	116	2	216	218
7:00 7:15	0	0	0	0	3	0	5	8	0	124	0	124	0	110	0	110	8	234	242
7:15 7:30	0	0	0	0	10	0	63	73	0	139	0	139	0	153	0	153	73	292	365
7:30 7:45	0	0	0	0	1	0	145	146	0	206	0	206	0	171	0	171	146	377	523
7:45 8:00	0	0	0	0	2	0	40	42	0	153	0	153	0	231	0	231	42	384	426
8:00 8:15	0	0	0	0	1	0	2	3	0	116	0	116	0	187	1	188	3	304	307
8:15 8:30	0	0	0	0	3	0	4	7	0	161	0	161	0	211	0	211	7	372	379
8:30 8:45	0	0	0	0	1	0	2	3	1	144	0	145	0	174	0	174	3	319	322
8:45 9:00	0	0	0	0	2	0	1	3	1	118	0	119	0	159	0	159	3	278	281
TOTALS	0	0	0	0	25	0	263	288	2	1392	0	1394	0	1714	2	1716	288	3110	3398

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: HIGH SCHOOL EXIT PARKWAY AVE

DATE: 4/10/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 38B PM

PM INTERVAL COUNTS

	HIGH SCHOOL EXIT								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	0	0	0	0	16	0	24	40	0	211	0	211	0	159	0	159	40	370	410
3:15 3:30	0	0	0	0	7	0	13	20	0	184	0	184	0	148	0	148	20	332	352
3:30 3:45	0	0	0	0	13	0	14	27	2	222	0	224	0	181	0	181	27	405	432
3:45 4:00	0	0	0	0	11	0	5	16	0	218	0	218	0	178	0	178	16	396	412
4:00 4:15	0	0	0	0	11	0	15	26	0	219	0	219	0	167	0	167	26	386	412
4:15 4:30	0	0	0	0	9	0	11	20	1	191	0	192	0	148	0	148	20	340	360
4:30 4:45	0	0	0	0	6	0	6	12	0	162	0	162	0	128	0	128	12	290	302
4:45 5:00	0	0	0	0	5	0	13	18	0	208	0	208	0	143	0	143	18	351	369
5:00 5:15	0	0	0	0	10	0	13	23	0	157	0	157	0	140	0	140	23	297	320
5:15 5:30	0	0	0	0	4	0	11	15	1	143	0	144	0	153	0	153	15	297	312
5:30 5:45	0	0	0	0	5	0	10	15	0	188	0	188	0	150	0	150	15	338	353
5:45 6:00	0	0	0	0	5	0	7	12	0	130	0	130	0	146	0	146	12	276	288
6:00 6:15	0	0	0	0	10	0	14	24	5	166	0	171	0	131	3	134	24	305	329
6:15 6:30	0	0	0	0	5	0	14	19	1	148	0	149	0	100	6	106	19	255	274
6:30 6:45	0	0	0	0	12	0	32	44	0	105	0	105	0	103	3	106	44	211	255
6:45 7:00	0	0	0	0	7	0	11	18	0	111	0	111	0	91	0	91	18	202	220
TOTALS	0	0	0	0	136	0	213	349	10	2763	0	2773	0	2266	12	2278	349	5051	5400

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: HIGH SCHOOL ENTRANCE PARKWAY AVE

DATE: 4/9/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 38A AM

AM INTERVAL COUNTS

STARTING TIME	HIGH SCHOOL ENTRANCE 1-NORTHBOUND				2-SOUTHBOUND				PARKWAY AVE 3-EASTBOUND				4-WESTBOUND				N-S	E-W	
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	0	0	0	0	0	0	0	0	28	0	28	0	27	2	29	0	57	57
6:15 6:30	0	0	0	0	0	0	0	0	0	37	0	37	0	54	2	56	0	93	93
6:30 6:45	0	0	0	0	0	0	0	0	2	61	0	63	0	96	9	105	0	168	168
6:45 7:00	0	0	0	0	0	0	0	0	14	75	0	89	0	110	10	120	0	209	209
7:00 7:15	0	0	0	0	0	0	0	0	20	106	0	126	0	123	24	147	0	273	273
7:15 7:30	0	0	0	0	0	0	0	0	53	112	0	165	0	163	125	288	0	453	453
7:30 7:45	0	0	0	0	0	0	0	0	66	181	0	247	0	177	142	319	0	566	566
7:45 8:00	0	0	0	0	0	0	0	0	16	158	0	174	0	139	29	168	0	342	342
8:00 8:15	0	0	0	0	0	0	0	0	5	154	0	159	0	225	8	233	0	392	392
8:15 8:30	0	0	0	0	0	0	0	0	5	172	0	177	0	208	5	213	0	390	390
8:30 8:45	0	0	0	0	0	0	0	0	2	151	0	153	0	185	5	190	0	343	343
8:45 9:00	0	0	0	0	0	0	0	0	3	127	0	130	0	219	3	222	0	352	352
TOTALS	0	0	0	0	0	0	0	0	186	1362	0	1548	0	1726	364	2090	0	3638	3638

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: HIGH SCHOOL ENTRANCE PARKWAY AVE

DATE: 4/9/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 38A AM

PM INTERVAL COUNTS

	HIGH SCHOOL ENTRANCE									PARKWAY AVE									
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	0	0	0	0	0	0	0	0	1	198	0	199	0	157	5	162	0	361	361
3:15 3:30	0	0	0	0	0	0	0	0	2	184	0	186	0	168	8	176	0	362	362
3:30 3:45	0	0	0	0	1	0	0	1	2	202	0	204	0	185	11	196	1	400	401
3:45 4:00	0	0	0	0	0	0	0	0	3	228	0	231	0	185	0	185	0	416	416
4:00 4:15	0	0	0	0	0	0	0	0	4	215	0	219	0	180	6	186	0	405	405
4:15 4:30	0	0	0	0	0	0	2	2	0	156	0	156	0	174	5	179	2	335	337
4:30 4:45	0	0	0	0	1	0	1	2	0	133	0	133	0	170	0	170	2	303	305
4:45 5:00	0	0	0	0	0	0	3	3	0	144	0	144	0	193	1	194	3	338	341
5:00 5:15	0	0	0	0	0	0	1	1	0	131	0	131	0	204	0	204	1	335	336
5:15 5:30	0	0	0	0	0	0	1	1	6	130	0	136	0	133	4	137	1	273	274
5:30 5:45	0	0	0	0	0	0	0	0	1	194	0	195	0	153	3	156	0	351	351
5:45 6:00	0	0	0	0	0	0	0	0	4	136	0	140	0	137	13	150	0	290	290
6:00 6:15	0	0	0	0	0	0	0	0	17	132	0	149	0	155	20	175	0	324	324
6:15 6:30	0	0	0	0	0	0	0	0	27	113	0	140	0	113	26	139	0	279	279
6:30 6:45	0	0	0	0	0	0	0	0	7	112	0	119	0	112	22	134	0	253	253
6:45 7:00	0	0	0	0	0	0	0	0	5	100	0	105	0	93	17	110	0	215	215
TOTALS	0	0	0	0	2	0	8	10	79	2508	0	2587	0	2512	141	2653	10	5240	5250

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: FARRELL AVE PARKWAY AVE

DATE: 2/26/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 40AM

AM INTERVAL COUNTS

	FARRELL AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	4	0	1	5	2	1	0	3	0	33	0	33	2	43	1	46	8	79	87
6:15 6:30	7	1	3	11	4	0	1	5	1	52	2	55	2	62	0	64	16	119	135
6:30 6:45	9	1	3	13	4	2	2	8	1	51	0	52	4	87	3	94	21	146	167
6:45 7:00	8	0	3	11	4	3	3	10	0	70	0	70	4	119	4	127	21	197	218
7:00 7:15	4	3	4	11	10	2	4	16	0	102	3	105	5	114	5	124	27	229	256
7:15 7:30	6	3	12	21	32	7	17	56	3	123	8	134	22	157	42	221	77	355	432
7:30 7:45	3	1	12	16	48	10	7	65	6	124	9	139	23	220	74	317	81	456	537
7:45 8:00	6	3	3	12	19	6	11	36	2	154	3	159	10	212	31	253	48	412	460
8:00 8:15	13	2	10	25	18	1	8	27	1	134	0	135	4	192	10	206	52	341	393
8:15 8:30	12	0	8	20	6	2	6	14	2	157	3	162	4	196	7	207	34	369	403
8:30 8:45	15	0	7	22	8	2	4	14	0	138	2	140	3	168	6	177	36	317	353
8:45 9:00	11	1	9	21	8	7	4	19	1	121	4	126	7	179	12	198	40	324	364
TOTALS	98	15	75	188	163	43	67	273	17	1259	34	1310	90	1749	195	2034	461	3344	3805

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: FARRELL AVE PARKWAY AVE

DATE: 2/26/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 40PM

PM INTERVAL COUNTS

	FARRELL AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	9	3	7	19	17	2	0	19	2	160	8	170	2	166	23	191	38	361	399
3:15 3:30	8	4	13	25	20	7	0	27	0	145	4	149	4	148	16	168	52	317	369
3:30 3:45	15	1	28	44	17	2	0	19	2	129	4	135	2	144	11	157	63	292	355
3:45 4:00	12	4	41	57	14	2	0	16	1	151	3	155	3	152	12	167	73	322	395
4:00 4:15	20	12	45	77	9	1	0	10	4	152	5	161	10	175	10	195	87	356	443
4:15 4:30	10	3	26	39	22	2	0	24	4	156	5	165	1	170	21	192	63	357	420
4:30 4:45	11	2	25	38	11	2	0	13	7	182	2	191	2	137	13	152	51	343	394
4:45 5:00	10	2	15	27	10	6	0	16	3	143	7	153	2	150	27	179	43	332	375
5:00 5:15	10	1	11	22	20	4	0	24	6	162	6	174	0	124	21	145	46	319	365
5:15 5:30	8	0	13	21	12	3	0	15	8	143	9	160	5	172	17	194	36	354	390
5:30 5:45	9	3	6	18	14	4	0	18	7	127	8	142	3	152	20	175	36	317	353
5:45 6:00	3	2	2	7	15	1	0	16	1	148	6	155	3	152	8	163	23	318	341
6:00 6:15	4	0	4	8	17	3	0	20	4	123	10	137	1	136	14	151	28	288	316
6:15 6:30	5	1	2	8	10	2	0	12	3	119	9	131	0	133	11	144	20	275	295
6:30 6:45	3	0	1	4	9	0	0	9	1	100	7	108	2	121	8	131	13	239	252
6:45 7:00	3	0	3	6	7	1	0	8	2	84	7	93	1	114	6	121	14	214	228
TOTALS	140	38	242	420	224	42	0	266	55	2224	100	2379	41	2346	238	2625	686	5004	5690

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: SUTHERLAND AVE PARKWAY AVE

DATE: 3/5/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 37AM

AM INTERVAL COUNTS

STARTING TIME	SUTHERLAND AVE 1-NORTHBOUND				SUTHERLAND AVE 2-SOUTHBOUND				PARKWAY AVE 3-EASTBOUND				PARKWAY AVE 4-WESTBOUND				N-S	E-W	
	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	0	0	0	2	0	0	2	0	9	0	9	0	14	2	16	2	25	27
6:15 6:30	0	0	0	0	4	0	1	5	0	16	0	16	0	21	3	24	5	40	45
6:30 6:45	0	0	0	0	4	0	1	5	0	14	0	14	0	47	7	54	5	68	73
6:45 7:00	0	0	0	0	5	0	2	7	0	32	0	32	0	70	5	75	7	107	114
7:00 7:15	0	0	0	0	6	0	2	8	1	35	0	36	0	63	1	64	8	100	108
7:15 7:30	0	0	0	0	10	0	3	13	4	48	0	52	0	136	10	146	13	198	211
7:30 7:45	0	0	0	0	6	0	2	8	0	69	0	69	0	107	12	119	8	188	196
7:45 8:00	0	0	0	0	6	0	4	10	0	68	0	68	0	140	20	160	10	228	238
8:00 8:15	0	0	0	0	13	0	3	16	1	72	0	73	0	101	13	114	16	187	203
8:15 8:30	0	0	0	0	12	0	3	15	3	58	0	61	0	76	5	81	15	142	157
8:30 8:45	0	0	0	0	5	0	2	7	1	93	0	94	0	94	6	100	7	194	201
8:45 9:00	0	0	0	0	9	0	2	11	4	60	0	64	0	78	4	82	11	146	157
TOTALS	0	0	0	0	82	0	25	107	14	574	0	588	0	947	88	1035	107	1623	1730

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: MERCER
MUNICIPALITY: EWING

INTERSECTION: North-South Street & East-West Street
STREETS: SUTHERLAND AVE PARKWAY AVE

DATE: '3/5/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 37PM

PM INTERVAL COUNTS

	SUTHERLAND AVE								PARKWAY AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
3:00 3:15	0	0	0	0	9	0	4	13	0	88	0	88	0	74	7	81	13	169	182
3:15 3:30	0	0	0	0	6	0	0	6	2	83	0	85	0	79	7	86	6	171	177
3:30 3:45	0	0	0	0	15	0	3	18	0	92	0	92	0	74	8	82	18	174	192
3:45 4:00	0	0	0	0	10	0	1	11	2	100	0	102	0	94	8	102	11	204	215
4:00 4:15	0	0	0	0	12	0	1	13	2	128	0	130	0	94	5	99	13	229	242
4:15 4:30	0	0	0	0	7	0	6	13	1	79	0	80	0	81	6	87	13	167	180
4:30 4:45	0	0	0	0	12	0	2	14	2	121	0	123	0	111	14	125	14	248	262
4:45 5:00	0	0	0	0	2	0	2	0	1	93	0	94	0	79	11	90	0	184	184
5:00 5:15	0	0	0	0	18	0	5	23	1	102	0	103	0	83	9	92	23	195	218
5:15 5:30	0	0	0	0	18	0	2	20	5	85	0	90	0	90	10	100	20	190	210
5:30 5:45	0	0	0	0	7	0	4	11	5	96	0	101	0	66	7	73	11	174	185
5:45 6:00	0	0	0	0	8	0	1	9	2	86	0	88	0	74	8	82	9	170	179
6:00 6:15	0	0	0	0	6	0	1	7	4	92	0	96	0	71	10	81	7	177	184
6:15 6:30	0	0	0	0	12	0	6	18	2	85	0	87	0	53	7	60	18	147	165
6:30 6:45	0	0	0	0	7	0	4	11	3	71	0	74	0	46	8	54	11	128	139
6:45 7:00	0	0	0	0	9	0	4	13	1	74	0	75	0	40	11	51	13	126	139
TOTALS	0	0	0	0	158	0	46	200	33	1475	0	1508	0	1209	136	1345	200	2853	3053

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR BRISTOL DR

DATE: 3/19/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 49AM

AM INTERVAL COUNTS

	DELSEA DR								BRISTOL DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	91	1	92	0	38	0	38	0	0	0	0	1	0	1	2	130	2	132
6:15 6:30	0	76	1	77	0	34	0	34	0	0	0	0	0	0	0	0	111	0	111
6:30 6:45	0	89	1	90	0	57	0	57	0	0	0	0	0	0	2	2	147	2	149
6:45 7:00	0	43	0	43	0	42	0	42	0	0	0	0	0	0	1	1	85	1	86
7:00 7:15	0	77	0	77	1	56	0	57	0	0	0	0	1	0	0	1	134	1	135
7:15 7:30	0	106	2	108	2	37	0	39	0	0	0	0	1	0	3	4	147	4	151
7:30 7:45	0	149	2	151	1	65	0	66	0	0	0	0	2	0	5	7	217	7	224
7:45 8:00	0	149	2	151	4	85	0	89	0	0	0	0	0	0	1	1	240	1	241
8:00 8:15	0	161	9	170	2	59	0	61	0	0	0	0	0	0	1	1	231	1	232
8:15 8:30	0	181	1	182	4	97	0	101	0	0	0	0	2	0	8	10	283	10	293
8:30 8:45	0	174	1	175	4	94	0	98	0	0	0	0	2	0	7	9	273	9	282
8:45 9:00	0	153	5	158	2	105	0	107	0	0	0	0	2	0	3	5	265	5	270
TOTALS	0	1449	25	1474	20	769	0	789	0	0	0	0	11	0	32	43	2263	43	2306
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR								BRISTOL DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	0	299	3	302	0	171	0	171	0	0	0	0	1	0	4	5	473	5	478
7:00 8:00	0	481	6	487	8	243	0	251	0	0	0	0	4	0	9	13	738	13	751
8:00 9:00	0	669	16	685	12	355	0	367	0	0	0	0	6	0	19	25	1052	25	1077
TOTALS	0	1449	25	1474	20	769	0	789	0	0	0	0	11	0	32	43	2263	43	2306

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR BRISTOL DR

DATE: 3/19/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 49PM

PM INTERVAL COUNTS

	DELSEA DR								BRISTOL DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	0	118	0	118	0	166	0	166	0	0	0	0	0	0	0	0	284	0	284
4:15 4:30	0	222	4	226	2	227	0	229	0	0	0	0	1	0	4	5	455	5	460
4:30 4:45	0	234	4	238	3	207	0	210	0	0	0	0	4	0	4	8	448	8	456
4:45 5:00	0	226	4	230	5	192	0	197	0	0	0	0	5	0	2	7	427	7	434
5:00 5:15	0	228	2	230	2	254	0	256	0	0	0	0	1	0	1	2	486	2	488
5:15 5:30	0	191	6	197	5	210	0	215	0	0	0	0	3	0	1	4	412	4	416
5:30 5:45	0	227	6	233	1	220	0	221	0	0	0	0	1	0	2	3	454	3	457
5:45 6:00	0	271	9	280	7	175	0	182	0	0	0	0	1	0	3	4	462	4	466
6:00 6:15	0	200	7	207	0	192	0	192	0	0	0	0	3	0	2	5	399	5	404
6:15 6:30	0	194	1	195	1	255	0	256	0	0	0	0	4	0	5	9	451	9	460
6:30 6:45	0	129	1	130	7	174	0	181	0	0	0	0	1	0	1	2	311	2	313
6:45 7:00	0	136	2	138	5	163	0	168	0	0	0	0	1	0	3	4	306	4	310
TOTALS	0	2376	46	2422	38	2435	0	2473	0	0	0	0	25	0	28	53	4895	53	4948
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR								BRISTOL DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	0	800	12	812	10	792	0	802	0	0	0	0	10	0	10	20	1614	20	1634
5:00 6:00	0	917	23	940	15	859	0	874	0	0	0	0	6	0	7	13	1814	13	1827
6:00 7:00	0	659	11	670	13	784	0	797	0	0	0	0	9	0	11	20	1467	20	1487
TOTALS	0	2376	46	2422	38	2435	0	2473	0	0	0	0	25	0	28	53	4895	53	4948

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR SHOPPING CENTER ENT

DATE: 3/20/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 50AM

AM INTERVAL COUNTS

	DELSEA DR								SHOPPING CENTER ENT										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	75	4	79	2	37	0	39	0	0	0	0	3	0	1	4	118	4	122
6:15 6:30	0	84	1	85	2	32	0	34	0	0	0	0	1	0	2	3	119	3	122
6:30 6:45	0	77	5	82	2	35	0	37	0	0	0	0	1	0	7	8	119	8	127
6:45 7:00	0	68	1	69	2	59	0	61	0	0	0	0	0	0	4	4	130	4	134
7:00 7:15	0	91	3	94	5	62	0	67	0	0	0	0	0	0	5	5	161	5	166
7:15 7:30	0	89	2	91	12	48	0	60	0	0	0	0	0	0	1	1	151	1	152
7:30 7:45	0	99	2	101	6	72	0	78	0	0	0	0	1	0	3	4	179	4	183
7:45 8:00	0	93	1	94	4	136	0	140	0	0	0	0	1	0	4	5	234	5	239
8:00 8:15	0	175	8	183	7	109	0	116	0	0	0	0	2	0	6	8	299	8	307
8:15 8:30	0	171	9	180	2	110	0	112	0	0	0	0	2	0	4	6	292	6	298
8:30 8:45	0	141	7	148	6	113	0	119	0	0	0	0	2	0	9	11	267	11	278
8:45 9:00	0	140	11	151	13	125	0	138	0	0	0	0	4	0	10	14	289	14	303
TOTALS	0	1303	54	1357	63	938	0	1001	0	0	0	0	17	0	56	73	2358	73	2431
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR								SHOPPING CENTER ENT										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	0	304	11	315	8	163	0	171	0	0	0	0	5	0	14	19	486	19	505
7:00 8:00	0	372	8	380	27	318	0	345	0	0	0	0	2	0	13	15	725	15	740
8:00 9:00	0	627	35	662	28	457	0	485	0	0	0	0	10	0	29	39	1147	39	1186
TOTALS	0	1303	54	1357	63	938	0	1001	0	0	0	0	17	0	56	73	2358	73	2431

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR SHOPPING CENTER ENT

DATE: 3/20/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 50PM

PM INTERVAL COUNTS

STARTING	DELSEA DR 1-NORTHBOUND				DELSEA DR 2-SOUTHBOUND				SHOPPING CENTER ENT 3-EASTBOUND				SHOPPING CENTER ENT 4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	0	136	10	146	15	139	0	154	0	0	0	0	7	0	24	31	300	31	331
4:15 4:30	0	190	9	199	22	225	0	247	0	0	0	0	6	0	12	18	446	18	464
4:30 4:45	0	145	15	160	18	144	0	162	0	0	0	0	7	0	17	24	322	24	346
4:45 5:00	0	119	10	129	16	123	0	139	0	0	0	0	9	0	16	25	268	25	293
5:00 5:15	0	165	14	179	25	177	0	202	0	0	0	0	4	0	18	22	381	22	403
5:15 5:30	0	236	27	263	25	222	0	247	0	0	0	0	7	0	28	35	510	35	545
5:30 5:45	0	238	29	267	34	205	0	239	0	0	0	0	16	0	23	39	506	39	545
5:45 6:00	0	195	30	225	31	246	0	277	0	0	0	0	4	0	19	23	502	23	525
6:00 6:15	0	221	20	241	27	176	0	203	0	0	0	0	8	0	22	30	444	30	474
6:15 6:30	0	164	19	183	36	194	0	230	0	0	0	0	4	0	19	23	413	23	436
6:30 6:45	0	164	19	183	33	176	0	209	0	0	0	0	11	0	24	35	392	35	427
6:45 7:00	0	178	18	196	33	234	0	267	0	0	0	0	21	0	26	47	463	47	510
TOTALS	0	2151	220	2371	315	2261	0	2576	0	0	0	0	104	0	248	352	4947	352	5299
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

STARTING	DELSEA DR 1-NORTHBOUND				DELSEA DR 2-SOUTHBOUND				SHOPPING CENTER ENT 3-EASTBOUND				SHOPPING CENTER ENT 4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	0	590	44	634	71	631	0	702	0	0	0	0	29	0	69	98	1336	98	1434
5:00 6:00	0	834	100	934	115	850	0	965	0	0	0	0	31	0	88	119	1899	119	2018
6:00 7:00	0	727	76	803	129	780	0	909	0	0	0	0	44	0	91	135	1712	135	1847
TOTALS	0	2151	220	2371	315	2261	0	2576	0	0	0	0	104	0	248	352	4947	352	5299

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR GREEN TREE RD

DATE: 3/18/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 48AM

AM INTERVAL COUNTS

	DELSEA DR												GREEN TREE RD						
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	67	11	78	0	28	0	28	0	0	0	0	8	0	8	16	106	16	122
6:15 6:30	0	60	14	74	0	33	0	33	0	0	0	0	11	0	13	24	107	24	131
6:30 6:45	0	77	13	90	2	48	0	50	0	0	0	0	21	0	9	30	140	30	170
6:45 7:00	0	119	13	132	4	75	0	79	0	0	0	0	20	0	19	39	211	39	250
7:00 7:15	0	103	16	119	0	67	0	67	0	0	0	0	20	0	11	31	186	31	217
7:15 7:30	0	127	14	141	4	61	0	65	0	0	0	0	35	0	14	49	206	49	255
7:30 7:45	0	153	21	174	5	82	0	87	0	0	0	0	34	0	23	57	261	57	318
7:45 8:00	0	156	22	178	3	110	0	113	0	0	0	0	42	0	19	61	291	61	352
8:00 8:15	0	149	25	174	4	82	0	86	0	0	0	0	36	0	23	59	260	59	319
8:15 8:30	0	136	29	165	4	113	0	117	0	0	0	0	28	0	20	48	282	48	330
8:30 8:45	0	119	29	148	1	92	0	93	0	0	0	0	27	0	10	37	241	37	278
8:45 9:00	0	139	20	159	7	66	0	73	0	0	0	0	41	0	23	64	232	64	296
TOTALS	0	1405	227	1632	34	857	0	891	0	0	0	0	323	0	192	515	2523	515	3038
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR												GREEN TREE RD						
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	0	323	51	374	6	184	0	190	0	0	0	0	60	0	49	109	564	109	673
7:00 8:00	0	539	73	612	12	320	0	332	0	0	0	0	131	0	67	198	944	198	1142
8:00 9:00	0	543	103	646	16	353	0	369	0	0	0	0	132	0	76	208	1015	208	1223
TOTALS	0	1405	227	1632	34	857	0	891	0	0	0	0	323	0	192	515	2523	515	3038

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR GREEN TREE RD

DATE: 3/18/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 48PM

PM INTERVAL COUNTS

	DELSEA DR								GREEN TREE RD										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	0	142	22	164	7	174	0	181	0	0	0	0	21	0	15	36	345	36	381
4:15 4:30	0	168	28	196	10	208	0	218	0	0	0	0	27	0	15	42	414	42	456
4:30 4:45	0	189	26	215	11	240	0	251	0	0	0	0	33	0	19	52	466	52	518
4:45 5:00	0	110	23	133	12	122	0	134	0	0	0	0	40	0	16	56	267	56	323
5:00 5:15	0	167	18	185	11	168	0	179	0	0	0	0	48	0	16	64	364	64	428
5:15 5:30	0	185	34	219	20	203	0	223	0	0	0	0	55	0	21	76	442	76	518
5:30 5:45	0	179	24	203	13	250	0	263	0	0	0	0	40	0	22	62	466	62	528
5:45 6:00	0	205	17	222	18	269	0	287	0	0	0	0	39	0	22	61	509	61	570
6:00 6:15	0	228	28	256	15	192	0	207	0	0	0	0	39	0	18	57	463	57	520
6:15 6:30	0	201	21	222	19	208	0	227	0	0	0	0	44	0	14	58	449	58	507
6:30 6:45	0	201	20	221	12	243	0	255	0	0	0	0	30	0	17	47	476	47	523
6:45 7:00	0	113	19	132	12	182	0	194	0	0	0	0	41	0	18	59	326	59	385
TOTALS	0	2088	280	2368	160	2459	0	2619	0	0	0	0	457	0	213	670	4987	670	5657
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR								GREEN TREE RD										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	0	609	99	708	40	744	0	784	0	0	0	0	121	0	65	186	1492	186	1678
5:00 6:00	0	736	93	829	62	890	0	952	0	0	0	0	182	0	81	263	1781	263	2044
6:00 7:00	0	743	88	831	58	825	0	883	0	0	0	0	154	0	67	221	1714	221	1935
TOTALS	0	2088	280	2368	160	2459	0	2619	0	0	0	0	457	0	213	670	4987	670	5657

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR HESTON RD / WILLIAM WALTON DR

DATE: 3/19/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 51AM

AM INTERVAL COUNTS

	DELSEA DR								HESTON RD / WILLIAM WALTON DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	3	46	1	50	2	41	0	43	4	4	1	9	5	8	8	21	93	30	123
6:15 6:30	17	65	4	86	5	29	3	37	18	11	2	31	3	14	4	21	123	52	175
6:30 6:45	8	112	8	128	9	75	9	93	18	26	5	49	13	23	12	48	221	97	318
6:45 7:00	23	161	7	191	4	84	11	99	19	30	10	59	16	27	29	72	290	131	421
7:00 7:15	16	102	6	124	6	71	16	93	24	24	16	64	12	41	28	81	217	145	362
7:15 7:30	33	93	11	137	6	40	17	63	16	23	11	50	16	33	35	84	200	134	334
7:30 7:45	45	154	11	210	14	81	23	118	38	37	25	100	12	58	16	86	328	186	514
7:45 8:00	35	112	6	153	5	79	20	104	32	41	11	84	23	57	22	102	257	186	443
8:00 8:15	35	188	27	250	15	95	28	138	45	50	14	109	15	55	43	113	388	222	610
8:15 8:30	32	130	24	186	17	91	21	129	36	47	22	105	20	55	13	88	315	193	508
8:30 8:45	27	93	18	138	15	74	9	98	34	57	14	105	18	50	15	83	236	188	424
8:45 9:00	21	139	23	183	16	100	8	124	19	58	23	100	21	55	10	86	307	186	493
TOTALS	295	1395	146	1836	114	860	165	1139	303	408	154	865	174	476	235	885	2975	1750	4725
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR								HESTON RD / WILLIAM WALTON DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	51	384	20	455	20	229	23	272	59	71	18	148	37	72	53	162	727	310	1037
7:00 8:00	129	461	34	624	31	271	76	378	110	125	63	298	63	189	101	353	1002	651	1653
8:00 9:00	115	550	92	757	63	360	66	489	134	212	73	419	74	215	81	370	1246	789	2035
TOTALS	295	1395	146	1836	114	860	165	1139	303	408	154	865	174	476	235	885	2975	1750	4725

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: GLOUCESTER
MUNICIPALITY: GLASSBORO

INTERSECTION: North-South Street & East-West Street
STREETS: DELSEA DR HESTON RD / WILLIAM DALTON DR

DATE: 3/19/08
DAY: WEDNESDAY
WEATHER: FAIR

FILE NUMBER: 51PM

PM INTERVAL COUNTS

	DELSEA DR								HESTON RD / WILLIAM DALTON DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	33	139	17	189	37	132	14	183	22	101	15	138	23	77	21	121	372	259	631
4:15 4:30	42	146	20	208	45	154	16	215	34	110	21	165	31	82	29	142	423	307	730
4:30 4:45	36	147	19	202	55	156	27	238	48	150	23	221	33	93	15	141	440	362	802
4:45 5:00	55	161	54	270	95	185	40	320	52	109	20	181	48	112	28	188	590	369	959
5:00 5:15	71	124	25	220	93	176	23	292	46	113	18	177	61	111	17	189	512	366	878
5:15 5:30	39	153	11	203	47	173	13	233	22	99	10	131	34	80	12	126	436	257	693
5:30 5:45	24	101	18	143	27	99	19	145	31	75	16	122	28	62	13	103	288	225	513
5:45 6:00	40	128	12	180	46	115	10	171	39	85	18	142	30	69	11	110	351	252	603
6:00 6:15	37	107	11	155	55	126	14	195	27	69	25	121	32	61	24	117	350	238	588
6:15 6:30	33	62	23	118	49	102	28	179	28	59	18	105	24	51	16	91	297	196	493
6:30 6:45	57	83	15	155	42	102	27	171	28	72	23	123	43	82	18	143	326	266	592
6:45 7:00	42	74	11	127	36	114	22	172	21	63	17	101	23	71	15	109	299	210	509
TOTALS	509	1425	236	2170	627	1634	253	2514	398	1105	224	1727	410	951	219	1580	4684	3307	7991
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	DELSEA DR								HESTON RD / WILLIAM DALTON DR										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	166	593	110	869	232	627	97	956	156	470	79	705	135	364	93	592	1825	1297	3122
5:00 6:00	174	506	66	746	213	563	65	841	138	372	62	572	153	322	53	528	1587	1100	2687
6:00 7:00	169	326	60	555	182	444	91	717	104	263	83	450	122	265	73	460	1272	910	2182
TOTALS	509	1425	236	2170	627	1634	253	2514	398	1105	224	1727	410	951	219	1580	4684	3307	7991

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE PARK AVE

DATE: 3/13/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 45AM

AM INTERVAL COUNTS

	HADDONFIELD AVE								PARK AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	3	24	4	31	2	29	2	33	5	6	4	15	3	2	3	8	64	23	87
6:15 6:30	4	47	6	57	4	51	4	59	0	1	3	4	5	4	3	12	116	16	132
6:30 6:45	2	42	7	51	1	41	8	50	4	9	3	16	1	6	0	7	101	23	124
6:45 7:00	5	51	4	60	2	69	4	75	2	4	4	10	1	3	2	6	135	16	151
7:00 7:15	3	24	1	28	1	50	4	55	3	6	1	10	2	1	2	5	83	15	98
7:15 7:30	11	91	13	115	7	101	17	125	4	8	6	18	14	17	5	36	240	54	294
7:30 7:45	29	94	8	131	7	136	17	160	11	11	5	27	15	36	5	56	291	83	374
7:45 8:00	23	109	2	134	11	167	17	195	17	26	18	61	25	40	8	73	329	134	463
8:00 8:15	6	76	9	91	5	128	11	144	18	15	12	45	19	20	3	42	235	87	322
8:15 8:30	6	60	5	71	7	90	11	108	6	11	9	26	17	14	4	35	179	61	240
8:30 8:45	6	88	8	102	5	175	18	198	8	21	9	38	19	16	10	45	300	83	383
8:45 9:00	7	106	9	122	4	138	17	159	6	19	7	32	26	27	5	58	281	90	371
TOTALS	105	812	76	993	56	1175	130	1361	84	137	81	302	147	186	50	383	2354	685	3039
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE								PARK AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	14	164	21	199	9	190	18	217	11	20	14	45	10	15	8	33	416	78	494
7:00 8:00	66	318	24	408	26	454	55	535	35	51	30	116	56	94	20	170	943	286	1229
8:00 9:00	25	330	31	386	21	531	57	609	38	66	37	141	81	77	22	180	995	321	1316
TOTALS	105	812	76	993	56	1175	130	1361	84	137	81	302	147	186	50	383	2354	685	3039

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE PARK AVE

DATE: 3/13/08
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 45PM

PM INTERVAL COUNTS

STARTING	HADDONFIELD AVE 1-NORTHBOUND				HADDONFIELD AVE 2-SOUTHBOUND				PENNSAUKEN 3-EASTBOUND				PENNSAUKEN 4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	7	114	18	139	2	127	11	140	7	22	2	31	15	20	2	37	279	68	347
4:15 4:30	7	123	19	149	5	136	15	156	5	25	3	33	12	29	5	46	305	79	384
4:30 4:45	8	142	15	165	5	148	19	172	7	36	5	48	16	30	7	53	337	101	438
4:45 5:00	11	133	16	160	6	159	18	183	8	37	1	46	18	35	6	59	343	105	448
5:00 5:15	8	131	33	172	13	191	22	226	12	19	6	37	13	22	13	48	398	85	483
5:15 5:30	7	168	32	207	14	178	33	225	11	25	7	43	14	40	13	67	432	110	542
5:30 5:45	11	150	27	188	8	202	23	233	10	40	18	68	13	22	9	44	421	112	533
5:45 6:00	17	176	29	222	11	218	27	256	2	32	7	41	14	24	9	47	478	88	566
6:00 6:15	10	160	31	201	14	219	27	260	7	27	5	39	22	23	9	54	461	93	554
6:15 6:30	12	129	25	166	13	123	26	162	6	22	8	36	14	16	8	38	328	74	402
6:30 6:45	14	161	18	193	7	158	13	178	4	21	8	33	7	17	4	28	371	61	432
6:45 7:00	12	127	20	159	7	139	17	163	5	11	7	23	11	23	6	40	322	63	385
TOTALS	124	1714	283	2121	105	1998	251	2354	84	317	77	478	169	301	91	561	4475	1039	5514
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

STARTING	HADDONFIELD AVE 1-NORTHBOUND				HADDONFIELD AVE 2-SOUTHBOUND				PENNSAUKEN 3-EASTBOUND				PENNSAUKEN 4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	33	512	68	613	18	570	63	651	27	120	11	158	61	114	20	195	1264	353	1617
5:00 6:00	43	625	121	789	46	789	105	940	35	116	38	189	54	108	44	206	1729	395	2124
6:00 7:00	48	577	94	719	41	639	83	763	22	81	28	131	54	79	27	160	1482	291	1773
TOTALS	124	1714	283	2121	105	1998	251	2354	84	317	77	478	169	301	91	561	4475	1039	5514

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE NEW YORK AVE

DATE: 3/11/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 46AM

AM INTERVAL COUNTS

	HADDONFIELD AVE								NEW YORK AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	41	0	41	0	74	0	74	0	0	0	0	2	0	2	4	115	4	119
6:15 6:30	0	56	0	56	1	89	0	90	0	0	0	0	2	0	4	6	146	6	152
6:30 6:45	0	67	0	67	1	93	0	94	0	0	0	0	3	0	5	8	161	8	169
6:45 7:00	0	128	0	128	1	120	0	121	0	0	0	0	3	0	6	9	249	9	258
7:00 7:15	0	95	0	95	0	82	0	82	0	0	0	0	3	0	2	5	177	5	182
7:15 7:30	0	97	0	97	2	110	0	112	0	0	0	0	4	0	6	10	209	10	219
7:30 7:45	0	179	0	179	0	236	0	236	0	0	0	0	11	0	2	13	415	13	428
7:45 8:00	0	205	0	205	1	315	0	316	0	0	0	0	11	0	4	15	521	15	536
8:00 8:15	0	153	0	153	1	236	0	237	0	0	0	0	11	0	1	12	390	12	402
8:15 8:30	0	138	0	138	4	282	0	286	0	0	0	0	10	0	1	11	424	11	435
8:30 8:45	0	163	3	166	5	238	0	243	0	0	0	0	11	0	4	15	409	15	424
8:45 9:00	0	153	3	156	1	246	0	247	0	0	0	0	10	0	1	11	403	11	414
TOTALS	0	1475	6	1481	17	2121	0	2138	0	0	0	0	81	0	38	119	3619	119	3738
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE								NEW YORK AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	0	292	0	292	3	376	0	379	0	0	0	0	10	0	17	27	671	27	698
7:00 8:00	0	576	0	576	3	743	0	746	0	0	0	0	29	0	14	43	1322	43	1365
8:00 9:00	0	607	6	613	11	1002	0	1013	0	0	0	0	42	0	7	49	1626	49	1675
TOTALS	0	1475	6	1481	17	2121	0	2138	0	0	0	0	81	0	38	119	3619	119	3738

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE NEW YORK AVE

DATE: 3/11/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 46PM

PM INTERVAL COUNTS

	HADDONFIELD AVE								NEW YORK AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	0	172	1	173	1	199	0	200	0	0	0	0	5	0	5	10	373	10	383
4:15 4:30	0	171	1	172	4	153	0	157	0	0	0	0	7	0	4	11	329	11	340
4:30 4:45	0	148	2	150	10	181	0	191	0	0	0	0	7	0	2	9	341	9	350
4:45 5:00	0	132	0	132	5	161	0	166	0	0	0	0	8	0	2	10	298	10	308
5:00 5:15	0	231	1	232	5	221	0	226	0	0	0	0	6	0	6	12	458	12	470
5:15 5:30	0	269	1	270	4	247	0	251	0	0	0	0	8	0	7	15	521	15	536
5:30 5:45	0	213	0	213	6	198	0	204	0	0	0	0	6	0	5	11	417	11	428
5:45 6:00	0	160	1	161	7	170	0	177	0	0	0	0	7	0	3	10	338	10	348
6:00 6:15	0	227	1	228	1	224	0	225	0	0	0	0	9	0	3	12	453	12	465
6:15 6:30	0	162	0	162	6	196	0	202	0	0	0	0	15	0	3	18	364	18	382
6:30 6:45	0	162	3	165	1	179	0	180	0	0	0	0	5	0	8	13	345	13	358
6:45 7:00	0	160	3	163	8	179	0	187	0	0	0	0	8	0	7	15	350	15	365
TOTALS	0	2207	14	2221	58	2308	0	2366	0	0	0	0	91	0	55	146	4587	146	4733
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE								NEW YORK AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	0	623	4	627	20	694	0	714	0	0	0	0	27	0	13	40	1341	40	1381
5:00 6:00	0	873	3	876	22	836	0	858	0	0	0	0	27	0	21	48	1734	48	1782
6:00 7:00	0	711	7	718	16	778	0	794	0	0	0	0	37	0	21	58	1512	58	1570
TOTALS	0	2207	14	2221	58	2308	0	2366	0	0	0	0	91	0	55	146	4587	146	4733

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE IRVING AVE

DATE: 3/11/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 44AM

AM INTERVAL COUNTS

	HADDONFIELD AVE								IRVING AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	17	0	17	0	22	0	22	0	0	0	0	0	0	0	0	39	0	39
6:15 6:30	0	23	0	23	0	30	0	30	0	0	0	0	1	0	0	1	53	1	54
6:30 6:45	0	52	0	52	0	51	0	51	0	0	0	0	1	0	0	1	103	1	104
6:45 7:00	0	60	0	60	0	73	0	73	0	0	0	0	0	0	0	0	133	0	133
7:00 7:15	0	72	0	72	0	100	0	100	0	0	0	0	4	1	0	5	172	5	177
7:15 7:30	0	69	0	69	0	81	0	81	0	0	1	1	0	0	1	1	150	2	152
7:30 7:45	0	88	1	89	1	110	1	112	0	0	0	0	1	0	0	1	201	1	202
7:45 8:00	0	91	2	93	1	180	0	181	0	0	2	2	1	0	0	1	274	3	277
8:00 8:15	0	109	2	111	1	111	1	113	0	0	2	2	1	0	0	1	224	3	227
8:15 8:30	1	124	0	125	0	200	0	200	0	0	1	1	0	0	0	0	325	1	326
8:30 8:45	2	116	0	118	0	173	1	174	0	0	1	1	0	0	1	1	292	2	294
8:45 9:00	1	70	2	73	0	117	2	119	0	0	0	0	3	0	0	3	192	3	195
TOTALS	4	891	7	902	3	1248	5	1256	0	0	7	7	12	1	2	15	2158	22	2180
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE								IRVING AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	0	152	0	152	0	176	0	176	0	0	0	0	2	0	0	2	328	2	330
7:00 8:00	0	320	3	323	2	471	1	474	0	0	3	3	6	1	1	8	797	11	808
8:00 9:00	4	419	4	427	1	601	4	606	0	0	4	4	4	0	1	5	1033	9	1042
TOTALS	4	891	7	902	3	1248	5	1256	0	0	7	7	12	1	2	15	2158	22	2180

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE IRVING AVE

DATE: 3/11/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 44PM

PM INTERVAL COUNTS

	HADDONFIELD AVE								IRVING AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	0	98	1	99	0	142	0	142	0	0	0	0	0	0	0	0	241	0	241
4:15 4:30	0	117	0	117	1	156	0	157	0	0	0	0	0	1	0	1	274	1	275
4:30 4:45	1	120	0	121	0	177	0	177	0	0	0	0	0	0	0	0	298	0	298
4:45 5:00	0	126	1	127	0	178	0	178	0	0	0	0	1	0	0	1	305	1	306
5:00 5:15	0	116	0	116	0	192	2	194	0	0	1	1	0	0	0	0	310	1	311
5:15 5:30	1	160	1	162	1	217	0	218	0	0	1	1	0	0	1	1	380	2	382
5:30 5:45	3	141	2	146	1	206	0	207	0	0	0	0	1	0	0	1	353	1	354
5:45 6:00	2	130	0	132	0	186	0	186	0	0	0	0	1	0	0	1	318	1	319
6:00 6:15	0	129	1	130	1	229	0	230	0	0	0	0	1	0	0	1	360	1	361
6:15 6:30	1	120	2	123	0	142	0	142	0	0	0	0	0	0	0	0	265	0	265
6:30 6:45	0	124	1	125	1	192	0	193	0	0	0	0	1	0	1	2	318	2	320
6:45 7:00	0	112	0	112	0	170	0	170	0	0	1	1	0	0	0	0	282	1	283
TOTALS	8	1493	9	1510	5	2187	2	2194	0	0	3	3	5	1	2	8	3704	11	3715
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE								IRVING AVE										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	1	461	2	464	1	653	0	654	0	0	0	0	1	1	0	2	1118	2	1120
5:00 6:00	6	547	3	556	2	801	2	805	0	0	2	2	2	0	1	3	1361	5	1366
6:00 7:00	1	485	4	490	2	733	0	735	0	0	1	1	2	0	1	3	1225	4	1229
TOTALS	8	1493	9	1510	5	2187	2	2194	0	0	3	3	5	1	2	8	3704	11	3715

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE WYNDAM RD

DATE: 3/11/08
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 43AM

AM INTERVAL COUNTS

	HADDONFIELD AVE								WYNDAM RD										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	1	18	0	19	0	21	1	22	3	0	0	3	0	0	0	0	41	3	44
6:15 6:30	2	24	0	26	0	33	1	34	2	0	2	4	0	0	0	0	60	4	64
6:30 6:45	3	39	0	42	0	44	1	45	6	0	1	7	0	0	0	0	87	7	94
6:45 7:00	2	72	0	74	0	91	2	93	10	0	4	14	0	0	0	0	167	14	181
7:00 7:15	10	97	0	107	0	114	0	114	12	0	5	17	0	0	0	0	221	17	238
7:15 7:30	6	114	0	120	0	122	2	124	9	0	4	13	0	0	0	0	244	13	257
7:30 7:45	12	170	0	182	0	244	6	250	5	0	8	13	0	0	0	0	432	13	445
7:45 8:00	6	198	0	204	0	328	10	338	13	0	12	25	0	0	0	0	542	25	567
8:00 8:15	5	171	0	176	0	340	5	345	8	0	12	20	0	0	0	0	521	20	541
8:15 8:30	8	159	0	167	0	330	12	342	14	0	15	29	0	0	0	0	509	29	538
8:30 8:45	7	141	0	148	0	358	8	366	9	0	11	20	0	0	0	0	514	20	534
8:45 9:00	13	112	0	125	0	249	5	254	11	0	4	15	0	0	0	0	379	15	394
TOTALS	75	1315	0	1390	0	2274	53	2327	102	0	78	180	0	0	0	0	3717	180	3897
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE								WYNDAM RD										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 7:00	8	153	0	161	0	189	5	194	21	0	7	28	0	0	0	0	355	28	383
7:00 8:00	34	579	0	613	0	808	18	826	39	0	29	68	0	0	0	0	1439	68	1507
8:00 9:00	33	583	0	616	0	1277	30	1307	42	0	42	84	0	0	0	0	1923	84	2007
TOTALS	75	1315	0	1390	0	2274	53	2327	102	0	78	180	0	0	0	0	3717	180	3897

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: CAMDEN
MUNICIPALITY: PENNSAUKEN

INTERSECTION: North-South Street & East-West Street
STREETS: HADDONFIELD AVE WYNDAM RD

DATE: 3/17/08
DAY: MONDAY
WEATHER: FAIR

FILE NUMBER: 43PM

PM INTERVAL COUNTS

	HADDONFIELD AVE									WYNDAM RD									
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 4:15	11	119	0	130	0	161	22	183	4	0	2	6	0	0	0	0	313	6	319
4:15 4:30	7	128	0	135	0	187	14	201	3	0	6	9	0	0	0	0	336	9	345
4:30 4:45	6	119	0	125	0	135	19	154	5	0	5	10	0	0	0	0	279	10	289
4:45 5:00	8	112	0	120	0	122	17	139	3	0	7	10	0	0	0	0	259	10	269
5:00 5:15	6	136	0	142	0	219	21	240	4	0	6	10	0	0	0	0	382	10	392
5:15 5:30	7	157	0	164	0	194	14	208	9	0	4	13	0	0	0	0	372	13	385
5:30 5:45	15	139	0	154	0	245	21	266	6	0	4	10	0	0	0	0	420	10	430
5:45 6:00	12	125	0	137	0	206	18	224	5	0	5	10	0	0	0	0	361	10	371
6:00 6:15	6	120	0	126	0	184	18	202	3	0	5	8	0	0	0	0	328	8	336
6:15 6:30	3	125	0	128	0	162	14	176	4	0	4	8	0	0	0	0	304	8	312
6:30 6:45	8	113	0	121	0	171	22	193	6	0	4	10	0	0	0	0	314	10	324
6:45 7:00	5	104	0	109	0	157	14	171	4	0	2	6	0	0	0	0	280	6	286
TOTALS	94	1497	0	1591	0	2143	214	2357	56	0	54	110	0	0	0	0	3948	110	4058
P.H. am																			
P.H. pm																			

HOURLY VOLUMES

	HADDONFIELD AVE									WYNDAM RD									
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
4:00 5:00	32	478	0	510	0	605	72	677	15	0	20	35	0	0	0	0	1187	35	1222
5:00 6:00	40	557	0	597	0	864	74	938	24	0	19	43	0	0	0	0	1535	43	1578
6:00 7:00	22	462	0	484	0	674	68	742	17	0	15	32	0	0	0	0	1226	32	1258
TOTALS	94	1497	0	1591	0	2143	214	2357	56	0	54	110	0	0	0	0	3948	110	4058

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING

47679, HADDONFIELD RD, 306-PENNSAUKEN TWP, CAMDEN
FROM CR 621 PARK AVE TO BAILEY RD, SOUTH
SRI=04000644, MP=5.00
FC=14 SPEED LIMIT= COUNTER SET DATE= WEATHER=

HOUR ENDING	03/04/2008, Tuesday	03/05/2008, Wednesday	03/06/2008, Thursday
1:00 AM		43	36
2:00 AM		22	21
3:00 AM		18	13
4:00 AM		25	26
5:00 AM		32	25
6:00 AM		111	103
7:00 AM		352	378
8:00 AM		704	696
9:00 AM		723	733
10:00 AM		537	528
11:00 AM		495	503
12:00 PM		483	476
1:00 PM	573	561	
2:00 PM	527	502	
3:00 PM	582	615	
4:00 PM	705	703	
5:00 PM	828	778	
6:00 PM	909	861	
7:00 PM	644	664	
8:00 PM	393	398	
9:00 PM	262	314	
10:00 PM	247	249	
11:00 PM	124	117	
12:00 AM	72	69	
		9376	

			Seasonal	0.97299999	AM PK HR	9:00:00 AM	AM PK%	0.077111775
TOTAL	AADT	8749	Axle	0.958999991	PM PK HR	6:00:00 PM	PM PK%	0.091830205

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING

47678, HADDONFIELD RD, 306-PENNSAUKEN TWP, CAMDEN
FROM CR 621 PARK AVE TO BAILEY RD, NORTH
SRI=04000644, MP=5.00
FC=14 SPEED LIMIT= COUNTER SET DATE= WEATHER=

HOUR ENDING	03/04/2008, Tuesday	03/05/2008, Wednesday	03/06/2008, Thursday
1:00 AM		36	35
2:00 AM		21	28
3:00 AM		17	17
4:00 AM		18	20
5:00 AM		27	29
6:00 AM		111	122
7:00 AM		283	271
8:00 AM		547	513
9:00 AM		453	460
10:00 AM		358	337
11:00 AM		353	345
12:00 PM		355	362
1:00 PM	440	414	
2:00 PM	480	443	
3:00 PM	514	470	
4:00 PM	592	545	
5:00 PM	567	573	
6:00 PM	633	609	
7:00 PM	533	580	
8:00 PM	402	397	
9:00 PM	319	376	
10:00 PM	303	296	
11:00 PM	132	135	
12:00 AM	65	84	
		7501	

			Seasonal	0.97299999	AM PK HR	8:00:00 AM	AM PK%	0.07292361
TOTAL	AADT	6999	Axle	0.958999991	PM PK HR	6:00:00 PM	PM PK%	0.081189175

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING

47681, DELSEA DR, 322-GLASSBORO BORO, GLOUCESTER
FROM MARKET PL TO SPENCER AVE, SOUTH
SRI=00000047, MP=63.21
FC=14 SPEED LIMIT= COUNTER SET DATE= WEATHER=

HOUR ENDING	03/03/2008, Monday	03/04/2008, Tuesday	03/05/2008, Wednesday
1:00 AM		66	58
2:00 AM		37	33
3:00 AM		16	18
4:00 AM		16	11
5:00 AM		25	20
6:00 AM		55	48
7:00 AM		158	160
8:00 AM		326	294
9:00 AM		389	324
10:00 AM		357	304
11:00 AM		345	256
12:00 PM		402	426
1:00 PM	645	490	
2:00 PM	542	458	
3:00 PM	373	416	
4:00 PM	313	473	
5:00 PM	294	535	
6:00 PM	353	551	
7:00 PM	356	520	
8:00 PM	366	335	
9:00 PM	293	324	
10:00 PM	253	275	
11:00 PM	167	180	
12:00 AM	132	109	
		6858	

			Seasonal	0.97299999	AM PK HR	12:00:00 PM	AM PK%	0.058617673
TOTAL	AADT	6399	Axle	0.958999991	PM PK HR	6:00:00 PM	PM PK%	0.080344124

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING

47680, DELSEA DR, 322-GLASSBORO BORO, GLOUCESTER
FROM MARKET PL TO SPENCER AVE, NORTH
SRI=00000047, MP=63.21
FC=14 SPEED LIMIT= COUNTER SET DATE= WEATHER=

HOUR ENDING	03/24/2008, Monday	03/25/2008, Tuesday	03/26/2008, Wednesday
1:00 AM		75	63
2:00 AM		58	44
3:00 AM		32	38
4:00 AM		32	37
5:00 AM		67	68
6:00 AM		171	189
7:00 AM		414	444
8:00 AM		665	705
9:00 AM		637	732
10:00 AM		592	611
11:00 AM		633	627
12:00 PM		722	734
1:00 PM	742	771	
2:00 PM	623	803	
3:00 PM	734	753	
4:00 PM	739	766	
5:00 PM	782	794	
6:00 PM	773	828	
7:00 PM	599	711	
8:00 PM	538	629	
9:00 PM	426	441	
10:00 PM	306	393	
11:00 PM	205	220	
12:00 AM	124	117	
		11324	

			Seasonal	**0.97299999**	**AM PK HR**	**12:00:00 PM**	**AM PK%**	**0.063758389**
TOTAL	**AADT**	**10,567**	**Axle**	**0.958999991**	**PM PK HR**	**6:00:00 PM**	**PM PK%**	**0.073119039**

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING

47683, DELSEA DR, 322-GLASSBORO BORO, GLOUCESTER
FROM SHOPPING CENTER ENTRANCE TO WILL DALTON DR, SOUTH
SRI=00000047, MP=63.68
FC=14 SPEED LIMIT= COUNTER SET DATE= WEATHER=

HOUR ENDING	03/05/2008, Wednesday	03/06/2008, Thursday	03/07/2008, Friday
1:00 AM		81	105
2:00 AM		40	64
3:00 AM		28	36
4:00 AM		26	32
5:00 AM		27	24
6:00 AM		65	65
7:00 AM		210	203
8:00 AM		382	382
9:00 AM		440	441
10:00 AM		463	457
11:00 AM		497	511
12:00 PM		619	657
1:00 PM	699	736	
2:00 PM	678	713	
3:00 PM	668	664	
4:00 PM	735	652	
5:00 PM	809	772	
6:00 PM	844	849	
7:00 PM	750	811	
8:00 PM	634	642	
9:00 PM	506	543	
10:00 PM	398	451	
11:00 PM	262	304	
12:00 AM	140	182	
		10197	

				Seasonal	**0.97299999**	**AM PK HR**	**12:00:00 PM**	**AM PK%**	**0.060704129**
TOTAL	**AADT**	**9515**		**Axle**	**0.958999991**	**PM PK HR**	**6:00:00 PM**	**PM PK%**	**0.083259782**

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MONITORING

47682, DELSEA DR, 322-GLASSBORO BORO, GLOUCESTER
FROM SHOPPING CENTER ENTRANCE TO WILL DALTON DR, NORTH
SRI=00000047, MP=63.68
FC=14 SPEED LIMIT=45 COUNTER SET DATE= WEATHER=f

HOUR ENDING	04/15/2008, Tuesday	04/16/2008, Wednesday	04/17/2008, Thursday
1:00 AM		60	58
2:00 AM		38	32
3:00 AM		35	30
4:00 AM		32	29
5:00 AM		62	57
6:00 AM		206	212
7:00 AM		448	462
8:00 AM		664	684
9:00 AM		674	487
10:00 AM		602	618
11:00 AM		652	670
12:00 PM		721	715
1:00 PM	806	830	
2:00 PM	758	786	
3:00 PM	788	815	
4:00 PM	789	843	
5:00 PM	813	792	
6:00 PM	843	915	
7:00 PM	711	803	
8:00 PM	562	683	
9:00 PM	494	482	
10:00 PM	310	353	
11:00 PM	202	166	
12:00 AM	97	117	
		11779	

				Seasonal	**0.942**	**AM PK HR**	**11:00 AM**	**AM PK%**	**0.06**
TOTAL	**AADT**	**10641**		**Axle**	**0.959**	**PM PK HR**	**5:00 PM**	**PM PK%**	**0.08**

APPENDIX B
CRASH DATA

CR 634 Parkway Avenue Cooridor Crash Data
EWING TOWNSHIP - MERCER COUNTY

Reportable and Non Reportable crashes (2005-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT COND.	ROAD COND.	CRASH TYPE	VEHICLE 1 CONTRIBUTING FACTORS	VEHICLE 2 CONTRIBUTING FACTORS
Reportable	4/13/06	8:26 AM	0	1	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Unsafe Speed	~
Reportable	7/13/06	12:45 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	None	~
Reportable	5/29/06	11:48 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	~	~
Reportable	1/20/06	4:48 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	Following Too Closely	~
Reportable	2/27/06	12:04 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Driver Inattention	~
Reportable	12/24/06	1:37 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Animals In Roadway	~
Reportable	2/16/06	7:25 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Driver Inattention	~
Reportable	1/17/06	3:41 PM	0	~	Not at Intersection	Overcast	Daylight	Wet	Same Direction Sideswipe	None	~
Reportable	2/24/06	1:07 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	None	~
Reportable	7/17/06	7:34 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	~	~
Non-reportable	8/9/06	7:31 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Backing	~	~
Reportable	8/11/06	12:39 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	10/6/06	7:20 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Left Turn	None	~
Reportable	10/6/06	4:11 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	11/1/06	6:18 PM	0	~	Not at Intersection	Clear	Dark	Dry	Rear End	None	~
Reportable	12/17/06	2:06 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	Driver Inattention	Following Too Closely
Reportable	1/11/06	3:09 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Left Turn	None	~
Reportable	1/7/06	4:46 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Non-reportable	5/2/06	10:04 PM	0	~	Not at Intersection	Clear	Dark	Dry	Rear End	None	~
Reportable	12/1/06	8:01 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Same Direction Sideswipe	None	~
Reportable	9/14/06	1:21 PM	0	~	At Intersection	Rain	Daylight	Wet	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	Improper Turning
Reportable	3/20/06	4:44 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Rear End	None	~
Reportable	8/20/06	5:04 AM	0	1	Not at Intersection	Overcast	Dark	Wet	Overturned	Animals In Roadway	~
Reportable	9/1/06	1:22 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	None	~
Reportable	12/12/06	10:59 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	6/7/06	3:18 PM	0	~	At Intersection	Rain	Daylight	Wet	Rear End	Unsafe Speed	~
Reportable	9/26/06	1:37 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Unsafe Speed	~
Reportable	2/3/06	10:47 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Hit Fixed Object	Unsafe Speed	~
Reportable	2/19/06	10:55 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Other Driver/Pedalcyclist Action	~
Reportable	4/17/06	7:48 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	None	~
Reportable	3/18/06	9:57 AM	0	~	At Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	9/20/06	2:41 PM	0	~	At Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	3/17/06	7:43 AM	0	2	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	5/8/06	8:58 PM	0	~	Not at Intersection	Clear	Dark	Dry	Opposite Direction Sideswipe	None	~

Reportable and Non Reportable crashes (2005-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT COND.	ROAD COND.	CRASH TYPE	VEHICLE 1 CONTRIBUTING FACTORS	VEHICLE 2 CONTRIBUTING FACTORS
Reportable	5/10/06	12:26 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	None	~
Non-reportable	7/24/06	7:18 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	8/1/06	1:15 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	Failed To Yield ROW to Vehicle/Pedes.	~
Reportable	9/15/06	5:32 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Other Driver/Pedalcyclist Action	0
Reportable	10/19/06	2:46 PM	0	3	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	10/13/06	1:44 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	12/12/06	12:52 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	12/20/06	14;13	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	Improper Turning
Reportable	3/3/06	1:45 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	Improper Turning	~
Reportable	3/10/06	2:34 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	None	~
Reportable	7/17/06	4:13 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	7/13/06	12:38 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	7/30/06	2:09 AM	0	1	Not at Intersection	Clear	Dark	Dry	Overturned	Unsafe Speed	~
Reportable	8/14/06	12:16 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	Improper Turning	~
Reportable	9/14/06	3:05 PM	0	1	Not at Intersection	Rain	Daylight	Wet	Angle	None	~
Non-reportable	9/20/06	11:59 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Animal	Animals In Roadway	~
Reportable	9/21/06	3:19 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	Following Too Closely	~
Reportable	9/7/06	12:50 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	10/1/06	5:21 PM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn	None	Failed To Yield ROW to Vehicle/Pedes.
Reportable	10/21/06	11:49 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	Improper Turning
Reportable	10/23/06	7:55 AM	0	3	Not at Intersection	Clear	Daylight	Dry	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	Improper Turning
Reportable	11/12/06	1:51 AM	0	~	Not at Intersection	Fog	Dark	Wet	Rear End	None	~
Reportable	11/12/06	1:45 AM	0	~	Not at Intersection	Fog	Dark	Wet	Hit Fixed Object	Unsafe Speed	~
Reportable	12/2/06	10:32 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	10/6/06	12:01 PM	0	~	At Intersection	Rain	Daylight	Wet	Left Turn	None	~
Reportable	7/3/06	9:34 PM	0	~	At Intersection	Clear	Dark	Dry	Left Turn	None	~
Reportable	6/21/06	2:02 PM	0	2	At Intersection	Clear	Daylight	Dry	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	Improper Turning
Reportable	6/16/06	3:31 PM	0	~	At Intersection	Clear	Daylight	Dry	Rear End	~	~
Reportable	5/15/06	8:13 AM	0	~	At Intersection	Rain	Daylight	Wet	Left Turn	None	~
Reportable	5/8/06	7:50 AM	0	~	At Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	10/1/07	8:37 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Unsafe Speed	Driver Inattention
Reportable	12/11/07	5:41 PM	0	~	Not at Intersection	Clear	Dark	Wet	Hit Fixed Object	Driver Inattention	~

Reportable and Non Reportable crashes (2005-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT COND.	ROAD COND.	CRASH TYPE	VEHICLE 1 CONTRIBUTING FACTORS	VEHICLE 2 CONTRIBUTING FACTORS
Reportable	9/23/07	7:41 PM	0	~	Not at Intersection	Clear	Dark	Dry	Backing	None	~
Reportable	12/17/07	9:15 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	None	~
Reportable	4/14/07	7:38 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Driver Inattention	~
Reportable	6/19/07	4:32 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Hit Non-Hit Fixed Object	Debris In Road	~
Reportable	8/7/07	2:50 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	None	~
Reportable	2/26/07	9:03 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Angle	None	~
Reportable	3/16/07	12:05 PM	0	~	Not at Intersection	Freezing Rain	Daylight	Slush	Opposite Direction Sideswipe	Unsafe Speed	Other Roadway Factor
Non-reportable	5/16/07	4:11 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Rear End	None	~
Reportable	7/2/07	12:11 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	Failed To Yield ROW to Vehicle/Pedes.	~
Reportable	8/28/07	12:51 AM	0	1	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Unsafe Speed	~
Reportable	1/27/07	1:52 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	5/26/07	4:47 PM	0	~	At Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	7/26/07	9:34 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Other Driver/Pedalcyclist Action	~
Reportable	1/19/07	8:03 AM	0	~	At Intersection	Clear	Daylight	Icy	Hit Fixed Object	Unsafe Speed	~
Reportable	5/8/07	7:35 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	Improper Turning	Physical Obstructions
Reportable	7/3/07	2:05 PM	0	4	Not at Intersection	Clear	Daylight	Dry	Left Turn	~	~
Reportable	11/16/07	1:49 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	Following Too Closely	~
Reportable	11/10/07	5:44 PM	0	~	Not at Intersection	Clear	Dark	Dry	Angle	None	~
Non-reportable	10/15/07	12:05 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	Driver Inattention	Following Too Closely
Reportable	11/9/07	6:47 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Animal	Animals In Roadway	~
Reportable	6/13/07	5:00 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	12/24/07	12:25 PM	0	~	At Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	4/10/07	3:42 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	4/13/07	10:02 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	None	~
Reportable	5/12/07	12:01 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Angle	Driver Inattention	Failed To Yield ROW to Vehicle/Pedes.
Reportable	6/22/07	12:58 AM	0	~	Not at Intersection	Rain	Dark	Wet	Hit Fixed Object	Driver Inattention	~
Reportable	6/21/07	8:37 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	6/23/07	8:49 AM	0	1	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	7/16/07	4:01 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	10/11/07	9:43 AM	0	~	Not at Intersection	Clear	Daylight	Wet	Rear End	None	~
Reportable	11/19/07	12:00 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Hit Animal	~	~
Reportable	2/25/07	9:36 PM	0	1	Not at Intersection	Snow	Dark	Icy	Hit Fixed Object	Unsafe Speed	~
Reportable	1/5/07	4:17 PM	0	1	At Intersection	Rain	Daylight	Wet	Rear End	Following Too Closely	~

Reportable and Non Reportable crashes (2005-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT COND.	ROAD COND.	CRASH TYPE	VEHICLE 1 CONTRIBUTING FACTORS	VEHICLE 2 CONTRIBUTING FACTORS
Reportable	1/2/07	5:57 PM	0	1	At Intersection	Clear	Dark	Dry	Left Turn	None	~
Reportable	2/17/07	7:00 PM	0	1	At Intersection	Clear	Dark	Dry	Left Turn	None	~
Reportable	3/22/07	5:31 PM	0	1	At Intersection	Clear	Daylight	Dry	Left Turn	None	~
Reportable	7/19/07	5:09 PM	0	1	At Intersection	Rain	Daylight	Wet	Left Turn	None	~
Reportable	12/19/07	5:15 PM	0	~	At Intersection	Clear	Dark	Dry	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	Improper Turning
Reportable	10/13/07	6:29 PM	0	2	At Intersection	Clear	Daylight	Dry	Left Turn	None	~
Reportable	12/19/07	6:17 PM	0	~	At Intersection	Clear	Dark	Dry	Left Turn	None	~
Non-reportable	12/17/07	8:45 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Animal	Animals In Roadway	~
Reportable	2/7/07	2:23 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	Failed To Yield ROW to Vehicle/Pedes.	~
Reportable	2/14/07	10:31 AM	0	~	Not at Intersection	Snow	Daylight	Slush	Rear End	None	~
Reportable	2/18/07	2:55 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Hit Fixed Object	Driver Inattention	~
Reportable	3/16/07	8:33 PM	0	~	Not at Intersection	Snow	Dark	Snowy	Angle	None	~
Reportable	6/30/07	2:58 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	6/23/07	3:40 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	7/19/07	5:51 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	9/13/07	8:31 AM	0	3	Not at Intersection	Clear	Daylight	Dry	Left Turn	Failed To Yield ROW to Vehicle/Pedes.	~
Reportable	9/17/07	12:02 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn	None	~
Reportable	10/9/07	10:49 AM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn	None	~
Reportable	11/6/07	9:20 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Rear End	None	~
Reportable	11/26/07	12:03 PM	0	1	Not at Intersection	Rain	Dark	Wet	Rear End	None	~
Reportable	4/8/07	11:02 PM	0	2	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Tires	~
Reportable	6/11/07	6:26 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	1/12/08	3:09 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	2/8/08	8:06 AM	0	1	At Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	2/5/08	12:25 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Rear End	Unsafe Speed	~
Reportable	3/20/08	2:42 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	Failed To Yield ROW to Vehicle/Pedes.	Driver Inattention
Reportable	3/21/08	8:12 PM	0	~	Not at Intersection	Clear	Dark	Dry	Hit Fixed Object	Driver Inattention	~
Reportable	4/20/08	12:30 AM	0	~	At Intersection	Clear	Dark	Dry	Hit Fixed Object	Driver Inattention	~
Reportable	1/28/08	7:57 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction Sideswipe	Improper Lane Change	~
Reportable	5/30/08	5:17 PM	0	2	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Non-reportable	4/9/08	4:12 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Rear End	None	~
Reportable	4/8/08	12:40 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Rear End	Driver Inattention	~
Reportable	2/11/08	3:46 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle	None	~
Reportable	2/9/08	11:05 AM	0	2	Not at Intersection	Clear	Daylight	Wet	Head On	Driver Inattention	Failure to Keep Right
Reportable	2/12/08	5:45 PM	0	~	Not at Intersection	Freezing Rain	Dark	Icy	Rear End	None	~

Reportable and Non Reportable crashes (2005-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT COND.	ROAD COND.	CRASH TYPE	VEHICLE 1 CONTRIBUTING FACTORS	VEHICLE 2 CONTRIBUTING FACTORS
Reportable	3/8/08	10:04 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Hit Fixed Object	Unsafe Speed	~
Reportable	1/30/08	6:26 PM	0	~	Not at Intersection	Clear	Dark	Dry	Same Direction Sideswipe	None	~
Reportable	4/12/08	3:03 PM	0	~	Not at Intersection	Overcast	Daylight	Dry	Hit Animal	Animals In Roadway	~
Reportable	2/12/08	5:13 PM	0	~	At Intersection	Freezing Rain	Daylight	Icy	Angle	Other Roadway Factor	~
Reportable	2/19/08	8:55 AM	0	2	Not at Intersection	Clear	Daylight	Dry	Head On	None	~
Reportable	2/22/08	8:44 AM	0	~	Not at Intersection	Rain	Daylight	Snowy	Head On	None	~

Source: Ewing Police Department

Regional Road Diet Analysis - Feasibility Assessment
NJ 47 Corridor Crash Data

Reportable and Non Reportable Crashes (2004-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER CONDITION	LIGHT CONDITION	ROAD COND.	CRASH TYPE
Non-Reportable	6/8/07	2:30 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Non-Reportable	6/14/2005	12:20 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Non-Reportable	10/1/2005	12:19 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Non-Reportable	6/5/2005	5:07 PM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn
Non-Reportable	4/2/06	1:47 PM	0	~	At Intersection	Clear	Daylight	Dry	~
Non-Reportable	3/19/07	8:06 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Non-Reportable	7/29/2004	8:22 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Non-Reportable	5/7/2005	4:18 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Non-Reportable	6/8/2004	5:55 PM	0	1	At Intersection	Clear	Daylight	Dry	Other
Non-Reportable	4/4/2004	2:51 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Angle
Non-Reportable	4/4/2004	2:49 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Same Direction- Rear End
Non-Reportable	10/25/2004	12:04 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Non-Reportable	4/2/2005	10:45 AM	0	~	At Intersection	Rain	Daylight	Dry	Left Turn
Non-Reportable	4/4/2005	4:02 PM	0	~	At Intersection	Rain	Daylight	Wet	Same Direction- Rear End
Non-Reportable	5/7/2005	2:02 PM	0	~	At Intersection	Rain	Daylight	Wet	Angle
Non-Reportable	7/7/2005	2:08 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Non-Reportable	10/25/2005	6:14 PM	0	~	Not at Intersection	Rain	Dark (St. Lights Off)	Wet	Same Direction- Rear End
Non-Reportable	3/31/06	12:02 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Non-Reportable	8/16/07	12:26 PM	0	~	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
Non-Reportable	5/22/06	1:54 PM	0	~	Not at Intersection	Clear	Daylight	Dry	~
Non-Reportable	11/12/2004	5:08 PM	0	~	Not at Intersection	Rain	Dark (St. Lights on)	Wet	Angle
Non-Reportable	12/17/2004	5:51 PM	0	~	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Head-on
Non-Reportable	3/17/2005	3:45 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Non-Reportable	7/23/2005	12:38 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Non-Reportable	2/13/2004	1:32 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Non-Reportable	5/22/06	10:54 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Non-Reportable	10/17/06	10:45 AM	0	~	At Intersection	Rain	Daylight	Wet	Right Angle
Non-Reportable	2/7/07	1:41 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Non-Reportable	10/31/07	12:41 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	10/23/06	2:05 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	12/9/07	1:40 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	4/20/2004	5:26 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Other
Reportable	10/28/2004	9:42 AM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn
Reportable	11/29/2004	3:05 PM	0	2	At Intersection	Clear	Daylight	Dry	Angle
Reportable	12/10/2004	7:44 PM	0	~	Not at Intersection	Clear	Dark (St. Lights on)	Wet	Same Direction- Rear End
Reportable	12/18/2004	11:02 AM	0	~	At Intersection	Clear	Daylight	Dry	Angle
Reportable	5/15/2005	8:37 AM	0	1	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	2/2/06	1:10 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	2/11/06	11:34 AM	0	1	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	4/8/06	7:20 PM	0	1	Not at Intersection	Rain	Dark	Wet	Same Direction (Side Swipe)
Reportable	2/28/07	4:22 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)

Reportable and Non Reportable Crashes (2004-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER CONDITION	LIGHT CONDITION	ROAD COND.	CRASH TYPE
Reportable	3/5/07	2:19 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	3/8/07	2:45 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	5/19/07	8:21 AM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	5/21/07	1:09 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	7/12/07	5:18 AM	0	1	Not at Intersection	Clear	Dawn	Dry	Right Angle
Reportable	11/7/07	8:05 PM	0	~	At Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Rear End)
Reportable	3/12/2005	5:00 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Reportable	8/30/2004	12:31 PM	0	1	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	7/21/06	4:28 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	10/5/2005	3:33 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	3/8/2004	2:08 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Angle
Reportable	4/14/2004	8:26 PM	0	~	Not at Intersection	Clear	Dark (St. Lights on)	Wet	Same Direction- Rear End
Reportable	6/30/2004	9:28 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn
Reportable	7/7/2004	1:33 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Reportable	7/23/2004	1:24 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Same Direction- Rear End
Reportable	7/28/2004	4:40 PM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn
Reportable	12/17/2004	5:02 PM	0	~	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Angle
Reportable	12/18/2004	11:04 AM	0	~	At Intersection	Clear	Daylight	Dry	Angle
Reportable	3/20/2005	8:43 PM	0	~	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Same Direction- Rear End
Reportable	4/25/2005	10:39 AM	0	1	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	5/20/06	4:54 AM	0	1	At Intersection	Clear	Dark (street lights on, continuous)	Dry	Struck Parked Vehicle
Reportable	8/1/06	10:00 AM	0	0	Not at Intersection	Clear	Daylight	Dry	Right Angle
Reportable	4/10/07	6:22 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	7/4/07	2:45 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	8/21/07	11:26 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Same Direction (Side Swipe)
Reportable	3/4/2004	4:19 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	10/22/2004	6:20 PM	0	1	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Angle
Reportable	6/17/2004	4:36 PM	0	~	At Intersection	Rain	Daylight	Wet	Same Direction- Sideswipe
Reportable	11/22/06	7:52 PM	0	1	Not at Intersection	Rain	Dark (street lights on, spot)	Wet	~
Reportable	4/3/07	12:38 PM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	9/24/2004	10:39 AM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Reportable	5/1/06	10:49 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	10/14/06	6:49 PM	0	1	Not at Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Rear End)
Reportable	2/2/07	10:46 PM	0	~	At Intersection	Clear	Dark (no street lights)	Wet	Backing
Reportable	9/27/07	3:25 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	7/3/2005	9:11 PM	0	~	At Intersection	Clear	Dark (St. Lights on)	Dry	Same Direction- Rear End
Reportable	2/7/2004	8:22 PM	0	1	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Struck Parked Vehicle
Reportable	6/26/2004	6:19 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Reportable	8/27/2004	3:44 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	7/16/2005	10:15 AM	0	1	Not at Intersection	Clear	Daylight	Dry	Other
Reportable	11/10/2005	1:46 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	7/11/06	5:20 PM	0	~	At Intersection	Clear	Daylight	Dry	Right Angle
Reportable	10/6/07	2:22 PM	0	4	Not at Intersection	Clear	Daylight	Dry	Right Angle

Reportable and Non Reportable Crashes (2004-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER CONDITION	LIGHT CONDITION	ROAD COND.	CRASH TYPE
Reportable	4/21/2004	6:51 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	6/20/2004	8:06 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Left Turn
Reportable	7/2/2004	12:52 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Reportable	8/27/2004	1:29 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	10/19/2004	6:47 PM	0	1	Not at Intersection	Rain	Dark (St. Lights on)	Wet	Angle
Reportable	11/8/2004	2:52 PM	0	3	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	6/3/2005	3:45 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	6/23/2005	1:43 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	11/2/2005	5:34 PM	0	~	At Intersection	Clear	Dark (St. Lights on)	Dry	Left Turn
Reportable	12/21/2005	6:43 PM	0	1	At Intersection	Clear	Dark (St. Lights on)	Dry	Angle
Reportable	5/16/06	2:13 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	6/2/06	10:39 AM	0	1	Not at Intersection	Clear	Daylight	Dry	Pedacyclist
Reportable	6/17/06	1:47 PM	0	1	~	Clear	Daylight	Dry	Right Angle
Reportable	8/20/06	8:51 PM	0	1	Not at Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Rear End)
Reportable	10/20/06	3:16 PM	0	2	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	9/28/07	5:19 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	3/24/2004	7:42 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	1/3/06	9:51 AM	0	~	Not at Intersection	Rain	Daylight	Wet	Left Turn/ U Turn
Reportable	3/9/07	108/14/200854	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	12/4/07	1:57 AM	0	2	Not at Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Rear End)
Reportable	6/24/2004	11:42 AM	0	~	At Intersection	Clear	Daylight	Dry	Angle
Reportable	12/21/2004	6:57 PM	0	~	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Same Direction- Sideswipe
Reportable	5/10/07	2:51 PM	0	~	~	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	1/16/2004	5:24 PM	0	~	At Intersection	Clear	Dark (St. Lights on)	Dry	Angle
Reportable	2/7/2004	2:44 PM	0	~	At Intersection	Clear	Daylight	Dry	Head-on
Reportable	3/29/2004	3:57 PM	0	2	At Intersection	Clear	Daylight	Dry	Left Turn
Reportable	6/3/2004	2:19 PM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn
Reportable	9/22/2004	2:12 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	10/29/2004	8:18 PM	0	2	At Intersection	Clear	Dark (St. Lights on)	Dry	Same Direction- Rear End
Reportable	11/4/2004	3:13 PM	0	~	Not at Intersection	Rain	Daylight	Snowy	Same Direction- Rear End
Reportable	12/20/2004	5:11 AM	0	2	At Intersection	Clear	Dark (St. Lights on)	Dry	Angle
Reportable	2/24/2005	4:50 PM	0	~	At Intersection	Snow	Daylight	Snowy	Same Direction- Rear End
Reportable	3/7/2005	8:22 AM	0	2	At Intersection	Clear	Daylight	Dry	Angle
Reportable	4/29/2005	7:08 PM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn
Reportable	6/23/2005	10:22 AM	0	1	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	9/13/2005	7:57 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	9/26/2005	12:44 PM	0	1	At Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	10/4/2005	7:32 AM	0	~	At Intersection	Rain	Daylight	Wet	Angle
Reportable	1/17/06	8:59 AM	0	~	Not at Intersection	Overcast	Daylight	Dry	Same Direction (Rear End)
Reportable	3/12/06	3:02 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	3/25/06	2:09 PM	0	1	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
Reportable	4/27/06	4:39 PM	0	~	At Intersection	Clear	Dawn	Dry	Same Direction (Rear End)
Reportable	4/27/06	8:18 PM	0	~	At Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Rear End)

Reportable and Non Reportable Crashes (2004-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER CONDITION	LIGHT CONDITION	ROAD COND.	CRASH TYPE
Reportable	8/23/06	8:44 PM	0	1	Not at Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Side Swipe)
Reportable	8/29/06	5:18 PM	0	~	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
Reportable	3/19/07	11:39 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	5/23/07	12:26 PM	0	3	At Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	9/22/07	6:39 PM	0	~	At Intersection	Clear	Dark	Dry	Left Turn/ U Turn
Reportable	11/8/07	9:55 AM	0	~	At Intersection	Clear	Daylight	Dry	Right Angle
Reportable	11/26/07	3:45 PM	0	~	At Intersection	Overcast	Daylight	Wet	Left Turn/ U Turn
Reportable	1/11/06	2:14 PM	0	~	Not at Intersection	~	Daylight	Dry	Same Direction (Rear End)
Reportable	11/24/07	3:14 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Right Angle
Reportable	5/7/2004	3:54 PM	0	1	Not at Intersection	Rain	Daylight	Wet	Angle
Reportable	11/1/2004	2:15 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn
Reportable	2/25/2005	2:01 PM	0	~	At Intersection	Clear	Daylight	Dry	Angle
Reportable	6/4/2004	8:54 AM	0	~	At Intersection	Clear	Daylight	Dry	Head-on
Reportable	6/9/2004	11:41 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	7/1/2004	11:07 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	7/3/2004	11:12 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	9/11/2004	10:47 AM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	10/19/2004	5:39 PM	0	~	Not at Intersection	Rain	Dawn or Dusk	Wet	Same Direction- Sideswipe
Reportable	10/26/2004	11:40 AM	0	1	At Intersection	Clear	Daylight	Dry	~
Reportable	2/5/2005	11:37 AM	0	1	At Intersection	Clear	Daylight	Dry	Angle
Reportable	3/9/2005	2:23 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Same Direction- Rear End
Reportable	4/5/2005	2:07 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction- Sideswipe
Reportable	4/18/2005	12:01 PM	0	1	At Intersection	Clear	Daylight	Dry	Angle
Reportable	5/15/2005	11:17 PM	0	1	Not at Intersection	Clear	Dark (St. Lights on)	Dry	Head-on
Reportable	7/8/2005	5:18 PM	0	~	Not at Intersection	Rain	Daylight	Wet	Same Direction- Rear End
Reportable	4/30/06	3:09 PM	0	1	Not at Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	4/5/07	2:09 PM	0	1	At Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	5/4/07	7:22 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	6/30/07	10:17 PM	0	~	Not at Intersection	Clear	Dark (street lights on, continuous)	Dry	Left Turn/ U Turn
Reportable	7/2/2004	4:24 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn
Reportable	10/12/2004	8:53 AM	0	~	At Intersection	Clear	Daylight	Dry	Head-on
Reportable	12/23/2005	12:27 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Angle
Reportable	4/27/06	10:59 AM	0	~	At Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	5/30/06	7:15 PM	0	~	At Intersection	Clear	Daylight	Dry	Right Angle
Reportable	2/9/07	4:06 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Left Turn/ U Turn
Reportable	2/17/07	1:32 PM	0	~	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
Reportable	3/15/07	8:31 PM	0	~	Not at Intersection	Rain	Dark (street lights on, continuous)	Wet	Right Angle
Reportable	5/28/07	1:26 PM	0	~	At Intersection	Clear	Daylight	Dry	Opposite Direction (Head On-Angular)
Reportable	7/17/07	7:14 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Right Angle
Reportable	9/24/07	5:22 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
Reportable	11/19/07	4:51 PM	0	~	At Intersection	Rain	Dark (street lights on, continuous)	Wet	Left Turn/ U Turn
Reportable	12/11/07	7:38 PM	0	1	Not at Intersection	Rain	Dark (street lights on, continuous)	Wet	Right Angle
Reportable	12/18/07	12:43 PM	0	~	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)

Reportable and Non Reportable Crashes (2004-2007)

Reportable or Non-reportable	DATE	TIME	TOTAL KILLED	TOTAL INJURED	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER CONDITION	LIGHT CONDITION	ROAD COND.	CRASH TYPE
Reportable	12/23/2004	1:12 PM	0	1	At Intersection	Rain	Daylight	Wet	Angle
Reportable	10/5/07	10:21 PM	0	~	Not at Intersection	Clear	Dark (street lights on, continuous)	Dry	Same Direction (Side Swipe)

Source: Glassboro Police Department

Regional Road Diet Analysis - Feasibility Assessment

Haddonfield Avenue Corridor Crash Data

Reportable crashes (2004-2007)

DATE	TIME	TOTAL KILLED	TOTAL INJURED	ROAD SYSTEM	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT CONDITION	ROAD COND.	CRASH TYPE
1/5/04	5:21 PM	0	0	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
1/18/04	4:31 PM	0	1	County	Not at Intersection	Snow	Dusk	Wet	Same Direction (Rear End)
1/21/04	4:12 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
1/27/04	4:50 PM	0	1	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Icy	Left Turn/U Turn
2/1/04	12:17 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
2/13/04	1:58 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Fixed Object
3/5/04	11:50 PM	0	1	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
3/9/04	12:27 PM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
4/12/04	11:38 AM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
4/15/04	9:03 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
4/29/04	4:59 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
5/1/04	6:45 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
5/15/04	4:08 PM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
5/26/04	7:20 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Left Turn/U Turn
5/27/04	11:13 AM	0	1	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
6/20/04	6:44 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Opposite Direction (Head-On, Angular)
6/23/04	8:55 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
6/26/04	11:57 PM	0	1	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Side Swipe)
6/26/04	10:57 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights Off)	Dry	Same Direction (Rear End)
7/16/04	5:07 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
7/21/04	2:53 PM	0	1	County	At Intersection	Clear	Daylight	Dry	Other
7/22/04	1:41 PM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
7/22/04	2:06 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
7/27/04	11:49 AM	0	0	County	Not at Intersection	Clear	Daylight	Wet	Same Direction (Rear End)
7/27/04	6:36 PM	0	0	County	Not at Intersection	Clear	Daylight	Wet	Other
7/29/04	5:40 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Right Angle
7/29/04	5:25 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
8/21/04	4:02 PM	0	1	County	Not at Intersection	Rain	Daylight	Wet	Left Turn/U Turn
8/25/04	5:07 PM	0	2	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
9/7/04	5:58 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Fixed Object
9/13/04	6:23 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Other
9/14/04	2:01 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
10/4/04	4:05 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
10/6/04	8:18 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
10/15/04	5:03 PM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
10/20/04	9:24 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Right Angle
10/25/04	9:46 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
11/5/04	8:56 AM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
11/7/04	2:21 PM	0	0	County	Not at Intersection	Unknown	Daylight	Dry	Same Direction (Rear End)
11/10/04	7:39 PM	0	4	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
11/12/04	2:47 PM	1	0	County	Not at Intersection	Rain	Daylight	Wet	Right Angle
11/17/04	6:05 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Fixed Object

Reportable crashes (2004-2007)

DATE	TIME	TOTAL KILLED	TOTAL INJURED	ROAD SYSTEM	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT CONDITION	ROAD COND.	CRASH TYPE
11/26/04	9:02 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
12/5/04	5:14 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
12/10/04	9:07 AM	0	1	County	Not at Intersection	Rain	Daylight	Wet	Left Turn/U Turn
12/10/04	9:59 PM	0	1	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Fixed Object
12/13/04	1:59 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
12/15/04	6:10 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
12/20/04	9:50 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
12/21/04	2:48 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
12/21/04	3:21 PM	0	1	County	At Intersection	Clear	Daylight	Dry	Left Turn/U Turn
12/26/04	1:37 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
1/4/05	11:35 AM	0	1	County	At Intersection	Clear	Daylight	Dry	Right Angle
1/5/05	8:50 PM	0	0	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
1/6/05	6:12 PM	0	2	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
1/6/05	6:15 PM	0	0	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
1/13/05	1:53 PM	0	1	County	At Intersection	Clear	Daylight	Wet	Same Direction (Rear End)
1/19/05	2:51 PM	0	0	County	At Intersection	Snow	Daylight	Icy	Fixed Object
1/29/05	7:17 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Other
1/30/05	9:25 PM	0	0	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Fixed Object
2/11/05	1:09 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
2/15/05	2:59 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
2/18/05	1:01 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Right Angle
2/24/05	4:11 PM	0	1	County	At Intersection	Snow	Daylight	Snowy	Opposite Direction (Head-On, Angular)
2/24/05	5:04 PM	0	0	County	At Intersection	Snow	Daylight	Snowy	Same Direction (Rear End)
2/24/05	6:01 PM	0	1	County	Not at Intersection	Snow	Dark (Street Lights On, Continuous)	Snowy	Same Direction (Rear End)
2/25/05	8:50 AM	0	0	County	Not at Intersection	Clear	Daylight	Snowy	Same Direction (Rear End)
2/26/05	6:32 PM	0	0	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
3/13/05	7:10 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Side Swipe)
3/20/05	12:29 PM	0	2	County	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
3/22/05	4:15 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
3/25/05	5:12 PM	0	0	County	At Intersection	Unknown	Daylight	Dry	Same Direction (Side Swipe)
4/9/05	1:55 PM	0	2	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
4/16/05	2:57 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
4/28/05	9:44 AM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
4/28/05	10:47 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
4/30/05	2:01 PM	0	1	County	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
5/13/05	4:44 PM	1	0	County	At Intersection	Clear	Daylight	Dry	Opposite Direction (Head-On, Angular)
5/20/05	12:43 PM	0	0	County	At Intersection	Rain	Daylight	Wet	Same Direction (Side Swipe)
6/3/05	6:01 PM	0	0	County	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
7/2/05	4:22 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
7/20/05	9:00 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Left Turn/U Turn
7/23/05	10:06 PM	0	0	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Side Swipe)
7/27/05	7:18 PM	0	0	County	Not at Intersection	99	Dusk	Dry	Right Angle
8/3/05	9:05 AM	0	0	County	At Intersection	Clear	Daylight	Dry	Other
8/9/05	9:56 AM	0	0	County	At Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Fixed Object

Reportable crashes (2004-2007)

DATE	TIME	TOTAL KILLED	TOTAL INJURED	ROAD SYSTEM	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT CONDITION	ROAD COND.	CRASH TYPE
8/11/05	5:12 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
8/15/05	6:04 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
8/16/05	6:48 PM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
8/19/05	4:30 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
8/24/05	4:28 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
8/27/05	5:11 PM	0	0	County	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
9/2/05	4:42 AM	0	1	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Fixed Object
9/6/05	3:25 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
9/19/05	6:30 PM	0	1	County	At Intersection	Clear	Dusk	Dry	Same Direction (Rear End)
9/28/05	2:45 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
10/4/05	4:58 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
10/8/05	8:30 PM	0	0	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
10/10/05	12:44 AM	0	4	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Right Angle
10/11/05	5:27 PM	0	0	County	At Intersection	Rain	Daylight	Wet	Same Direction (Side Swipe)
10/14/05	8:53 AM	0	0	County	At Intersection	Rain	Daylight	Wet	Other
10/17/05	3:01 PM	0	1	County	At Intersection	Clear	Daylight	Dry	Left Turn/U Turn
10/20/05	5:30 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
10/20/05	8:56 AM	0	0	County	At Intersection	Clear	Daylight	Dry	Right Angle
10/21/05	5:25 PM	0	0	County	At Intersection	Clear	Dusk	Dry	Same Direction (Side Swipe)
10/22/05	9:50 PM	0	0	County	At Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
11/1/05	8:35 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
11/12/05	6:35 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
11/13/05	4:08 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
11/18/05	5:39 PM	0	1	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Right Angle
11/22/05	3:49 PM	0	4	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
11/22/05	4:14 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
11/22/05	1:30 PM	0	0	County	Not at Intersection	Clear	Daylight	Wet	Left Turn/U Turn
11/26/05	8:29 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
11/30/05	7:00 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Right Angle
12/4/05	11:10 AM	0	0	County	Not at Intersection	Clear	Daylight	Icy	Fixed Object
12/27/05	7:11 PM	0	5	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
12/29/05	2:21 PM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Side Swipe)
1/11/06	4:40 PM	0	0	County	Not at Intersection	Rain	Dusk	Wet	Same Direction (Rear End)
1/11/06	7:35 PM	0	0	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
2/15/06	10:46 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
3/14/06	4:15 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
3/30/06	9:40 PM	0	2	County	Not at Intersection	Clear	Dark (Street Lights On, Spot)	Dry	Same Direction (Rear End)
4/3/06	5:13 PM	0	1	County	At Intersection	Rain	Daylight	Wet	Fixed Object
4/8/06	2:27 PM	0	1	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
4/21/06	9:28 PM	0	1	County	Not at Intersection	Overcast	Dark (Street Lights On, Spot)	Dry	Pedalcyclist
4/24/06	7:08 AM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Right Angle
5/1/06	3:14 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Non-fixed Object
5/6/06	8:39 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Spot)	Dry	Same Direction (Rear End)
5/11/06	8:31 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)

Reportable crashes (2004-2007)

DATE	TIME	TOTAL KILLED	TOTAL INJURED	ROAD SYSTEM	AT INTERSECTION OR NOT AT INTERSECTION	WEATHER COND.	LIGHT CONDITION	ROAD COND.	CRASH TYPE
5/12/06	3:12 PM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
5/13/06	1:01 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
5/16/06	9:37 PM	0	0	County	At Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Left Turn/U Turn
5/19/06	5:46 PM	0	0	County	At Intersection	Clear	Daylight	Dry	Fixed Object
5/26/06	1:00 PM	0	2	County	Not at Intersection	Clear	Daylight	Wet	Right Angle
5/26/06	4:34 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Right Angle
6/6/06	11:09 AM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
6/7/06	12:21 PM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
6/7/06	6:55 PM	0	2	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
6/23/06	4:31 PM	0	0	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
6/24/06	8:18 PM	0	0	County	Not at Intersection	Rain	Dusk	Wet	Same Direction (Rear End)
6/30/06	12:40 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Left Turn/U Turn
6/30/06	8:36 PM	0	1	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Side Swipe)
7/1/06	2:02 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
7/27/06	2:19 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
8/16/06	7:12 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Right Angle
8/16/06	5:11 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)
9/9/06	5:21 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
9/18/06	5:54 AM	0	1	County	Not at Intersection	Clear	Dawn	Dry	Same Direction (Side Swipe)
10/6/06	1:07 PM	0	0	County	At Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
10/6/06	4:18 PM	0	2	County	Not at Intersection	Rain	Daylight	Wet	Same Direction (Rear End)
10/9/06	9:44 AM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Right Angle
10/12/06	10:18 AM	0	1	County	Not at Intersection	Clear	Daylight	Wet	Same Direction (Rear End)
10/28/06	11:31 AM	0	0	County	Not at Intersection	Clear	Daylight	Wet	Same Direction (Rear End)
10/28/06	1:08 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
11/8/06	6:15 PM	0	0	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Wet	Same Direction (Rear End)
11/17/06	6:30 PM	0	1	County	Not at Intersection	Clear	Dark (Street Lights On, Continuous)	Dry	Same Direction (Rear End)
11/21/06	8:26 AM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Rear End)
12/1/06	7:45 AM	0	1	County	At Intersection	Rain	Daylight	Wet	Same Direction (Side Swipe)
12/5/06	3:42 PM	0	1	County	Not at Intersection	Clear	Daylight	Dry	Right Angle
12/22/06	5:08 PM	0	1	County	Not at Intersection	Rain	Dark (Street Lights On, Continuous)	Wet	Right Angle
12/26/06	10:50 AM	0	1	County	Not at Intersection	Clear	Daylight	Wet	Same Direction (Rear End)
12/29/06	3:30 PM	0	0	County	Not at Intersection	Clear	Daylight	Dry	Same Direction (Side Swipe)

Source: New Jersey Department of Transportation

APPENDIX C
SIMTRAFFIC ANALYSIS OUTPUT

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.0	0.4	0.3	0.2	0.9
Delay / Veh (s)	13.6	7.4	1.5	0.9	1.9
St Del/Veh (s)	13.6	8.3	0.5	0.0	1.2
Stop/Veh	1.00	0.94	0.05	0.00	0.13
Avg Speed (mph)	3	5	23	28	24
Fuel Used (gal)	0.1	1.8	19.4	29.6	50.8
HC Emissions (g)	0	0	3	3	6
CO Emissions (g)	1	22	974	641	1638
NOx Emissions (g)	0	0	10	9	19

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.2	0.4	0.3	0.1	1.1
Delay / Veh (s)	10.1	2.4	1.7	2.3	2.5
St Del/Veh (s)	7.3	1.1	0.3	0.8	1.0
Stop/Veh	0.72	0.08	0.00	0.05	0.08
Avg Speed (mph)	17	26	22	18	23
Fuel Used (gal)	3.1	24.2	32.5	6.5	66.3
HC Emissions (g)	0	2	4	1	8
CO Emissions (g)	52	519	1567	304	2442
NOx Emissions (g)	1	7	15	3	26

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.2	0.1	0.0	0.3
Delay / Veh (s)	6.4	3.7	4.6	2.3	0.6	0.5	1.5
St Del/Veh (s)	5.3	3.7	2.2	0.2	0.0	0.1	0.4
Stop/Veh	1.00	1.00	0.50	0.00	0.00	0.00	0.06
Avg Speed (mph)	7	8	29	35	38	30	35
Fuel Used (gal)	0.3	0.1	0.4	29.6	16.1	1.5	48.0
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	2	1	23	1739	514	42	2321
NOx Emissions (g)	0	0	0	15	8	1	23

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	0.8	0.2	0.3	0.7	0.0	1.2	1.3	0.2	0.1	2.7	0.2
Delay / Veh (s)	24.2	18.9	4.7	24.4	16.2	8.1	25.4	15.7	11.0	27.6	26.3	20.5
St Del/Veh (s)	22.5	15.4	3.0	22.7	13.5	7.6	21.8	11.7	8.8	24.1	20.7	17.1
Stop/Veh	0.77	0.61	0.17	0.78	0.56	0.67	0.90	0.49	0.53	0.90	0.74	0.78
Avg Speed (mph)	5	6	12	5	7	9	10	13	14	11	11	12
Fuel Used (gal)	2.0	3.3	1.0	1.1	3.1	0.1	8.2	12.5	1.9	0.6	20.9	1.8
HC Emissions (g)	0	0	0	0	0	0	1	1	0	0	1	0
CO Emissions (g)	22	63	14	9	92	1	266	374	58	20	529	78
NOx Emissions (g)	0	1	0	0	1	0	2	4	1	0	5	1

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	8.4
Delay / Veh (s)	19.4
St Del/Veh (s)	15.8
Stop/Veh	0.62
Avg Speed (mph)	10
Fuel Used (gal)	56.4
HC Emissions (g)	4
CO Emissions (g)	1526
NOx Emissions (g)	14

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBR	WBL	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Delay / Veh (s)	7.6	4.0	6.6	3.5	1.2	0.4	0.2	1.3	0.4	0.3	0.6
St Del/Veh (s)	6.2	3.8	5.1	3.3	0.5	0.0	0.1	0.4	0.0	0.0	0.2
Stop/Veh	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.20	0.00	0.00	0.04
Avg Speed (mph)	15	17	18	19	28	38	32	32	38	31	37
Fuel Used (gal)	0.3	0.2	0.2	0.2	0.1	12.4	0.2	0.3	25.6	0.2	39.6
HC Emissions (g)	0	0	0	0	0	1	0	0	4	0	5
CO Emissions (g)	3	3	1	2	1	298	2	14	1400	8	1731
NOx Emissions (g)	0	0	0	0	0	5	0	0	13	0	19

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.3	0.6	0.0	0.7	0.1	0.0	0.0	1.5	0.1	0.1	3.5
Delay / Veh (s)	8.7	6.3	9.6	8.5	2.6	55.7	41.2	33.2	26.0	2.5	10.0
St Del/Veh (s)	6.4	2.8	8.3	5.4	0.3	52.8	41.0	29.9	21.0	0.7	7.1
Stop/Veh	0.62	0.26	0.60	0.36	0.00	1.00	1.00	0.87	0.86	0.00	0.35
Avg Speed (mph)	24	30	12	15	19	5	5	16	18	32	22
Fuel Used (gal)	6.5	19.7	0.2	6.5	0.9	0.1	0.1	12.7	0.5	6.9	54.0
HC Emissions (g)	1	2	0	1	0	0	0	1	0	1	6
CO Emissions (g)	196	623	2	327	10	1	1	400	11	306	1877
NOx Emissions (g)	3	9	0	2	0	0	0	4	0	3	23

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	0.8	0.1	0.3	0.7	0.1	0.7	1.5	0.2	0.3	0.8	0.3
Delay / Veh (s)	17.9	6.6	5.4	9.4	6.0	4.9	38.6	29.8	8.2	37.2	32.2	30.2
St Del/Veh (s)	16.6	4.7	4.7	7.5	3.2	3.9	36.5	26.5	7.5	35.1	29.3	29.2
Stop/Veh	0.79	0.23	0.48	0.58	0.21	0.33	0.85	0.78	0.75	0.97	0.85	0.82
Avg Speed (mph)	17	25	24	14	20	17	10	11	20	7	8	8
Fuel Used (gal)	1.1	15.3	1.7	2.3	7.5	1.8	4.6	11.4	4.7	1.8	5.0	1.9
HC Emissions (g)	0	2	0	0	1	0	0	1	0	0	0	0
CO Emissions (g)	12	489	65	42	293	35	85	221	127	32	115	49
NOx Emissions (g)	0	7	1	1	3	0	1	3	1	0	1	1

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	6.0
Delay / Veh (s)	13.0
St Del/Veh (s)	10.9
Stop/Veh	0.45
Avg Speed (mph)	15
Fuel Used (gal)	59.1
HC Emissions (g)	5
CO Emissions (g)	1565
NOx Emissions (g)	18

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.1	0.4	0.2	0.4	0.5	1.5	1.7	1.3	0.1	0.2	2.2	0.0
Delay / Veh (s)	50.1	44.8	37.5	40.5	42.3	12.9	22.8	13.5	13.4	22.3	21.0	4.3
St Del/Veh (s)	48.2	42.1	36.6	38.8	36.7	12.9	20.2	11.4	12.2	20.4	16.6	1.0
Stop/Veh	1.00	0.97	0.88	0.92	0.91	0.54	0.66	0.38	0.67	0.65	0.55	0.17
Avg Speed (mph)	6	6	6	11	12	20	9	12	12	20	21	31
Fuel Used (gal)	0.4	1.8	0.9	3.3	4.2	28.2	10.7	9.0	0.7	3.1	28.6	1.0
HC Emissions (g)	0	0	0	0	0	4	1	1	0	0	3	0
CO Emissions (g)	5	51	11	133	197	1487	281	187	7	63	747	17
NOx Emissions (g)	0	1	0	1	1	11	3	2	0	1	11	0

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	8.7
Delay / Veh (s)	19.2
St Del/Veh (s)	16.9
Stop/Veh	0.56
Avg Speed (mph)	16
Fuel Used (gal)	91.9
HC Emissions (g)	9
CO Emissions (g)	3186
NOx Emissions (g)	32

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.5	0.0	0.2	2.9	0.3	0.2	0.0	0.0	0.5	0.1	0.1
Delay / Veh (s)	28.8	10.0	3.4	20.1	12.7	9.0	24.7	20.0	2.1	21.7	19.4	7.0
St Del/Veh (s)	26.3	6.7	2.6	17.2	9.1	6.8	23.0	18.1	0.9	19.7	17.6	6.6
Stop/Veh	1.00	0.39	0.44	0.93	0.52	0.54	0.78	0.83	0.15	0.72	0.70	0.69
Avg Speed (mph)	7	15	19	7	10	10	8	10	20	9	10	15
Fuel Used (gal)	0.3	12.7	0.3	1.1	21.6	2.7	1.2	0.2	0.8	3.8	0.8	1.0
HC Emissions (g)	0	1	0	0	2	0	0	0	0	0	0	0
CO Emissions (g)	3	492	5	18	518	53	23	5	26	87	13	29
NOx Emissions (g)	0	4	0	0	6	1	0	0	0	1	0	0

30: Parkway Ave & Farrell Ave Performance by movement

Movement	All
Total Delay (hr)	6.0
Delay / Veh (s)	12.2
St Del/Veh (s)	9.1
Stop/Veh	0.51
Avg Speed (mph)	11
Fuel Used (gal)	46.6
HC Emissions (g)	4
CO Emissions (g)	1271
NOx Emissions (g)	14

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.1	0.0	0.2	0.6	0.0	1.0
Delay / Veh (s)	0.8	0.7	7.3	2.9	2.9	2.4
St Del/Veh (s)	0.1	0.3	3.5	0.3	2.8	0.5
Stop/Veh	0.00	0.03	0.52	0.03	1.00	0.06
Avg Speed (mph)	37	28	15	25	15	28
Fuel Used (gal)	17.0	1.4	4.0	38.8	0.0	61.3
HC Emissions (g)	2	0	0	6	0	9
CO Emissions (g)	938	62	176	3035	0	4211
NOx Emissions (g)	9	1	2	20	0	31

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.7	0.9	1.6
Delay / Veh (s)	5.5	7.3	6.3
St Del/Veh (s)	3.1	3.8	3.4
Stop/Veh	0.29	0.35	0.32
Avg Speed (mph)	27	21	25
Fuel Used (gal)	21.3	10.7	32.0
HC Emissions (g)	3	1	4
CO Emissions (g)	1300	314	1614
NOx Emissions (g)	11	4	15

Total Network Performance

Total Delay (hr)	41.3
Delay / Veh (s)	33.8
St Del/Veh (s)	23.8
Stop/Veh	1.09
Avg Speed (mph)	23
Fuel Used (gal)	1146.7
HC Emissions (g)	138
CO Emissions (g)	52944
NOx Emissions (g)	493

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.2	7.3	0.1	37
	11	0.4	4.0	0.0	31
Parkside Ave	12	16.2	20.3	0.0	7
	10	2.1	6.4	0.0	24
Berwyn Ave	15	0.4	17.7	0.2	42
	8	0.3	14.8	0.2	39
Sutherland Rd	9	0.6	13.5	0.1	40
N Olden Ave	27	21.0	44.6	0.3	23
Ewing High Entrance	6	2.1	11.3	0.1	30
Ewing High Exit	5	0.9	16.7	0.1	29
Farrell Ave	30	12.8	19.5	0.1	10
NJDOT Driveway	34	3.0	10.1	0.1	27
	4	1.0	14.3	0.1	36
Lower Ferry Rd	24	6.0	11.8	0.1	23
	3	2.0	17.3	0.2	35
	22	0.1	3.8	0.0	39
	2	0.7	18.4	0.2	38
Scotch Rd	20	8.5	14.0	0.1	17
	1	3.1	21.9	0.2	34
Shopping Center	37	7.3	15.6	0.1	21
	36	3.1	15.6	0.1	32
Total		91.9	319.0	2.5	28

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	36	0.6	4.2	0.0	34
Shopping Center	37	5.5	18.2	0.1	27
	1	1.5	9.9	0.1	34
Sylvia St	20	6.3	24.9	0.2	30
	2	1.4	7.4	0.1	32
	22	0.3	18.0	0.2	39
	3	0.1	3.8	0.0	39
Lower Ferry Rd	24	6.6	18.2	0.2	33
	4	2.0	9.2	0.1	30
NJDOT Driveway	34	0.8	11.8	0.1	45
	30	10.0	16.5	0.1	17
Ewing High Exit	5	1.2	7.8	0.1	26
Ewing High Entrance	6	2.4	17.7	0.1	27
Lexington Ave	27	13.5	22.1	0.1	15
Sutherland Rd	9	2.7	29.5	0.3	35
	8	0.3	13.7	0.1	39
Berwyn Ave	15	0.4	14.2	0.2	40
	10	1.6	20.3	0.2	37
Parkside Ave	12	18.9	22.6	0.0	7
	11	2.5	7.1	0.0	21
	41	0.1	3.7	0.0	34
Total		78.7	300.9	2.4	29

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	0.0	0.4	0.1	0.6
Delay / Veh (s)	10.2	3.7	1.9	0.5	1.4
St Del/Veh (s)	10.3	4.3	0.8	0.0	0.7
Stop/Veh	1.00	1.00	0.08	0.00	0.08
Avg Speed (mph)	4	7	22	29	25
Fuel Used (gal)	0.2	0.2	22.5	24.8	47.8
HC Emissions (g)	0	0	3	3	5
CO Emissions (g)	4	3	1051	488	1546
NOx Emissions (g)	0	0	11	8	18

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.3	0.0	0.4
Delay / Veh (s)	0.5	1.2	1.7	0.9
St Del/Veh (s)	0.0	0.1	0.5	0.1
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (mph)	29	22	19	25
Fuel Used (gal)	25.5	45.2	0.3	70.9
HC Emissions (g)	2	6	0	9
CO Emissions (g)	504	2270	12	2786
NOx Emissions (g)	7	23	0	30

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.4	0.1	0.0	0.6
Delay / Veh (s)	7.0	3.7	4.9	2.8	0.6	0.6	2.0
St Del/Veh (s)	6.0	3.7	1.9	0.1	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.25	0.00	0.00	0.00	0.06
Avg Speed (mph)	6	8	29	34	38	30	34
Fuel Used (gal)	0.3	0.1	0.4	56.9	14.0	1.1	72.8
HC Emissions (g)	0	0	0	9	2	0	11
CO Emissions (g)	3	1	23	3590	408	33	4058
NOx Emissions (g)	0	0	0	32	7	1	39

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	1.0	0.2	0.7	0.9	0.0	0.5	2.2	0.4	0.1	2.8	0.2
Delay / Veh (s)	22.9	19.5	5.7	28.1	18.6	7.9	23.9	18.4	14.3	38.4	25.5	19.2
St Del/Veh (s)	21.1	15.5	3.8	25.9	15.5	7.4	19.7	13.0	11.1	35.5	20.0	16.0
Stop/Veh	0.76	0.66	0.23	0.83	0.61	0.62	0.91	0.56	0.60	0.80	0.72	0.76
Avg Speed (mph)	5	6	11	4	7	9	11	12	12	8	11	12
Fuel Used (gal)	1.5	4.0	0.9	2.4	4.0	0.1	3.8	17.5	3.6	0.3	21.9	1.7
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	2	0
CO Emissions (g)	15	79	9	29	139	1	158	496	106	7	568	51
NOx Emissions (g)	0	1	0	0	1	0	1	5	1	0	5	1

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.4
Delay / Veh (s)	20.1
St Del/Veh (s)	15.9
Stop/Veh	0.64
Avg Speed (mph)	10
Fuel Used (gal)	61.7
HC Emissions (g)	5
CO Emissions (g)	1659
NOx Emissions (g)	16

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Delay / Veh (s)	5.1	8.0	3.0	3.4	11.6	3.9	1.7	0.6	0.4	1.9	0.4	0.4
St Del/Veh (s)	3.6	5.9	3.0	2.5	9.0	3.5	0.9	0.0	0.0	1.2	0.0	0.0
Stop/Veh	1.00	1.00	1.00	1.00	1.00	1.00	0.29	0.00	0.00	0.33	0.00	0.00
Avg Speed (mph)	17	15	18	19	16	19	30	38	31	29	38	32
Fuel Used (gal)	0.0	0.1	0.2	0.0	0.1	0.1	0.2	15.7	0.3	0.3	21.4	0.2
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	4	0
CO Emissions (g)	0	1	2	0	1	1	3	419	4	10	1175	9
NOx Emissions (g)	0	0	0	0	0	0	0	7	0	0	12	0

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	0.1
Delay / Veh (s)	0.6
St Del/Veh (s)	0.2
Stop/Veh	0.03
Avg Speed (mph)	37
Fuel Used (gal)	38.7
HC Emissions (g)	5
CO Emissions (g)	1625
NOx Emissions (g)	20

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.9	1.1	0.1	2.5	0.2	0.1	0.2	0.3	3.3	0.1	0.2	9.0
Delay / Veh (s)	18.3	10.6	16.9	14.1	3.7	38.3	37.3	38.4	48.6	36.1	3.5	16.6
St Del/Veh (s)	15.0	6.1	14.5	9.0	0.2	37.1	35.1	37.8	43.4	29.5	1.2	12.4
Stop/Veh	0.88	0.38	0.71	0.44	0.06	0.89	0.88	0.97	1.02	0.86	0.01	0.47
Avg Speed (mph)	19	25	9	11	18	5	5	5	12	15	31	17
Fuel Used (gal)	10.0	20.8	0.5	15.0	1.8	0.4	0.7	1.4	21.1	0.6	11.0	83.4
HC Emissions (g)	1	2	0	1	0	0	0	0	2	0	1	8
CO Emissions (g)	233	516	9	502	26	3	12	26	658	18	502	2506
NOx Emissions (g)	4	9	0	4	0	0	0	0	6	0	5	28

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	1.4	9.8	1.3	4.8	6.5	0.8	2.9	3.3	1.4	10.6	26.5	8.8
Delay / Veh (s)	92.5	52.7	35.5	98.5	36.5	26.1	54.3	37.8	20.4	524.8	562.2	577.7
St Del/Veh (s)	87.5	42.9	29.1	93.6	28.5	22.4	50.6	33.0	18.7	515.3	551.6	568.9
Stop/Veh	1.37	0.95	0.85	1.56	0.78	0.60	0.98	0.81	0.70	2.63	2.54	2.40
Avg Speed (mph)	5	8	10	3	7	9	8	10	15	2	2	1
Fuel Used (gal)	4.9	43.6	7.1	14.1	26.9	3.5	15.4	21.8	13.9	27.1	67.0	22.2
HC Emissions (g)	0	3	1	1	2	0	1	2	1	0	2	1
CO Emissions (g)	65	787	185	160	471	52	260	395	325	187	577	252
NOx Emissions (g)	1	9	2	2	5	1	3	5	4	1	3	2

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	78.1
Delay / Veh (s)	99.7
St Del/Veh (s)	92.7
Stop/Veh	1.07
Avg Speed (mph)	6
Fuel Used (gal)	267.4
HC Emissions (g)	13
CO Emissions (g)	3717
NOx Emissions (g)	37

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.2	0.7	0.5	0.5	1.0	2.3	4.5	3.6	0.2	0.1	3.3	0.1
Delay / Veh (s)	41.5	45.9	44.2	42.9	45.7	15.6	29.4	29.7	25.9	26.8	31.0	7.1
St Del/Veh (s)	38.8	42.7	42.8	40.5	40.0	14.8	26.4	25.5	23.5	24.5	25.0	3.1
Stop/Veh	0.94	0.92	0.92	0.91	0.89	0.57	0.75	0.74	0.86	0.67	0.72	0.24
Avg Speed (mph)	6	6	6	11	11	18	6	6	6	18	17	28
Fuel Used (gal)	1.1	3.3	2.4	4.1	7.2	37.2	21.0	17.3	0.7	0.7	32.2	2.0
HC Emissions (g)	0	0	0	0	1	5	1	1	0	0	3	1
CO Emissions (g)	19	61	75	198	318	1964	336	299	7	14	894	111
NOx Emissions (g)	0	1	1	1	2	15	4	4	0	0	11	2

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	16.9
Delay / Veh (s)	27.5
St Del/Veh (s)	24.2
Stop/Veh	0.71
Avg Speed (mph)	12
Fuel Used (gal)	129.2
HC Emissions (g)	12
CO Emissions (g)	4297
NOx Emissions (g)	41

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	All
Total Delay (hr)	0.1	1.8	0.0	0.0	1.5	0.2	0.3	0.0	0.1	0.4	0.1	4.5
Delay / Veh (s)	17.1	9.1	5.5	20.3	9.5	7.3	23.3	17.9	3.3	20.3	16.1	9.9
St Del/Veh (s)	14.5	5.5	3.8	18.0	7.0	5.9	21.4	15.9	2.0	18.6	14.6	7.1
Stop/Veh	0.89	0.37	0.44	0.83	0.43	0.50	0.79	0.67	0.19	0.68	0.60	0.42
Avg Speed (mph)	10	16	16	7	12	12	8	10	18	10	12	13
Fuel Used (gal)	0.4	15.1	0.3	0.1	12.5	1.4	1.7	0.2	1.7	2.7	0.5	36.8
HC Emissions (g)	0	1	0	0	1	0	0	0	0	0	0	3
CO Emissions (g)	4	432	5	2	310	27	25	4	48	53	6	914
NOx Emissions (g)	0	4	0	0	4	0	0	0	1	1	0	10

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.2	0.0	0.0	0.4	0.0	0.6
Delay / Veh (s)	0.7	0.4	7.6	1.6	6.6	1.2
St Del/Veh (s)	0.0	0.0	5.6	0.3	6.5	0.2
Stop/Veh	0.00	0.00	0.50	0.00	1.00	0.02
Avg Speed (mph)	37	30	13	28	12	34
Fuel Used (gal)	33.8	0.1	0.1	39.1	0.4	73.5
HC Emissions (g)	4	0	0	6	0	10
CO Emissions (g)	1313	3	6	3424	4	4750
NOx Emissions (g)	16	0	0	20	0	36

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.3	1.9	3.2
Delay / Veh (s)	8.2	9.2	8.8
St Del/Veh (s)	3.9	4.3	4.1
Stop/Veh	0.35	0.36	0.35
Avg Speed (mph)	24	19	21
Fuel Used (gal)	27.0	21.1	48.1
HC Emissions (g)	4	2	6
CO Emissions (g)	1537	710	2247
NOx Emissions (g)	12	8	20

Total Network Performance

Total Delay (hr)	131.3
Delay / Veh (s)	81.6
St Del/Veh (s)	66.8
Stop/Veh	1.39
Avg Speed (mph)	18
Fuel Used (gal)	1749.4
HC Emissions (g)	197
CO Emissions (g)	76062
NOx Emissions (g)	692

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.2	0.1	36
	11	0.5	4.0	0.0	30
Parkside Ave	12	18.6	23.0	0.0	7
	10	2.2	6.5	0.0	24
Berwyn Ave	15	0.4	16.3	0.2	46
	8	0.3	14.8	0.2	39
Sutherland Rd	9	0.6	13.8	0.1	39
N Olden Ave	27	30.8	54.8	0.3	19
Ewing High Entrance	6	2.0	13.1	0.1	25
Ewing High Exit	5	0.5	15.0	0.1	32
Farrell Ave	30	9.6	16.0	0.1	13
NJDOT Driveway	34	1.7	8.2	0.1	33
	4	1.7	15.1	0.1	35
Lower Ferry Rd	24	36.5	43.1	0.1	8
	3	3.5	18.8	0.2	32
	22	0.1	3.9	0.0	38
	2	1.6	19.3	0.2	36
Scotch Rd	20	14.1	19.6	0.1	12
	1	6.0	24.8	0.2	30
Shopping Center	37	9.2	17.6	0.1	19
	36	5.6	18.1	0.1	27
Total		145.7	372.8	2.5	24

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	8.2	21.1	0.1	23
	1	1.5	9.9	0.1	34
Sylvia St	20	10.6	29.3	0.2	26
	2	1.9	7.9	0.1	30
	22	0.4	18.1	0.2	39
	3	0.1	3.9	0.0	39
Lower Ferry Rd	24	52.7	66.1	0.2	9
	4	3.6	10.8	0.1	25
NJDOT Driveway	34	0.7	12.3	0.1	43
	30	9.1	15.5	0.1	17
Ewing High Exit	5	1.3	7.9	0.1	26
Ewing High Entrance	6	0.5	15.2	0.1	32
Lexington Ave	27	29.7	38.2	0.1	9
Sutherland Rd	9	3.2	27.3	0.3	38
	8	0.5	13.8	0.1	39
Berwyn Ave	15	0.6	14.1	0.2	41
	10	1.7	20.4	0.2	37
Parkside Ave	12	19.5	23.2	0.0	7
	11	2.7	7.4	0.0	21
	41	0.1	3.6	0.0	34
Total		148.4	365.9	2.4	24

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	1.0	40.6	0.3	2.2	44.1
Delay / Veh (s)	689.7	1318.0	1.7	9.9	100.0
St Del/Veh (s)	689.6	1321.5	0.6	7.2	98.4
Stop/Veh	1.00	0.99	0.04	0.26	0.22
Avg Speed (mph)	5	1	23	11	9
Fuel Used (gal)	2.2	93.6	20.7	12.1	128.6

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.4	0.3	1.0	0.2	1.8
Delay / Veh (s)	16.8	1.4	4.6	3.8	3.8
St Del/Veh (s)	14.5	0.5	1.6	1.9	1.8
Stop/Veh	0.77	0.00	0.00	0.01	0.04
Avg Speed (mph)	11	28	20	18	21
Fuel Used (gal)	2.5	17.9	29.2	6.3	55.9

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.2	0.1	0.0	0.4
Delay / Veh (s)	6.0	4.1	5.0	3.1	0.7	0.2	1.7
St Del/Veh (s)	4.8	4.1	1.4	0.2	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.50	0.00	0.00	0.00	0.06
Avg Speed (mph)	8	8	29	34	33	21	32
Fuel Used (gal)	0.3	0.1	0.5	31.7	6.9	0.3	39.7

11: Saratoga Ave & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	1.0	1.1
Delay / Veh (s)	0.2	5.0	2.8
St Del/Veh (s)	0.0	2.0	1.1
Stop/Veh	0.00	0.15	0.08
Avg Speed (mph)	28	21	22
Fuel Used (gal)	6.8	24.6	31.4

12: Parkway Ave & Parkside Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	1.1	0.4	0.3	0.8	0.0	1.4	1.5	0.2	0.1	2.5	0.2
Delay / Veh (s)	24.4	22.8	9.0	25.7	18.5	11.3	28.8	15.9	12.1	30.1	24.1	19.1
St Del/Veh (s)	21.9	17.9	6.9	23.9	15.0	10.1	25.0	11.8	9.6	26.9	18.9	16.1
Stop/Veh	0.80	0.66	0.32	0.83	0.59	0.73	0.95	0.50	0.55	0.88	0.70	0.81
Avg Speed (mph)	4	5	9	8	10	12	10	13	14	11	11	12
Fuel Used (gal)	2.1	4.1	1.6	1.4	4.1	0.2	8.6	13.4	1.7	0.5	19.8	1.8

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	8.9
Delay / Veh (s)	20.3
St Del/Veh (s)	16.4
Stop/Veh	0.64
Avg Speed (mph)	10
Fuel Used (gal)	59.3

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBR	WBL	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Delay / Veh (s)	9.0	4.4	7.2	5.0	4.5	1.1	0.5	3.1	0.9	0.3	1.2
St Del/Veh (s)	7.7	4.2	5.7	4.8	3.5	0.1	0.2	1.8	0.2	0.1	0.4
Stop/Veh	1.00	1.00	1.00	1.00	0.50	0.00	0.00	0.25	0.00	0.00	0.04
Avg Speed (mph)	14	17	17	18	25	37	31	31	38	33	36
Fuel Used (gal)	0.3	0.3	0.2	0.3	0.1	12.8	0.2	0.3	25.6	0.2	40.1

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.4	0.8	0.0	1.0	0.2	0.0	0.0	1.6	0.1	0.1	4.1
Delay / Veh (s)	11.2	8.1	12.9	11.6	3.6	59.9	44.6	34.0	23.4	2.5	11.8
St Del/Veh (s)	6.9	3.5	10.6	6.5	1.2	57.6	44.4	30.7	19.1	0.7	7.9
Stop/Veh	0.71	0.29	0.56	0.38	0.04	1.00	1.00	0.85	0.67	0.01	0.38
Avg Speed (mph)	23	28	11	13	18	4	5	16	18	31	21
Fuel Used (gal)	6.1	19.1	0.2	5.9	0.9	0.1	0.1	12.7	0.8	7.3	53.4

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.0	0.1	0.4	0.8	0.1	0.7	1.6	0.2	0.4	0.8	0.3
Delay / Veh (s)	15.6	8.3	7.9	11.3	7.4	5.6	39.5	30.1	9.1	38.2	31.2	33.9
St Del/Veh (s)	12.6	5.3	6.4	8.4	3.8	4.2	37.2	26.8	8.3	35.8	28.2	32.6
Stop/Veh	0.74	0.24	0.52	0.64	0.23	0.38	0.89	0.77	0.74	1.03	0.85	0.89
Avg Speed (mph)	17	23	22	13	17	16	9	11	19	7	8	7
Fuel Used (gal)	1.0	15.6	1.6	2.5	7.7	1.7	4.5	12.6	4.8	2.1	5.2	2.0

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	6.6
Delay / Veh (s)	14.6
St Del/Veh (s)	11.8
Stop/Veh	0.47
Avg Speed (mph)	15
Fuel Used (gal)	61.3

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.1	0.4	0.2	0.4	0.6	2.0	1.7	1.8	0.2	0.3	3.1	0.1
Delay / Veh (s)	46.0	41.4	40.7	47.2	39.7	17.6	22.3	17.1	24.2	29.1	29.4	12.3
St Del/Veh (s)	44.2	38.8	40.0	45.1	34.8	15.3	19.8	13.8	21.6	24.0	22.3	7.7
Stop/Veh	1.00	0.91	0.90	0.94	0.87	0.58	0.65	0.43	0.83	0.81	0.65	0.47
Avg Speed (mph)	6	6	6	12	13	17	9	10	8	18	17	25
Fuel Used (gal)	0.6	2.0	1.2	3.0	4.3	26.8	9.4	10.5	0.8	3.8	31.6	1.0

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	10.9
Delay / Veh (s)	23.5
St Del/Veh (s)	19.7
Stop/Veh	0.61
Avg Speed (mph)	14
Fuel Used (gal)	95.1

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	2.1	0.0	0.3	4.4	0.5	0.2	0.0	0.0	0.5	0.1	0.1
Delay / Veh (s)	37.5	13.7	9.9	31.8	21.0	18.3	21.7	17.5	2.4	21.4	18.5	13.0
St Del/Veh (s)	34.4	8.8	7.7	27.0	15.0	14.5	20.0	15.6	1.1	19.6	16.9	12.6
Stop/Veh	1.10	0.45	0.54	1.15	0.60	0.66	0.76	0.60	0.19	0.72	0.67	0.71
Avg Speed (mph)	5	13	14	5	7	7	9	10	19	10	11	12
Fuel Used (gal)	0.4	15.1	0.3	1.3	25.6	3.4	1.3	0.2	0.8	3.6	0.7	1.2

30: Parkway Ave & Farrell Ave Performance by movement

Movement	All
Total Delay (hr)	8.5
Delay / Veh (s)	18.1
St Del/Veh (s)	13.2
Stop/Veh	0.57
Avg Speed (mph)	9
Fuel Used (gal)	53.8

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.3	0.0	0.3	0.6	0.0	1.3
Delay / Veh (s)	2.4	1.7	9.4	3.2	6.4	3.4
St Del/Veh (s)	0.7	1.1	5.4	0.1	6.3	0.8
Stop/Veh	0.00	0.04	0.55	0.00	1.00	0.05
Avg Speed (mph)	34	28	14	24	13	26
Fuel Used (gal)	14.6	1.4	4.5	37.1	0.0	57.6

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.0	1.0	2.0
Delay / Veh (s)	7.3	8.7	8.0
St Del/Veh (s)	3.7	4.4	4.0
Stop/Veh	0.32	0.38	0.35
Avg Speed (mph)	25	19	22
Fuel Used (gal)	20.1	10.7	30.8

43: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.2	0.2
Delay / Veh (s)	0.3	1.1	0.8
St Del/Veh (s)	0.0	0.5	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	34	37	36
Fuel Used (gal)	5.4	13.3	18.7

Total Network Performance

Total Delay (hr)	94.6
Delay / Veh (s)	76.0
St Del/Veh (s)	62.1
Stop/Veh	1.19
Avg Speed (mph)	21
Fuel Used (gal)	1255.2

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.2	7.3	0.1	37
Parkside Ave	12	18.5	26.2	0.1	10
	10	2.2	6.5	0.0	24
Berwyn Ave	15	0.9	18.1	0.2	41
	8	0.6	15.1	0.2	38
Vannest Ave	43	1.1	9.2	0.1	41
Sutherland Rd	9	0.7	5.0	0.0	36
N Olden Ave	27	29.4	52.8	0.3	20
Ewing High Entrance	6	6.1	15.6	0.1	25
Saratoga Ave	11	5.0	16.6	0.1	20
Ewing High Exit	5	9.9	13.9	0.0	12
Farrell Ave	30	20.9	27.9	0.1	8
NJDOT Driveway	34	3.4	10.4	0.1	26
	4	1.2	14.5	0.1	36
Lower Ferry Rd	24	7.4	13.3	0.1	21
	3	2.4	17.7	0.2	34
	22	0.1	3.9	0.0	38
	2	1.3	19.0	0.2	37
Scotch Rd	20	11.6	17.0	0.1	15
	1	3.9	22.8	0.2	33
Shopping Center	37	8.7	17.1	0.1	20
	36	2.6	15.1	0.1	33
Total		138.0	365.0	2.5	25

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	7.3	20.1	0.1	25
	1	2.0	10.3	0.1	32
Sylvia St	20	8.1	26.8	0.2	28
	2	1.6	7.6	0.1	31
	22	1.0	18.6	0.2	38
	3	0.2	4.0	0.0	37
Lower Ferry Rd	24	8.3	19.8	0.2	31
	4	2.4	9.5	0.1	29
NJDOT Driveway	34	2.4	13.3	0.1	41
	30	13.7	20.0	0.1	15
Ewing High Exit	5	1.4	8.3	0.1	26
Saratoga Ave	11	0.2	4.7	0.0	28
Ewing High Entrance	6	1.4	11.9	0.1	30
Lexington Ave	27	17.1	25.6	0.1	13
Sutherland Rd	9	3.6	30.4	0.3	34
Vannest Ave	43	0.2	4.7	0.0	37
	8	0.5	9.3	0.1	38
Berwyn Ave	15	1.1	14.6	0.2	39
	10	2.8	21.5	0.2	35
Parkside Ave	12	22.8	26.3	0.0	6
	41	2.7	10.8	0.1	26
Total		100.7	318.2	2.4	28

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.5	0.2	0.8
Delay / Veh (s)	6.7	7.8	2.4	1.2	2.2
St Del/Veh (s)	6.6	8.4	1.3	0.3	1.2
Stop/Veh	1.00	0.98	0.09	0.03	0.11
Avg Speed (mph)	6	5	20	24	20
Fuel Used (gal)	0.2	0.4	20.6	4.7	25.9
HC Emissions (g)	0	0	2	0	2
CO Emissions (g)	2	5	787	61	855
NOx Emissions (g)	0	0	9	1	10

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.4	0.0	0.5
Delay / Veh (s)	0.6	1.4	1.4	1.1
St Del/Veh (s)	0.0	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (mph)	28	22	20	24
Fuel Used (gal)	15.6	44.7	0.2	60.6
HC Emissions (g)	1	5	0	7
CO Emissions (g)	302	1931	6	2238
NOx Emissions (g)	4	21	0	25

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.5	0.1	0.0	0.6
Delay / Veh (s)	5.7	3.8	6.1	3.5	0.7	0.2	2.4
St Del/Veh (s)	4.5	3.8	0.8	0.1	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.25	0.00	0.00	0.00	0.06
Avg Speed (mph)	8	9	29	33	34	21	32
Fuel Used (gal)	0.2	0.1	0.5	52.6	5.0	0.2	58.6
HC Emissions (g)	0	0	0	7	1	0	7
CO Emissions (g)	3	1	23	2851	147	2	3027
NOx Emissions (g)	0	0	0	26	2	0	28

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.5	1.2	0.3	0.6	0.8	0.0	0.5	2.2	0.4	0.0	2.6	0.2
Delay / Veh (s)	26.0	24.0	8.6	24.6	16.5	11.5	23.5	18.2	14.1	35.5	24.0	19.1
St Del/Veh (s)	23.3	19.0	6.4	22.7	13.2	10.8	19.4	13.0	11.0	31.8	18.7	16.1
Stop/Veh	0.84	0.68	0.31	0.82	0.58	0.71	0.95	0.56	0.61	1.00	0.70	0.74
Avg Speed (mph)	4	5	9	5	7	8	11	12	13	10	11	12
Fuel Used (gal)	1.7	4.4	1.2	2.1	3.8	0.1	3.6	18.3	3.5	0.2	20.9	1.7
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	2	0
CO Emissions (g)	17	83	14	23	75	1	129	523	101	7	581	67
NOx Emissions (g)	0	1	0	0	1	0	1	5	1	0	6	1

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.2
Delay / Veh (s)	20.0
St Del/Veh (s)	15.8
Stop/Veh	0.64
Avg Speed (mph)	10
Fuel Used (gal)	61.5
HC Emissions (g)	5
CO Emissions (g)	1622
NOx Emissions (g)	16

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Delay / Veh (s)	9.4	10.7	4.7		8.4	3.9	2.7	1.2	0.4	5.1	1.0	0.3
St Del/Veh (s)	8.3	8.8	4.5		6.2	3.6	0.6	0.0	0.0	3.2	0.3	0.2
Stop/Veh	1.00	1.00	1.00		1.00	1.00	0.33	0.00	0.00	0.25	0.00	0.00
Avg Speed (mph)	13	13	17	17	17	19	29	36	31	29	38	32
Fuel Used (gal)	0.1	0.1	0.3	0.0	0.1	0.2	0.2	14.4	0.3	0.2	21.6	0.2
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	3	0
CO Emissions (g)	1	1	3	0	1	2	3	309	3	6	1060	10
NOx Emissions (g)	0	0	0	0	0	0	0	6	0	0	11	0

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	0.3
Delay / Veh (s)	1.3
St Del/Veh (s)	0.3
Stop/Veh	0.04
Avg Speed (mph)	36
Fuel Used (gal)	37.8
HC Emissions (g)	5
CO Emissions (g)	1398
NOx Emissions (g)	18

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	1.0	1.1	0.2	5.9	1.1	0.1	0.2	0.3	3.1	0.0	0.2	13.2
Delay / Veh (s)	19.4	10.7	32.2	35.0	20.3	31.7	37.9	35.6	49.2	34.7	3.4	25.2
St Del/Veh (s)	16.3	6.3	25.5	24.6	13.9	30.5	35.7	35.1	44.2	29.2	1.1	19.1
Stop/Veh	0.91	0.38	1.04	0.81	0.54	0.80	0.88	0.90	1.01	0.80	0.03	0.65
Avg Speed (mph)	18	25	6	5	6	6	5	6	12	14	31	13
Fuel Used (gal)	9.9	20.8	1.0	23.5	4.7	0.4	0.7	1.4	19.9	0.4	10.8	93.5
HC Emissions (g)	1	2	0	1	0	0	0	0	2	0	2	8
CO Emissions (g)	239	439	17	325	58	4	9	33	628	9	527	2288
NOx Emissions (g)	3	8	0	4	1	0	0	0	6	0	5	28

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	4.4	66.7	12.2	7.2	21.7	3.4	4.7	4.9	2.9	18.8	46.4	16.3
Delay / Veh (s)	344.4	425.2	367.4	162.2	129.8	116.5	85.4	56.6	41.9	1093.8	1092.9	1067.0
St Del/Veh (s)	326.3	404.5	351.9	155.2	119.9	110.8	80.3	50.8	38.8	1084.5	1082.4	1058.7
Stop/Veh	2.28	1.49	1.48	1.54	0.75	0.75	1.20	0.93	0.86	2.94	2.80	2.64
Avg Speed (mph)	4	6	6	3	7	7	6	9	12	1	1	1
Fuel Used (gal)	11.9	172.8	32.2	19.7	62.3	9.8	20.3	25.8	17.7	45.2	111.9	39.3
HC Emissions (g)	0	4	2	0	2	1	1	1	1	2	4	2
CO Emissions (g)	70	1414	381	143	682	133	314	383	329	444	1039	407
NOx Emissions (g)	0	9	3	1	6	1	3	5	3	2	5	2

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	209.8
Delay / Veh (s)	287.4
St Del/Veh (s)	276.6
Stop/Veh	1.29
Avg Speed (mph)	5
Fuel Used (gal)	569.0
HC Emissions (g)	20
CO Emissions (g)	5740
NOx Emissions (g)	41

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.3	0.7	0.4	0.6	0.8	4.1	8.3	7.7	0.4	0.2	11.3	0.7
Delay / Veh (s)	42.4	43.5	41.4	45.2	43.2	28.1	59.4	70.5	65.5	87.6	103.3	73.7
St Del/Veh (s)	39.9	40.2	39.9	42.8	38.0	22.6	55.3	63.8	61.2	74.3	86.2	60.8
Stop/Veh	0.91	0.91	0.89	0.89	0.86	0.74	0.85	0.91	0.91	1.67	1.66	1.39
Avg Speed (mph)	6	6	6	12	12	14	5	4	4	8	7	9
Fuel Used (gal)	1.4	3.5	2.3	4.2	6.1	37.5	28.7	25.3	1.3	1.1	51.0	3.7
HC Emissions (g)	0	0	0	0	1	3	1	1	0	0	4	0
CO Emissions (g)	22	60	63	166	243	1415	342	282	9	16	976	93
NOx Emissions (g)	0	1	1	1	2	10	3	3	0	0	12	1

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	35.6
Delay / Veh (s)	60.5
St Del/Veh (s)	53.0
Stop/Veh	1.00
Avg Speed (mph)	8
Fuel Used (gal)	165.9
HC Emissions (g)	11
CO Emissions (g)	3686
NOx Emissions (g)	34

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	All
Total Delay (hr)	0.1	1.9	0.0	0.0	2.4	0.3	0.3	0.1	0.1	0.4	0.1	5.6
Delay / Veh (s)	30.2	10.8	8.2	18.1	15.3	11.4	22.6	22.9	3.3	20.9	21.1	13.2
St Del/Veh (s)	26.9	6.1	5.7	14.4	11.0	8.9	20.9	20.8	1.9	19.1	19.4	9.2
Stop/Veh	1.07	0.39	0.50	1.20	0.51	0.53	0.74	0.78	0.21	0.71	0.83	0.48
Avg Speed (mph)	7	15	14	7	9	10	9	9	18	10	10	12
Fuel Used (gal)	0.5	14.6	0.3	0.1	14.4	1.8	1.7	0.4	1.8	2.6	0.5	38.6
HC Emissions (g)	0	1	0	0	1	0	0	0	0	0	0	2
CO Emissions (g)	4	312	5	1	223	31	34	7	55	44	3	720
NOx Emissions (g)	0	4	0	0	3	0	0	0	1	0	0	9

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.3	0.0	0.0	0.8	0.1	1.1
Delay / Veh (s)	1.1	0.2	9.4	3.5	8.6	2.3
St Del/Veh (s)	0.0	0.0	6.4	1.3	8.5	0.8
Stop/Veh	0.00	0.00	0.67	0.01	1.00	0.02
Avg Speed (mph)	36	31	14	26	11	31
Fuel Used (gal)	26.5	0.0	0.2	37.2	0.4	64.3
HC Emissions (g)	3	0	0	5	0	8
CO Emissions (g)	850	1	6	2537	4	3398
NOx Emissions (g)	12	0	0	18	0	30

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.3	2.1	3.4
Delay / Veh (s)	8.5	10.5	9.6
St Del/Veh (s)	4.0	4.9	4.5
Stop/Veh	0.36	0.40	0.38
Avg Speed (mph)	23	18	20
Fuel Used (gal)	25.6	18.7	44.2
HC Emissions (g)	3	1	5
CO Emissions (g)	1315	301	1616
NOx Emissions (g)	10	5	16

39: Parkway Ave & Saratoga Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.2
Delay / Veh (s)	0.3	0.5	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	28	28	28
Fuel Used (gal)	8.2	17.5	25.7
HC Emissions (g)	1	2	2
CO Emissions (g)	179	304	483
NOx Emissions (g)	2	4	7

44: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.1	0.1
Delay / Veh (s)	0.4	0.5	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	34	37	36
Fuel Used (gal)	6.5	9.6	16.1
HC Emissions (g)	1	1	2
CO Emissions (g)	281	189	470
NOx Emissions (g)	3	4	8

Total Network Performance

Total Delay (hr)	295.9
Delay / Veh (s)	191.9
St Del/Veh (s)	169.8
Stop/Veh	1.81
Avg Speed (mph)	15
Fuel Used (gal)	2025.6
HC Emissions (g)	179
CO Emissions (g)	66368
NOx Emissions (g)	616

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.2	0.1	37
	11	0.4	3.9	0.0	31
Parkside Ave	12	16.5	20.9	0.0	8
	10	2.2	6.5	0.0	24
Berwyn Ave	15	1.0	16.9	0.2	45
	8	0.6	15.1	0.2	38
Vannest Ave	44	0.5	9.3	0.1	38
Sutherland Rd	9	0.7	5.1	0.0	34
N Olden Ave	27	103.2	126.9	0.3	8
Ewing High Entrance	6	2.3	13.4	0.1	24
Saratoga Ave	39	0.5	10.8	0.1	31
Ewing High Exit	5	1.2	5.8	0.0	24
Farrell Ave	30	15.2	21.5	0.1	10
NJDOT Driveway	34	3.6	10.0	0.1	30
	4	11.9	25.3	0.1	21
Lower Ferry Rd	24	129.8	136.3	0.1	7
	3	4.1	19.4	0.2	31
	22	0.4	4.2	0.0	36
	2	23.6	41.3	0.2	17
Scotch Rd	20	35.0	40.5	0.1	6
	1	6.0	24.9	0.2	30
Shopping Center	37	10.5	18.9	0.1	18
	36	3.2	15.7	0.1	31
Total		372.6	599.9	2.5	18

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	8.5	21.3	0.1	23
	1	2.2	10.6	0.1	32
Sylvia St	20	10.7	29.5	0.2	25
	2	1.9	8.0	0.1	29
	22	1.4	19.2	0.2	37
	3	1.4	5.2	0.0	29
Lower Ferry Rd	24	425.2	439.3	0.2	6
	4	4.1	11.3	0.1	24
NJDOT Driveway	34	1.1	12.7	0.1	41
	30	10.9	17.4	0.1	16
Ewing High Exit	5	1.4	8.0	0.1	26
Saratoga Ave	39	0.3	5.3	0.0	27
Ewing High Entrance	6	0.6	10.9	0.1	31
Lexington Ave	27	70.5	78.4	0.1	6
Sutherland Rd	9	4.0	28.5	0.3	37
Vannest Ave	44	0.3	4.9	0.0	36
	8	0.6	9.4	0.1	38
Berwyn Ave	15	1.2	14.7	0.2	39
	10	3.0	21.8	0.2	34
Parkside Ave	12	24.0	27.7	0.0	6
	11	2.4	7.2	0.0	22
	41	0.1	3.6	0.0	33
Total		575.8	794.7	2.4	20

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	2.0	39.3	0.3	2.1	43.7
Delay / Veh (s)	1424.1	1274.0	1.8	9.4	99.3
St Del/Veh (s)	1424.0	1277.5	0.7	6.7	97.7
Stop/Veh	1.20	0.98	0.04	0.26	0.22
Avg Speed (mph)	4	1	22	11	9
Fuel Used (gal)	4.6	90.1	20.8	11.8	127.2

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.4	0.2	1.0	0.2	1.9
Delay / Veh (s)	19.3	1.3	4.8	3.4	4.0
St Del/Veh (s)	17.0	0.5	1.6	1.4	1.9
Stop/Veh	0.83	0.00	0.00	0.02	0.04
Avg Speed (mph)	10	27	20	18	21
Fuel Used (gal)	2.5	17.8	29.2	6.5	56.0

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.2	0.1	0.0	0.4
Delay / Veh (s)	6.1	4.2	5.1	2.7	0.8	0.1	1.6
St Del/Veh (s)	4.9	4.2	2.0	0.2	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.50	0.00	0.00	0.00	0.06
Avg Speed (mph)	8	8	28	34	33	21	32
Fuel Used (gal)	0.2	0.1	0.4	30.2	7.1	0.3	38.3

11: Saratoga Ave & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	1.1	1.1
Delay / Veh (s)	0.2	5.2	2.9
St Del/Veh (s)	0.0	2.1	1.1
Stop/Veh	0.00	0.15	0.08
Avg Speed (mph)	28	21	22
Fuel Used (gal)	6.7	24.7	31.5

12: Parkway Ave & Parkside Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	1.1	0.3	0.4	0.8	0.0	1.5	1.5	0.2	0.1	2.9	0.2
Delay / Veh (s)	26.4	22.9	8.4	24.7	17.5	8.2	31.0	16.8	11.5	28.1	27.0	22.7
St Del/Veh (s)	23.8	18.1	6.3	23.0	14.0	7.2	27.1	12.5	9.3	24.6	21.2	19.5
Stop/Veh	0.85	0.67	0.28	0.78	0.57	0.60	0.99	0.53	0.53	0.86	0.75	0.81
Avg Speed (mph)	4	5	9	8	10	14	9	13	14	11	11	11
Fuel Used (gal)	2.2	3.9	1.5	1.5	4.1	0.2	9.0	13.4	1.9	0.4	21.3	1.9

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.5
Delay / Veh (s)	21.5
St Del/Veh (s)	17.4
Stop/Veh	0.66
Avg Speed (mph)	10
Fuel Used (gal)	61.3

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBR	WBL	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Delay / Veh (s)	8.8	4.6	11.5	5.5	2.9	1.0	0.8	3.6	0.9	0.8	1.2
St Del/Veh (s)	7.6	4.4	10.2	5.2	1.8	0.1	0.4	1.9	0.1	0.3	0.4
Stop/Veh	1.00	1.00	1.00	1.14	0.00	0.00	0.00	0.25	0.00	0.00	0.04
Avg Speed (mph)	14	16	15	18	28	37	31	30	38	32	36
Fuel Used (gal)	0.3	0.2	0.2	0.3	0.1	12.6	0.2	0.2	26.0	0.2	40.3

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.4	0.8	0.0	0.6	0.1	0.0	0.0	1.5	0.1	0.1	3.6
Delay / Veh (s)	10.1	7.8	7.9	7.7	2.6	42.2	49.0	34.0	24.4	2.5	10.4
St Del/Veh (s)	6.1	3.2	6.1	4.8	0.1	40.3	48.9	30.8	19.7	0.7	7.0
Stop/Veh	0.62	0.28	0.43	0.32	0.00	1.00	1.00	0.88	0.70	0.01	0.34
Avg Speed (mph)	23	28	16	18	21	5	4	16	19	32	23
Fuel Used (gal)	6.1	19.9	0.1	7.4	1.0	0.1	0.1	11.9	0.7	6.7	53.9

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.0	0.0	0.3	0.6	0.1	0.7	1.4	0.2	0.4	0.9	0.3
Delay / Veh (s)	11.5	7.4	2.9	9.7	5.8	2.4	40.2	29.2	8.1	40.0	33.7	31.8
St Del/Veh (s)	8.8	4.8	1.7	7.6	3.5	1.9	38.2	26.0	7.9	37.6	30.5	30.5
Stop/Veh	0.73	0.23	0.45	0.59	0.21	0.31	0.92	0.77	0.73	1.00	0.87	0.87
Avg Speed (mph)	20	24	26	14	20	20	9	11	20	7	8	8
Fuel Used (gal)	0.9	16.1	1.5	2.6	8.8	1.6	4.4	11.3	4.8	1.9	5.4	2.1

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	6.0
Delay / Veh (s)	13.3
St Del/Veh (s)	11.0
Stop/Veh	0.45
Avg Speed (mph)	15
Fuel Used (gal)	61.3

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.1	0.4	0.3	0.4	0.4	2.2	1.7	1.4	0.1	0.3	3.1	0.1
Delay / Veh (s)	37.1	39.9	40.4	47.5	36.6	19.8	21.6	14.4	15.2	31.6	28.3	13.9
St Del/Veh (s)	34.7	37.1	39.5	45.6	31.8	16.9	19.7	12.1	13.7	25.5	21.2	9.0
Stop/Veh	0.89	0.87	0.91	0.94	0.86	0.62	0.65	0.40	0.75	0.92	0.65	0.47
Avg Speed (mph)	7	7	6	11	13	17	9	11	11	17	18	24
Fuel Used (gal)	0.5	2.2	1.3	2.8	3.4	27.5	9.5	9.6	0.6	3.6	32.1	1.1

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	10.5
Delay / Veh (s)	23.0
St Del/Veh (s)	19.3
Stop/Veh	0.62
Avg Speed (mph)	15
Fuel Used (gal)	94.3

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	2.0	0.0	0.4	4.5	0.5	0.2	0.0	0.0	0.6	0.1	0.1
Delay / Veh (s)	39.2	13.4	10.9	32.2	21.2	17.3	20.1	21.2	3.2	23.2	18.6	13.1
St Del/Veh (s)	36.0	8.5	8.4	27.5	15.2	13.5	18.5	19.4	2.0	21.2	16.6	12.6
Stop/Veh	1.08	0.44	0.57	1.12	0.61	0.60	0.69	0.71	0.22	0.75	0.67	0.69
Avg Speed (mph)	5	13	12	5	7	8	9	9	18	9	11	12
Fuel Used (gal)	0.4	14.6	0.3	1.6	25.7	3.3	1.2	0.3	0.7	4.2	0.8	1.3

30: Parkway Ave & Farrell Ave Performance by movement

Movement	All
Total Delay (hr)	8.6
Delay / Veh (s)	18.3
St Del/Veh (s)	13.4
Stop/Veh	0.57
Avg Speed (mph)	9
Fuel Used (gal)	54.5

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.4	0.0	0.3	0.6	0.0	1.3
Delay / Veh (s)	2.6	1.2	8.8	3.2	5.1	3.4
St Del/Veh (s)	0.8	0.7	4.8	0.1	5.0	0.8
Stop/Veh	0.00	0.04	0.58	0.00	1.00	0.06
Avg Speed (mph)	33	28	14	24	14	26
Fuel Used (gal)	14.6	1.4	4.5	37.2	0.1	57.7

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.1	1.0	2.0
Delay / Veh (s)	7.9	8.2	8.0
St Del/Veh (s)	3.9	4.2	4.0
Stop/Veh	0.34	0.36	0.35
Avg Speed (mph)	24	20	22
Fuel Used (gal)	20.4	10.1	30.5

43: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.2	0.2
Delay / Veh (s)	0.3	1.1	0.8
St Del/Veh (s)	0.1	0.5	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	34	37	36
Fuel Used (gal)	5.2	13.4	18.6

Total Network Performance

Total Delay (hr)	93.3
Delay / Veh (s)	75.5
St Del/Veh (s)	62.0
Stop/Veh	1.19
Avg Speed (mph)	21
Fuel Used (gal)	1249.7

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.4	0.1	37
Parkside Ave	12	17.5	25.2	0.1	11
	10	2.2	6.6	0.0	24
Berwyn Ave	15	0.9	18.2	0.2	41
	8	0.7	15.1	0.2	38
Vannest Ave	43	1.1	9.2	0.1	41
Sutherland Rd	9	0.8	5.0	0.0	35
N Olden Ave	27	28.4	52.0	0.3	20
Ewing High Entrance	6	6.5	15.8	0.1	25
Saratoga Ave	11	5.2	16.8	0.1	20
Ewing High Exit	5	9.4	13.4	0.0	12
Farrell Ave	30	20.9	28.0	0.1	8
NJDOT Driveway	34	3.4	10.4	0.1	26
	4	1.0	14.3	0.1	36
Lower Ferry Rd	24	5.8	11.7	0.1	24
	3	1.8	17.2	0.2	35
	22	0.1	3.9	0.0	38
	2	0.8	17.2	0.2	38
Scotch Rd	20	7.7	14.2	0.1	21
	1	2.8	21.6	0.2	35
Shopping Center	37	8.2	16.5	0.1	20
	36	2.4	14.9	0.1	33
Total		127.8	354.6	2.5	26

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	7.9	20.6	0.1	24
	1	2.1	10.5	0.1	32
Sylvia St	20	7.8	26.5	0.2	28
	2	1.6	9.0	0.1	32
	22	0.9	17.2	0.2	38
	3	0.2	4.0	0.0	37
Lower Ferry Rd	24	7.4	19.0	0.2	32
	4	2.1	9.4	0.1	29
NJDOT Driveway	34	2.6	13.6	0.1	41
	30	13.4	19.7	0.1	15
Ewing High Exit	5	1.4	8.3	0.1	26
Saratoga Ave	11	0.2	4.7	0.0	27
Ewing High Entrance	6	1.3	11.9	0.1	30
Lexington Ave	27	14.4	23.2	0.1	14
Sutherland Rd	9	3.2	30.0	0.3	35
Vannest Ave	43	0.2	4.7	0.0	37
	8	0.5	9.3	0.1	38
Berwyn Ave	15	1.0	14.5	0.2	40
	10	2.8	21.5	0.2	35
Parkside Ave	12	22.9	26.5	0.0	6
	41	2.7	10.8	0.1	26
Total		96.7	315.0	2.4	28

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.5	0.2	0.8
Delay / Veh (s)	6.6	8.0	2.7	1.0	2.2
St Del/Veh (s)	6.5	8.6	1.4	0.2	1.3
Stop/Veh	1.00	1.00	0.08	0.03	0.11
Avg Speed (mph)	6	5	20	24	20
Fuel Used (gal)	0.2	0.4	21.9	4.7	27.2
HC Emissions (g)	0	0	3	0	3
CO Emissions (g)	3	5	872	63	943
NOx Emissions (g)	0	0	10	1	11

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.3	0.0	0.5
Delay / Veh (s)	0.7	1.3	1.0	1.1
St Del/Veh (s)	0.0	0.1	0.1	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (mph)	28	22	19	24
Fuel Used (gal)	17.9	44.3	0.2	62.4
HC Emissions (g)	2	5	0	7
CO Emissions (g)	386	1938	9	2332
NOx Emissions (g)	5	21	0	26

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.5	0.1	0.0	0.7
Delay / Veh (s)	5.8	3.7	5.6	3.5	0.8	0.2	2.5
St Del/Veh (s)	4.6	3.7	1.4	0.1	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.40	0.00	0.00	0.00	0.06
Avg Speed (mph)	8	9	30	33	33	21	32
Fuel Used (gal)	0.3	0.1	0.6	55.9	4.8	0.3	61.9
HC Emissions (g)	0	0	0	8	0	0	9
CO Emissions (g)	3	1	25	2944	128	3	3104
NOx Emissions (g)	0	0	0	31	2	0	33

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.5	1.3	0.3	0.7	0.9	0.0	0.5	2.2	0.4	0.0	2.8	0.2
Delay / Veh (s)	26.5	23.5	8.6	26.0	18.7	11.9	24.8	18.3	13.9	51.1	24.8	18.4
St Del/Veh (s)	23.6	18.3	6.3	24.0	15.3	11.0	20.5	12.8	10.6	47.0	19.2	15.3
Stop/Veh	0.87	0.68	0.33	0.84	0.63	0.67	0.97	0.57	0.58	1.00	0.72	0.78
Avg Speed (mph)	4	5	9	5	7	8	11	12	13	8	11	12
Fuel Used (gal)	1.9	4.7	1.2	2.2	3.9	0.1	3.5	17.9	3.7	0.2	22.0	1.8
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	2	0
CO Emissions (g)	19	81	17	27	69	1	132	488	115	6	583	63
NOx Emissions (g)	0	1	0	0	1	0	1	5	1	0	6	1

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.7
Delay / Veh (s)	20.7
St Del/Veh (s)	16.2
Stop/Veh	0.66
Avg Speed (mph)	10
Fuel Used (gal)	63.2
HC Emissions (g)	5
CO Emissions (g)	1601
NOx Emissions (g)	16

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Delay / Veh (s)	9.3	8.8	3.6		10.6	4.3	2.9	1.1	0.6	4.6	0.9	1.1
St Del/Veh (s)	8.1	6.9	3.5		8.5	3.9	1.3	0.0	0.0	3.5	0.2	0.7
Stop/Veh	1.00	1.00	1.00		1.00	1.00	0.29	0.00	0.00	0.25	0.00	0.00
Avg Speed (mph)	13	14	17	18	15	19	28	37	31	29	38	31
Fuel Used (gal)	0.0	0.1	0.2	0.0	0.2	0.2	0.2	15.9	0.4	0.2	21.5	0.3
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	3	0
CO Emissions (g)	0	0	2	0	1	2	3	366	4	5	1099	9
NOx Emissions (g)	0	0	0	0	0	0	0	7	0	0	12	0

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	0.3
Delay / Veh (s)	1.2
St Del/Veh (s)	0.3
Stop/Veh	0.03
Avg Speed (mph)	36
Fuel Used (gal)	39.1
HC Emissions (g)	5
CO Emissions (g)	1492
NOx Emissions (g)	19

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.9	1.0	0.1	2.8	0.2	0.1	0.2	0.3	3.1	0.0	0.2	9.1
Delay / Veh (s)	18.0	9.5	19.2	16.0	3.7	41.7	38.9	36.8	49.3	35.9	4.0	17.0
St Del/Veh (s)	15.0	5.5	15.5	10.7	0.2	40.3	36.4	36.2	44.3	30.8	1.5	12.8
Stop/Veh	0.86	0.34	0.77	0.48	0.03	1.00	0.95	0.93	1.02	0.80	0.11	0.48
Avg Speed (mph)	19	26	8	10	18	5	5	5	12	14	30	17
Fuel Used (gal)	9.3	20.6	0.6	18.3	2.2	0.5	0.9	1.4	20.4	0.4	11.2	85.6
HC Emissions (g)	1	2	0	1	0	0	0	0	2	0	1	8
CO Emissions (g)	191	481	13	514	57	4	14	26	665	10	516	2492
NOx Emissions (g)	3	9	0	5	1	0	0	0	6	0	5	29

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	2.0	22.0	3.9	3.0	5.4	0.6	4.0	3.8	2.2	16.1	39.2	13.4
Delay / Veh (s)	131.4	124.2	107.5	63.7	30.2	21.3	76.8	45.8	33.2	839.9	881.9	912.4
St Del/Veh (s)	120.4	110.4	97.7	59.1	23.7	18.4	72.7	40.8	31.2	830.2	871.2	903.3
Stop/Veh	1.57	1.06	1.24	1.24	0.60	0.65	1.08	0.83	0.78	2.99	2.76	2.68
Avg Speed (mph)	8	8	10	4	8	11	6	10	12	1	1	1
Fuel Used (gal)	6.5	74.3	13.6	10.1	27.3	3.6	17.5	22.5	15.8	39.5	95.8	32.7
HC Emissions (g)	0	4	1	1	2	0	1	1	1	1	2	1
CO Emissions (g)	66	1012	220	161	594	75	259	362	338	281	710	312
NOx Emissions (g)	1	11	2	2	7	1	3	5	3	1	3	2

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	115.7
Delay / Veh (s)	151.6
St Del/Veh (s)	143.7
Stop/Veh	1.10
Avg Speed (mph)	6
Fuel Used (gal)	359.2
HC Emissions (g)	14
CO Emissions (g)	4390
NOx Emissions (g)	41

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.2	0.7	0.5	0.6	0.8	4.2	4.8	4.9	0.2	0.2	7.4	0.4
Delay / Veh (s)	39.0	44.4	42.9	47.3	43.0	28.2	32.2	41.7	32.1	63.3	69.0	41.7
St Del/Veh (s)	36.5	40.9	41.4	44.8	37.7	22.4	29.6	36.5	29.2	53.3	55.9	32.3
Stop/Veh	0.90	0.93	0.92	0.93	0.88	0.73	0.74	0.77	0.75	1.33	1.23	0.97
Avg Speed (mph)	7	6	6	11	12	14	6	5	6	11	10	14
Fuel Used (gal)	1.3	3.4	2.5	4.2	5.7	37.6	20.8	19.6	0.9	1.0	41.5	2.8
HC Emissions (g)	0	0	0	0	1	4	1	1	0	0	3	0
CO Emissions (g)	21	64	65	153	236	1464	328	290	8	26	903	85
NOx Emissions (g)	0	1	1	1	2	11	3	4	0	0	11	1

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	24.8
Delay / Veh (s)	41.0
St Del/Veh (s)	35.1
Stop/Veh	0.85
Avg Speed (mph)	10
Fuel Used (gal)	141.3
HC Emissions (g)	11
CO Emissions (g)	3643
NOx Emissions (g)	34

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	All
Total Delay (hr)	0.1	2.3	0.0	0.0	2.4	0.3	0.3	0.1	0.1	0.3	0.1	5.9
Delay / Veh (s)	27.1	11.9	8.0	24.0	15.0	11.4	23.5	21.0	4.2	21.8	17.4	13.5
St Del/Veh (s)	22.9	6.7	5.4	21.4	10.9	9.2	21.6	18.8	2.7	20.1	15.9	9.4
Stop/Veh	1.11	0.43	0.44	0.80	0.50	0.56	0.80	0.80	0.28	0.70	0.60	0.49
Avg Speed (mph)	7	14	14	6	9	10	8	9	17	9	11	11
Fuel Used (gal)	0.6	16.6	0.4	0.1	14.4	1.7	1.6	0.4	1.9	2.3	0.6	40.6
HC Emissions (g)	0	1	0	0	1	0	0	0	0	0	0	3
CO Emissions (g)	6	346	4	1	238	31	37	6	61	44	6	780
NOx Emissions (g)	0	4	0	0	3	0	0	0	1	0	0	10

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.4	0.0	0.0	0.6	0.1	1.1
Delay / Veh (s)	1.5	0.5	10.5	2.9	14.3	2.3
St Del/Veh (s)	0.0	0.0	7.3	0.9	14.2	0.6
Stop/Veh	0.01	0.00	0.50	0.00	1.04	0.02
Avg Speed (mph)	35	30	13	27	8	31
Fuel Used (gal)	28.9	0.1	0.2	38.1	0.5	67.7
HC Emissions (g)	4	0	0	5	0	9
CO Emissions (g)	877	1	7	2747	6	3638
NOx Emissions (g)	13	0	0	20	0	33

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.2	2.4	3.6
Delay / Veh (s)	8.0	11.8	10.2
St Del/Veh (s)	3.7	5.6	4.8
Stop/Veh	0.34	0.45	0.40
Avg Speed (mph)	24	16	20
Fuel Used (gal)	25.1	20.3	45.4
HC Emissions (g)	3	2	5
CO Emissions (g)	1313	335	1648
NOx Emissions (g)	10	6	16

39: Parkway Ave & Saratoga Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.2
Delay / Veh (s)	0.4	0.5	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	27	28	28
Fuel Used (gal)	9.0	17.6	26.6
HC Emissions (g)	1	2	3
CO Emissions (g)	208	308	516
NOx Emissions (g)	3	5	7

44: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.1	0.1
Delay / Veh (s)	0.4	0.5	0.5
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	34	37	36
Fuel Used (gal)	7.2	9.3	16.5
HC Emissions (g)	1	1	2
CO Emissions (g)	304	188	492
NOx Emissions (g)	4	4	8

Total Network Performance

Total Delay (hr)	181.6
Delay / Veh (s)	114.1
St Del/Veh (s)	96.2
Stop/Veh	1.50
Avg Speed (mph)	17
Fuel Used (gal)	1798.6
HC Emissions (g)	178
CO Emissions (g)	64341
NOx Emissions (g)	639

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.2	0.1	36
	11	0.4	4.0	0.0	30
Parkside Ave	12	18.7	23.1	0.0	7
	10	2.2	6.6	0.0	23
Berwyn Ave	15	0.9	16.9	0.2	45
	8	0.6	15.1	0.2	38
Vannest Ave	44	0.5	9.3	0.1	38
Sutherland Rd	9	0.8	5.3	0.0	33
N Olden Ave	27	69.3	93.1	0.3	11
Ewing High Entrance	6	2.3	13.4	0.1	24
Saratoga Ave	39	0.5	10.8	0.1	31
Ewing High Exit	5	1.0	5.7	0.0	25
Farrell Ave	30	15.2	21.5	0.1	10
NJDOT Driveway	34	3.0	9.4	0.1	32
	4	3.6	17.0	0.1	31
Lower Ferry Rd	24	30.2	36.6	0.1	9
	3	3.5	18.8	0.2	32
	22	0.3	4.1	0.0	37
	2	3.8	21.5	0.2	33
Scotch Rd	20	16.0	21.5	0.1	11
	1	5.3	24.3	0.2	31
Shopping Center	37	11.8	20.2	0.1	17
	36	3.4	15.9	0.1	31
Total		193.7	421.2	2.5	22

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	8.0	20.8	0.1	24
	1	2.2	10.5	0.1	32
Sylvia St	20	9.5	28.2	0.2	27
	2	1.8	7.9	0.1	30
	22	1.3	18.9	0.2	37
	3	0.6	4.4	0.0	34
Lower Ferry Rd	24	124.2	137.5	0.2	9
	4	3.2	10.4	0.1	26
NJDOT Driveway	34	1.5	13.0	0.1	40
	30	11.9	18.4	0.1	15
Ewing High Exit	5	1.5	8.1	0.1	25
Saratoga Ave	39	0.3	5.3	0.0	27
Ewing High Entrance	6	0.7	11.0	0.1	31
Lexington Ave	27	41.7	49.8	0.1	7
Sutherland Rd	9	4.0	28.6	0.3	37
Vannest Ave	44	0.3	4.9	0.0	36
	8	0.6	9.5	0.1	38
Berwyn Ave	15	1.1	14.6	0.2	39
	10	3.1	21.8	0.2	34
Parkside Ave	12	23.5	27.2	0.0	6
	11	2.5	7.3	0.0	22
	41	0.1	3.6	0.0	33
Total		243.7	461.7	2.4	23

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	1.1	41.2	0.4	2.2	44.9
Delay / Veh (s)	1330.5	1349.3	1.9	10.3	102.0
St Del/Veh (s)	1330.4	1352.7	0.7	7.7	100.5
Stop/Veh	1.00	1.00	0.04	0.26	0.22
Avg Speed (mph)	4	1	22	11	9
Fuel Used (gal)	2.6	94.8	21.6	12.2	131.2

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.4	0.3	0.9	0.2	1.7
Delay / Veh (s)	16.2	1.4	4.2	3.2	3.6
St Del/Veh (s)	13.8	0.5	1.4	1.5	1.7
Stop/Veh	0.85	0.00	0.00	0.02	0.05
Avg Speed (mph)	12	28	20	18	21
Fuel Used (gal)	2.5	18.4	29.3	6.6	56.8

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.1	0.0	0.3
Delay / Veh (s)	6.5	4.9	3.9	1.9	0.8	0.2	1.4
St Del/Veh (s)	5.4	4.9	2.0	0.2	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.25	0.00	0.00	0.00	0.05
Avg Speed (mph)	7	8	30	35	33	21	33
Fuel Used (gal)	0.2	0.1	0.4	29.6	7.0	0.3	37.6

11: Saratoga Ave & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	1.1	1.1
Delay / Veh (s)	0.2	5.1	2.9
St Del/Veh (s)	0.0	2.2	1.2
Stop/Veh	0.00	0.15	0.08
Avg Speed (mph)	28	21	22
Fuel Used (gal)	6.8	24.5	31.3

12: Parkway Ave & Parkside Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.5	1.0	0.3	0.4	0.8	0.0	1.3	1.4	0.1	0.1	2.4	0.2
Delay / Veh (s)	23.3	21.7	7.8	24.7	17.7	8.8	27.0	15.8	11.3	31.2	24.3	17.0
St Del/Veh (s)	20.8	17.1	5.9	22.8	14.3	7.6	23.5	11.9	9.2	27.9	19.1	13.8
Stop/Veh	0.81	0.64	0.24	0.79	0.57	0.50	0.92	0.52	0.53	0.83	0.71	0.72
Avg Speed (mph)	5	6	9	8	10	14	10	13	14	11	11	13
Fuel Used (gal)	2.0	3.7	1.5	1.6	4.3	0.2	7.8	13.5	1.7	0.4	19.5	1.8

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	8.5
Delay / Veh (s)	19.6
St Del/Veh (s)	15.8
Stop/Veh	0.63
Avg Speed (mph)	11
Fuel Used (gal)	57.8

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBR	WBL	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2
Delay / Veh (s)	11.0	4.7	5.8	4.6	2.7	0.8	0.3	2.3	0.9	0.6	1.1
St Del/Veh (s)	9.8	4.6	4.6	4.4	1.1	0.1	0.0	1.0	0.1	0.0	0.4
Stop/Veh	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.17	0.00	0.00	0.04
Avg Speed (mph)	13	16	18	18	29	37	30	32	38	32	36
Fuel Used (gal)	0.4	0.3	0.1	0.2	0.1	12.5	0.2	0.4	25.1	0.2	39.4

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.3	0.8	0.0	0.6	0.1	0.0	0.0	1.5	0.1	0.1	3.6
Delay / Veh (s)	10.1	7.8	11.3	7.8	2.5	45.0	37.0	33.4	25.8	2.6	10.5
St Del/Veh (s)	6.1	3.2	9.3	4.9	0.1	42.7	37.0	30.3	20.9	0.7	7.1
Stop/Veh	0.63	0.29	0.56	0.32	0.00	1.00	1.00	0.87	0.75	0.02	0.35
Avg Speed (mph)	23	28	13	18	21	5	5	16	18	31	23
Fuel Used (gal)	5.9	20.1	0.2	7.4	1.0	0.1	0.1	12.6	0.6	6.8	54.8

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.0	0.0	0.4	0.6	0.1	0.7	1.5	0.2	0.4	0.9	0.3
Delay / Veh (s)	10.2	7.7	3.4	10.5	5.5	2.4	36.3	29.6	8.8	39.6	33.1	31.8
St Del/Veh (s)	7.3	4.9	2.1	8.5	3.3	1.9	34.1	26.3	8.5	37.2	29.9	30.6
Stop/Veh	0.60	0.24	0.50	0.60	0.20	0.35	0.91	0.80	0.75	1.00	0.86	0.85
Avg Speed (mph)	21	24	26	13	20	20	10	11	19	7	8	8
Fuel Used (gal)	1.0	16.4	1.6	2.7	8.5	1.6	4.5	11.6	4.8	1.9	5.7	2.2

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	6.1
Delay / Veh (s)	13.3
St Del/Veh (s)	11.0
Stop/Veh	0.46
Avg Speed (mph)	15
Fuel Used (gal)	62.5

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.1	0.4	0.2	0.2	0.3	1.8	2.0	0.5	0.0	0.3	1.9	0.0
Delay / Veh (s)	40.6	36.8	32.5	24.2	20.6	15.7	25.9	4.6	4.6	22.9	17.9	8.2
St Del/Veh (s)	38.9	34.3	31.9	23.0	16.1	13.5	23.5	3.1	3.8	18.2	11.7	3.8
Stop/Veh	1.00	0.97	0.94	0.79	0.74	0.70	0.90	0.23	0.50	0.92	0.58	0.26
Avg Speed (mph)	7	7	7	18	19	18	8	19	18	19	22	27
Fuel Used (gal)	0.5	1.9	0.9	2.3	2.9	26.9	10.2	8.0	0.6	3.4	28.8	1.3

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	7.6
Delay / Veh (s)	16.5
St Del/Veh (s)	13.4
Stop/Veh	0.62
Avg Speed (mph)	17
Fuel Used (gal)	87.9

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	2.2	0.0	0.3	4.4	0.5	0.2	0.0	0.0	0.5	0.1	0.1
Delay / Veh (s)	38.3	14.3	9.8	30.5	21.1	16.7	22.0	18.8	2.6	21.6	16.9	13.1
St Del/Veh (s)	34.1	9.1	7.2	25.7	15.2	13.1	20.2	16.8	1.3	19.7	15.3	12.7
Stop/Veh	1.09	0.45	0.59	1.15	0.61	0.62	0.76	0.50	0.23	0.73	0.62	0.72
Avg Speed (mph)	6	13	13	5	7	8	9	9	19	10	11	12
Fuel Used (gal)	0.5	15.4	0.4	1.5	25.6	3.1	1.5	0.2	0.9	3.8	0.6	1.0

30: Parkway Ave & Farrell Ave Performance by movement

Movement	All
Total Delay (hr)	8.6
Delay / Veh (s)	18.2
St Del/Veh (s)	13.3
Stop/Veh	0.57
Avg Speed (mph)	9
Fuel Used (gal)	54.6

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.4	0.0	0.3	0.6	0.0	1.3
Delay / Veh (s)	2.9	1.4	9.3	3.1	5.6	3.5
St Del/Veh (s)	0.9	0.9	5.3	0.1	5.4	0.9
Stop/Veh	0.01	0.04	0.59	0.00	1.00	0.06
Avg Speed (mph)	33	27	14	24	14	26
Fuel Used (gal)	14.7	1.4	4.2	37.1	0.0	57.5

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.1	1.0	2.0
Delay / Veh (s)	8.1	8.0	8.0
St Del/Veh (s)	4.0	4.1	4.1
Stop/Veh	0.35	0.35	0.35
Avg Speed (mph)	24	20	22
Fuel Used (gal)	20.5	10.4	30.9

43: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.2	0.2
Delay / Veh (s)	0.2	1.2	0.9
St Del/Veh (s)	0.0	0.6	0.4
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	35	36	36
Fuel Used (gal)	5.1	13.2	18.3

Total Network Performance

Total Delay (hr)	90.6
Delay / Veh (s)	73.1
St Del/Veh (s)	60.1
Stop/Veh	1.18
Avg Speed (mph)	21
Fuel Used (gal)	1245.9

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.2	7.4	0.1	36
Parkside Ave	12	17.7	25.5	0.1	11
	10	2.1	6.5	0.0	24
Berwyn Ave	15	0.9	18.3	0.2	41
	8	0.6	15.1	0.2	38
Vannest Ave	43	1.2	9.2	0.1	41
Sutherland Rd	9	0.8	5.0	0.0	35
N Olden Ave	27	18.0	41.5	0.3	25
Ewing High Entrance	6	5.6	14.9	0.1	26
Saratoga Ave	11	5.1	16.8	0.1	20
Ewing High Exit	5	10.3	14.4	0.0	12
Farrell Ave	30	20.8	27.8	0.1	8
NJDOT Driveway	34	3.3	10.4	0.1	26
	4	1.0	14.3	0.1	36
Lower Ferry Rd	24	5.5	11.3	0.1	24
	3	1.8	17.1	0.2	35
	22	0.1	3.9	0.0	38
	2	0.9	17.2	0.2	38
Scotch Rd	20	7.8	14.4	0.1	21
	1	2.9	21.9	0.2	34
Shopping Center	37	8.0	16.4	0.1	20
	36	2.4	14.9	0.1	33
Total		117.0	344.2	2.5	27

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	8.1	20.8	0.1	24
	1	2.1	10.5	0.1	32
Sylvia St	20	7.8	26.5	0.2	28
	2	1.6	9.0	0.1	32
	22	0.9	17.3	0.2	38
	3	0.2	4.0	0.0	37
Lower Ferry Rd	24	7.7	19.3	0.2	31
	4	2.2	9.5	0.1	29
NJDOT Driveway	34	2.9	13.9	0.1	40
	30	14.3	20.6	0.1	14
Ewing High Exit	5	1.4	8.4	0.1	26
Saratoga Ave	11	0.2	4.7	0.0	28
Ewing High Entrance	6	1.4	11.9	0.1	30
Lexington Ave	27	4.6	13.3	0.1	24
Sutherland Rd	9	2.2	29.2	0.3	36
Vannest Ave	43	0.2	4.7	0.0	38
	8	0.4	9.2	0.1	39
Berwyn Ave	15	0.8	14.5	0.2	40
	10	2.4	21.1	0.2	35
Parkside Ave	12	21.7	25.3	0.0	6
	41	2.6	10.7	0.1	26
Total		85.7	304.2	2.4	29

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.5	0.2	0.8
Delay / Veh (s)	6.7	8.6	2.6	1.0	2.2
St Del/Veh (s)	6.6	9.2	1.4	0.2	1.2
Stop/Veh	1.00	1.00	0.08	0.03	0.11
Avg Speed (mph)	6	5	20	24	20
Fuel Used (gal)	0.2	0.4	22.0	4.7	27.2
HC Emissions (g)	0	0	2	0	3
CO Emissions (g)	2	7	840	65	913
NOx Emissions (g)	0	0	10	1	11

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.3	0.0	0.5
Delay / Veh (s)	0.6	1.3	1.3	1.0
St Del/Veh (s)	0.0	0.1	0.1	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (mph)	28	22	20	24
Fuel Used (gal)	17.8	44.3	0.3	62.3
HC Emissions (g)	2	6	0	7
CO Emissions (g)	366	1991	10	2367
NOx Emissions (g)	5	22	0	27

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.3	0.1	0.0	0.5
Delay / Veh (s)	5.6	3.7	4.1	2.4	0.8	0.2	1.9
St Del/Veh (s)	4.5	3.7	1.5	0.1	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.33	0.00	0.00	0.00	0.05
Avg Speed (mph)	8	9	30	34	34	21	33
Fuel Used (gal)	0.2	0.1	0.6	53.9	5.0	0.2	60.1
HC Emissions (g)	0	0	0	8	1	0	8
CO Emissions (g)	2	1	27	2957	140	3	3130
NOx Emissions (g)	0	0	0	29	2	0	31

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.5	1.2	0.3	0.6	0.9	0.0	0.5	2.2	0.4	0.0	3.0	0.2
Delay / Veh (s)	28.8	23.3	8.4	25.8	18.2	11.7	24.6	18.6	13.8	31.9	27.3	19.1
St Del/Veh (s)	26.0	18.1	6.3	23.8	15.0	10.6	20.3	13.2	10.3	27.6	21.4	15.9
Stop/Veh	0.90	0.68	0.30	0.84	0.61	0.62	0.95	0.58	0.58	1.00	0.76	0.74
Avg Speed (mph)	4	5	9	5	7	8	11	12	13	10	10	12
Fuel Used (gal)	1.9	4.4	1.3	2.1	4.1	0.1	3.8	17.7	3.8	0.2	22.4	1.7
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	2	0
CO Emissions (g)	20	79	13	21	82	1	136	535	105	6	573	64
NOx Emissions (g)	0	1	0	0	1	0	1	6	1	0	6	1

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.9
Delay / Veh (s)	21.2
St Del/Veh (s)	16.7
Stop/Veh	0.66
Avg Speed (mph)	10
Fuel Used (gal)	63.5
HC Emissions (g)	5
CO Emissions (g)	1636
NOx Emissions (g)	17

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Delay / Veh (s)	7.0	8.5	4.3	10.8	8.7	4.8	3.9	1.0	0.5	3.6	1.0	0.6
St Del/Veh (s)	5.9	6.2	4.2	9.4	6.6	4.6	2.4	0.0	0.0	2.4	0.3	0.2
Stop/Veh	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.00	0.00	0.14	0.00	0.00
Avg Speed (mph)	14	15	16	14	17	18	27	37	31	30	37	32
Fuel Used (gal)	0.0	0.1	0.2	0.0	0.1	0.2	0.2	15.5	0.4	0.3	21.7	0.3
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	3	0
CO Emissions (g)	0	1	3	0	1	2	2	353	6	12	1045	9
NOx Emissions (g)	0	0	0	0	0	0	0	7	0	0	11	0

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	0.3
Delay / Veh (s)	1.2
St Del/Veh (s)	0.3
Stop/Veh	0.03
Avg Speed (mph)	36
Fuel Used (gal)	39.1
HC Emissions (g)	5
CO Emissions (g)	1433
NOx Emissions (g)	19

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	1.0	1.1	0.1	2.9	0.2	0.1	0.2	0.3	3.1	0.1	0.2	9.2
Delay / Veh (s)	19.2	10.2	16.5	16.1	3.8	37.8	40.0	39.2	48.3	34.8	3.8	17.2
St Del/Veh (s)	16.0	6.0	12.9	10.7	0.2	36.7	37.5	38.6	43.3	28.7	1.4	12.9
Stop/Veh	0.88	0.36	0.75	0.49	0.03	0.88	0.89	0.94	1.01	0.83	0.08	0.48
Avg Speed (mph)	18	26	9	10	17	5	5	5	12	15	30	16
Fuel Used (gal)	10.3	20.5	0.4	18.5	2.3	0.3	0.9	1.6	20.6	0.5	11.0	86.9
HC Emissions (g)	1	2	0	2	0	0	0	0	2	0	1	9
CO Emissions (g)	251	499	9	525	59	3	14	54	656	14	486	2569
NOx Emissions (g)	4	9	0	6	1	0	0	1	6	0	4	30

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	2.2	25.2	4.5	3.4	5.1	0.6	4.7	4.4	2.3	14.0	33.6	11.3
Delay / Veh (s)	154.9	141.4	125.9	70.6	29.3	20.9	88.5	51.3	36.7	789.3	704.1	700.9
St Del/Veh (s)	143.0	127.4	116.1	65.8	22.6	17.9	83.9	45.7	34.2	779.4	693.4	692.0
Stop/Veh	1.64	1.08	1.22	1.25	0.61	0.70	1.17	0.91	0.85	2.92	2.63	2.48
Avg Speed (mph)	8	8	10	3	8	10	6	9	12	1	1	1
Fuel Used (gal)	6.6	82.2	14.9	11.2	26.8	3.5	19.7	24.3	15.5	34.5	83.3	28.0
HC Emissions (g)	0	4	1	0	2	0	1	1	1	1	3	1
CO Emissions (g)	52	1060	197	146	614	59	274	390	355	314	794	254
NOx Emissions (g)	0	11	2	1	7	1	3	5	4	2	4	1

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	111.4
Delay / Veh (s)	145.7
St Del/Veh (s)	137.6
Stop/Veh	1.12
Avg Speed (mph)	5
Fuel Used (gal)	350.6
HC Emissions (g)	16
CO Emissions (g)	4510
NOx Emissions (g)	42

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.3	0.8	0.6	0.5	0.7	4.3	4.6	1.6	0.1	0.1	5.3	0.3
Delay / Veh (s)	51.4	52.1	50.6	34.7	33.0	29.2	32.8	13.1	10.7	35.8	49.0	23.9
St Del/Veh (s)	48.8	48.7	49.0	32.7	28.2	23.4	29.9	10.2	9.3	27.5	37.7	16.8
Stop/Veh	1.05	1.02	1.07	0.80	0.78	0.79	0.85	0.45	0.50	1.20	1.02	0.63
Avg Speed (mph)	5	5	5	14	14	14	6	12	12	15	13	18
Fuel Used (gal)	1.5	3.7	2.8	3.8	6.0	38.3	20.6	12.1	0.5	0.9	36.7	2.7
HC Emissions (g)	0	0	0	0	1	4	1	1	0	0	3	0
CO Emissions (g)	23	81	100	151	260	1477	350	236	6	23	858	76
NOx Emissions (g)	0	1	1	1	2	11	4	3	0	0	11	1

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	19.1
Delay / Veh (s)	31.6
St Del/Veh (s)	26.4
Stop/Veh	0.79
Avg Speed (mph)	11
Fuel Used (gal)	129.6
HC Emissions (g)	11
CO Emissions (g)	3640
NOx Emissions (g)	35

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	All
Total Delay (hr)	0.2	2.2	0.0	0.0	2.5	0.2	0.2	0.0	0.1	0.3	0.1	5.9
Delay / Veh (s)	31.3	11.7	8.2	27.7	15.4	12.2	21.6	19.7	3.0	19.5	14.6	13.5
St Del/Veh (s)	27.2	6.6	5.5	24.3	11.4	9.9	19.8	17.5	1.6	17.7	13.1	9.4
Stop/Veh	1.17	0.42	0.44	1.00	0.51	0.53	0.76	0.71	0.24	0.69	0.56	0.48
Avg Speed (mph)	7	14	14	6	9	10	9	9	18	10	12	12
Fuel Used (gal)	0.6	16.1	0.4	0.1	14.8	1.6	1.4	0.3	1.9	2.5	0.6	40.3
HC Emissions (g)	0	1	0	0	1	0	0	0	0	0	0	3
CO Emissions (g)	6	345	5	1	250	23	27	4	48	56	6	771
NOx Emissions (g)	0	5	0	0	4	0	0	0	0	1	0	10

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.4	0.0	0.0	0.6	0.1	1.1
Delay / Veh (s)	1.5	0.2	12.8	2.9	14.2	2.4
St Del/Veh (s)	0.1	0.0	9.7	0.9	14.1	0.7
Stop/Veh	0.01	0.00	0.71	0.00	1.04	0.02
Avg Speed (mph)	35	29	12	27	9	31
Fuel Used (gal)	29.1	0.0	0.2	38.1	0.6	68.1
HC Emissions (g)	4	0	0	5	0	9
CO Emissions (g)	959	0	7	2720	6	3693
NOx Emissions (g)	14	0	0	20	0	34

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	1.3	2.4	3.7
Delay / Veh (s)	8.3	11.9	10.3
St Del/Veh (s)	4.0	5.7	5.0
Stop/Veh	0.35	0.44	0.40
Avg Speed (mph)	23	16	20
Fuel Used (gal)	26.1	20.6	46.7
HC Emissions (g)	4	2	5
CO Emissions (g)	1396	325	1721
NOx Emissions (g)	11	6	17

39: Parkway Ave & Saratoga Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.2
Delay / Veh (s)	0.3	0.5	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	27	28	28
Fuel Used (gal)	8.8	17.5	26.3
HC Emissions (g)	1	2	3
CO Emissions (g)	187	318	506
NOx Emissions (g)	3	5	7

44: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.1	0.1
Delay / Veh (s)	0.3	0.6	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	35	37	36
Fuel Used (gal)	6.8	9.6	16.4
HC Emissions (g)	1	1	2
CO Emissions (g)	282	172	454
NOx Emissions (g)	3	4	7

Total Network Performance

Total Delay (hr)	171.9
Delay / Veh (s)	108.1
St Del/Veh (s)	90.3
Stop/Veh	1.50
Avg Speed (mph)	18
Fuel Used (gal)	1783.0
HC Emissions (g)	184
CO Emissions (g)	64922
NOx Emissions (g)	651

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.3	0.1	36
	11	0.4	4.0	0.0	30
Parkside Ave	12	18.2	22.6	0.0	7
	10	2.1	6.5	0.0	24
Berwyn Ave	15	1.0	17.1	0.2	44
	8	0.6	15.2	0.2	38
Vannest Ave	44	0.6	9.4	0.1	38
Sutherland Rd	9	0.8	5.2	0.0	34
N Olden Ave	27	49.1	72.9	0.3	14
Ewing High Entrance	6	2.2	13.2	0.1	25
Saratoga Ave	39	0.5	10.8	0.1	31
Ewing High Exit	5	1.0	5.7	0.0	25
Farrell Ave	30	15.5	21.8	0.1	10
NJDOT Driveway	34	3.0	9.5	0.1	31
	4	4.2	17.5	0.1	30
Lower Ferry Rd	24	29.3	35.7	0.1	9
	3	3.7	19.0	0.2	32
	22	0.3	4.1	0.0	37
	2	3.7	21.4	0.2	33
Scotch Rd	20	16.1	21.6	0.1	11
	1	5.3	24.3	0.2	31
Shopping Center	37	11.9	20.3	0.1	17
	36	3.3	15.9	0.1	31
Total		173.2	400.6	2.5	23

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	8.3	21.2	0.1	23
	1	2.2	10.6	0.1	32
Sylvia St	20	10.2	28.9	0.2	26
	2	1.9	8.0	0.1	30
	22	1.2	18.9	0.2	37
	3	0.6	4.3	0.0	34
Lower Ferry Rd	24	141.4	154.6	0.2	9
	4	3.1	10.4	0.1	26
NJDOT Driveway	34	1.5	13.0	0.1	40
	30	11.7	18.1	0.1	15
Ewing High Exit	5	1.4	8.1	0.1	25
Saratoga Ave	39	0.3	5.3	0.0	27
Ewing High Entrance	6	0.6	10.9	0.1	31
Lexington Ave	27	13.1	21.4	0.1	16
Sutherland Rd	9	2.7	27.0	0.3	39
Vannest Ave	44	0.3	4.8	0.0	37
	8	0.5	9.4	0.1	38
Berwyn Ave	15	1.0	14.4	0.2	40
	10	2.9	21.6	0.2	34
Parkside Ave	12	23.3	27.0	0.0	6
	11	2.5	7.3	0.0	22
	41	0.1	3.6	0.0	33
Total		230.6	448.8	2.4	24

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	5.4	0.3	0.8	6.5
Delay / Veh (s)	62.8	101.5	1.5	3.5	14.1
St Del/Veh (s)	62.6	104.2	0.8	1.8	13.4
Stop/Veh	1.00	0.92	0.03	0.10	0.17
Avg Speed (mph)	4	1	23	18	12
Fuel Used (gal)	0.3	13.6	17.6	8.1	39.5

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.3	0.2	0.9	0.2	1.6
Delay / Veh (s)	14.6	1.2	4.4	3.4	3.5
St Del/Veh (s)	12.3	0.5	1.5	1.6	1.7
Stop/Veh	0.77	0.00	0.00	0.01	0.04
Avg Speed (mph)	12	28	20	18	22
Fuel Used (gal)	2.4	17.9	28.4	6.0	54.6

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.1	0.0	0.3
Delay / Veh (s)	6.4	4.6	4.1	2.0	0.8	0.1	1.4
St Del/Veh (s)	5.3	4.6	1.7	0.2	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.50	0.00	0.00	0.00	0.05
Avg Speed (mph)	7	8	29	35	33	21	33
Fuel Used (gal)	0.2	0.1	0.4	29.2	6.8	0.3	37.1

11: Saratoga Ave & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.4	0.4
Delay / Veh (s)	0.2	1.8	1.1
St Del/Veh (s)	0.0	0.1	0.1
Stop/Veh	0.00	0.02	0.01
Avg Speed (mph)	28	26	26
Fuel Used (gal)	6.9	24.1	30.9

12: Parkway Ave & Parkside Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	1.1	0.3	0.4	0.8	0.0	1.3	1.4	0.2	0.1	2.7	0.2
Delay / Veh (s)	26.9	23.5	8.1	25.1	18.2	9.4	27.3	15.7	10.5	29.4	26.2	19.5
St Del/Veh (s)	24.4	18.8	6.1	23.2	14.6	8.0	23.6	11.6	8.3	26.2	20.7	16.7
Stop/Veh	0.87	0.67	0.28	0.80	0.59	0.50	0.93	0.49	0.52	0.75	0.74	0.78
Avg Speed (mph)	4	5	9	8	10	13	10	13	15	10	11	12
Fuel Used (gal)	2.3	4.1	1.4	1.5	4.1	0.2	8.2	13.2	1.8	0.5	20.7	1.8

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.1
Delay / Veh (s)	20.7
St Del/Veh (s)	16.7
Stop/Veh	0.65
Avg Speed (mph)	10
Fuel Used (gal)	59.8

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBR	WBL	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Delay / Veh (s)	9.2	4.1	8.5	3.9	2.9	0.9	0.3	3.4	0.9	1.4	1.2
St Del/Veh (s)	7.8	3.9	7.3	3.7	1.6	0.1	0.1	1.5	0.2	0.4	0.4
Stop/Veh	1.00	1.00	1.00	1.00	0.50	0.00	0.00	0.33	0.00	0.00	0.05
Avg Speed (mph)	14	17	16	19	30	37	30	30	38	30	36
Fuel Used (gal)	0.3	0.2	0.1	0.2	0.1	12.4	0.2	0.4	25.2	0.1	39.2

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.4	0.7	0.0	0.3	0.1	0.1	0.1	2.1	0.1	0.1	3.9
Delay / Veh (s)	10.7	7.2	8.9	3.6	2.6	72.6	63.8	48.3	40.0	2.6	11.2
St Del/Veh (s)	7.0	3.4	7.4	2.2	0.1	70.2	63.5	44.4	34.9	0.7	8.4
Stop/Veh	0.54	0.24	0.40	0.12	0.00	1.00	1.00	0.91	0.75	0.02	0.28
Avg Speed (mph)	23	28	15	26	21	3	4	12	14	32	22
Fuel Used (gal)	6.0	20.0	0.2	8.3	1.0	0.2	0.2	13.9	0.7	6.8	57.1

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.1	0.0	0.3	0.6	0.0	0.8	1.7	0.2	0.4	0.9	0.4
Delay / Veh (s)	18.3	8.6	2.9	7.5	4.9	1.7	42.2	34.0	8.5	45.3	38.5	37.9
St Del/Veh (s)	15.8	6.0	1.8	5.7	2.4	0.9	39.9	30.6	8.1	42.8	35.3	36.5
Stop/Veh	0.62	0.21	0.44	0.52	0.19	0.24	0.88	0.79	0.71	1.09	0.87	0.94
Avg Speed (mph)	16	23	26	15	21	21	9	10	19	6	7	7
Fuel Used (gal)	1.3	16.6	1.5	2.6	9.4	1.6	4.7	12.5	5.0	2.1	5.3	2.2

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	6.7
Delay / Veh (s)	14.2
St Del/Veh (s)	11.9
Stop/Veh	0.43
Avg Speed (mph)	15
Fuel Used (gal)	64.9

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.1	0.5	0.3	0.4	0.4	2.1	3.0	0.6	0.0	0.2	2.6	0.0
Delay / Veh (s)	61.6	52.9	57.3	34.3	35.0	18.5	38.3	6.2	5.3	21.7	25.2	8.9
St Del/Veh (s)	59.4	50.1	56.3	32.8	30.7	15.9	35.7	4.6	4.3	16.8	18.7	4.1
Stop/Veh	1.00	0.94	0.95	0.72	0.76	0.71	0.80	0.23	0.38	0.95	0.57	0.33
Avg Speed (mph)	5	5	5	14	14	17	6	17	17	20	19	27
Fuel Used (gal)	0.4	2.1	1.4	2.9	3.6	26.8	12.7	8.2	0.5	3.4	30.3	1.0

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	10.2
Delay / Veh (s)	22.7
St Del/Veh (s)	19.4
Stop/Veh	0.60
Avg Speed (mph)	15
Fuel Used (gal)	93.4

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.0	0.0	0.2	2.6	0.3	0.4	0.1	0.1	1.0	0.1	0.2
Delay / Veh (s)	33.6	6.4	3.5	21.2	11.4	8.7	38.6	39.0	6.0	40.3	32.3	18.1
St Del/Veh (s)	31.1	3.5	2.5	17.1	6.8	5.9	36.9	36.8	4.7	38.1	30.2	17.7
Stop/Veh	1.00	0.18	0.19	0.98	0.38	0.41	0.88	0.83	0.38	0.86	0.81	0.79
Avg Speed (mph)	6	21	19	7	11	11	6	6	15	6	8	10
Fuel Used (gal)	0.4	13.1	0.3	1.2	22.8	3.0	1.7	0.3	0.9	5.4	0.8	1.3

30: Parkway Ave & Farrell Ave Performance by movement

Movement	All
Total Delay (hr)	6.0
Delay / Veh (s)	12.2
St Del/Veh (s)	8.7
Stop/Veh	0.38
Avg Speed (mph)	12
Fuel Used (gal)	51.3

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.3	0.0	0.2	0.6	0.0	1.2
Delay / Veh (s)	2.3	1.4	7.3	2.7	4.8	2.9
St Del/Veh (s)	0.6	0.7	3.7	0.1	4.6	0.6
Stop/Veh	0.00	0.04	0.50	0.00	1.00	0.05
Avg Speed (mph)	34	28	15	25	14	27
Fuel Used (gal)	15.7	1.3	4.2	38.7	0.0	59.9

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.6	0.4	1.0
Delay / Veh (s)	4.8	2.9	3.9
St Del/Veh (s)	2.3	1.7	2.0
Stop/Veh	0.21	0.13	0.17
Avg Speed (mph)	28	29	29
Fuel Used (gal)	20.6	10.5	31.0

43: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.2	0.2
Delay / Veh (s)	0.3	1.1	0.8
St Del/Veh (s)	0.1	0.5	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	34	37	36
Fuel Used (gal)	5.1	13.0	18.1

Total Network Performance

Total Delay (hr)	51.4
Delay / Veh (s)	40.8
St Del/Veh (s)	29.6
Stop/Veh	0.99
Avg Speed (mph)	22
Fuel Used (gal)	1153.1

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.3	0.1	37
Parkside Ave	12	18.2	26.0	0.1	11
	10	2.2	6.5	0.0	24
Berwyn Ave	15	0.9	18.1	0.2	41
	8	0.7	15.2	0.2	38
Vannest Ave	43	1.1	9.2	0.1	41
Sutherland Rd	9	0.8	5.0	0.0	35
N Olden Ave	27	25.2	48.7	0.3	21
Ewing High Entrance	6	6.0	15.3	0.1	26
Saratoga Ave	11	1.8	13.5	0.1	25
Ewing High Exit	5	3.5	7.6	0.0	20
Farrell Ave	30	11.0	18.1	0.1	12
NJDOT Driveway	34	2.9	9.9	0.1	27
	4	1.1	14.4	0.1	36
Lower Ferry Rd	24	4.9	10.7	0.1	26
	3	2.0	17.3	0.2	35
	22	0.2	3.9	0.0	38
	2	0.9	17.3	0.2	38
Scotch Rd	20	3.6	10.1	0.1	30
	1	1.7	20.7	0.2	36
Shopping Center	37	2.9	11.3	0.1	30
	36	1.2	13.8	0.1	36
Total		93.1	319.9	2.5	28

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	4.8	17.5	0.1	28
	1	1.4	9.8	0.1	34
Sylvia St	20	7.2	26.0	0.2	29
	2	1.4	8.8	0.1	33
	22	0.9	17.3	0.2	37
	3	0.2	4.0	0.0	37
Lower Ferry Rd	24	8.6	20.4	0.2	30
	4	2.0	9.3	0.1	30
NJDOT Driveway	34	2.3	13.2	0.1	41
	30	6.4	12.8	0.1	23
Ewing High Exit	5	0.8	7.7	0.1	28
Saratoga Ave	11	0.2	4.7	0.0	28
Ewing High Entrance	6	1.2	11.7	0.1	30
Lexington Ave	27	6.2	14.9	0.1	22
Sutherland Rd	9	2.2	29.3	0.3	36
Vannest Ave	43	0.2	4.7	0.0	37
	8	0.4	9.3	0.1	39
Berwyn Ave	15	0.9	14.5	0.2	40
	10	2.6	21.4	0.2	35
Parkside Ave	12	23.5	27.0	0.0	6
	41	2.6	10.7	0.1	26
Total		75.8	295.0	2.4	30

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	0.3	0.5	0.4	1.3
Delay / Veh (s)	8.4	28.2	2.7	2.4	3.5
St Del/Veh (s)	8.3	28.9	1.8	1.5	2.6
Stop/Veh	1.00	0.98	0.07	0.06	0.11
Avg Speed (mph)	5	2	20	20	18
Fuel Used (gal)	0.2	0.9	19.8	5.7	26.6
HC Emissions (g)	0	0	2	1	3
CO Emissions (g)	2	16	824	92	935
NOx Emissions (g)	0	0	9	1	11

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.4	0.0	0.5
Delay / Veh (s)	0.5	1.4	0.9	1.0
St Del/Veh (s)	0.0	0.1	0.0	0.1
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (mph)	28	22	19	24
Fuel Used (gal)	16.7	44.7	0.3	61.7
HC Emissions (g)	2	6	0	7
CO Emissions (g)	343	1980	10	2334
NOx Emissions (g)	5	22	0	27

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.3	0.1	0.0	0.5
Delay / Veh (s)	6.0	4.6	4.6	2.2	0.8	0.2	1.8
St Del/Veh (s)	4.8	4.6	1.5	0.1	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.25	0.00	0.00	0.00	0.05
Avg Speed (mph)	8	8	30	34	33	21	33
Fuel Used (gal)	0.2	0.1	0.5	50.6	5.0	0.2	56.6
HC Emissions (g)	0	0	0	8	1	0	8
CO Emissions (g)	3	1	18	2789	138	3	2953
NOx Emissions (g)	0	0	0	27	2	0	30

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	1.3	0.4	0.7	1.1	0.0	0.6	2.3	0.4	0.0	2.7	0.2
Delay / Veh (s)	32.9	26.9	11.4	31.5	22.2	11.5	26.4	19.1	14.6	24.8	24.5	18.7
St Del/Veh (s)	29.9	21.9	9.1	29.5	19.0	10.6	22.3	13.9	11.3	21.7	19.2	15.4
Stop/Veh	0.91	0.70	0.36	0.87	0.60	0.57	0.96	0.54	0.57	0.67	0.65	0.69
Avg Speed (mph)	4	5	7	4	6	8	10	12	12	12	11	12
Fuel Used (gal)	2.1	4.8	1.5	2.4	4.4	0.1	3.8	18.1	3.6	0.2	21.3	1.8
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	2	0
CO Emissions (g)	22	78	20	22	85	1	133	509	98	6	558	56
NOx Emissions (g)	0	1	0	0	1	0	1	5	1	0	5	1

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	10.3
Delay / Veh (s)	22.3
St Del/Veh (s)	18.0
Stop/Veh	0.64
Avg Speed (mph)	9
Fuel Used (gal)	64.2
HC Emissions (g)	5
CO Emissions (g)	1588
NOx Emissions (g)	16

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Delay / Veh (s)	10.9	9.9	3.9	3.9	8.7	4.7	3.3	0.9	0.5	3.8	0.9	0.2
St Del/Veh (s)	9.8	7.8	3.7	3.2	6.7	4.4	1.8	0.0	0.0	2.8	0.3	0.1
Stop/Veh	1.00	1.00	1.00	1.00	1.00	1.00	0.29	0.00	0.00	0.40	0.00	0.00
Avg Speed (mph)	12	14	17	17	16	19	28	37	31	29	38	33
Fuel Used (gal)	0.1	0.1	0.2	0.0	0.1	0.2	0.3	15.2	0.3	0.2	21.9	0.2
HC Emissions (g)	0	0	0	0	0	0	0	2	0	0	3	0
CO Emissions (g)	0	1	2	0	1	1	3	353	3	11	1103	9
NOx Emissions (g)	0	0	0	0	0	0	0	7	0	0	12	0

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	0.3
Delay / Veh (s)	1.1
St Del/Veh (s)	0.3
Stop/Veh	0.03
Avg Speed (mph)	36
Fuel Used (gal)	38.8
HC Emissions (g)	5
CO Emissions (g)	1487
NOx Emissions (g)	19

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.9	1.2	0.1	2.3	0.2	0.1	0.3	0.5	3.8	0.1	0.2	9.7
Delay / Veh (s)	18.1	10.7	20.5	13.5	3.2	54.9	60.5	57.0	59.9	49.0	3.6	18.2
St Del/Veh (s)	14.9	7.0	17.8	9.8	0.0	53.5	57.8	56.2	54.3	42.8	1.3	14.6
Stop/Veh	0.82	0.35	0.64	0.31	0.01	1.00	1.00	0.93	0.94	0.83	0.08	0.41
Avg Speed (mph)	19	25	8	11	18	4	4	4	11	12	31	16
Fuel Used (gal)	10.1	21.2	0.6	18.1	1.8	0.4	1.2	1.8	22.5	0.5	10.9	89.1
HC Emissions (g)	1	2	0	2	0	0	0	0	2	0	1	8
CO Emissions (g)	197	445	11	723	37	3	16	40	718	18	489	2695
NOx Emissions (g)	3	8	0	6	0	0	0	0	6	0	5	29

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	7.0	69.5	14.3	7.1	17.8	2.5	3.2	2.5	1.6	3.9	10.1	3.2
Delay / Veh (s)	517.3	445.7	448.0	155.4	107.8	87.0	58.4	30.2	24.0	166.4	159.5	162.3
St Del/Veh (s)	502.1	428.2	434.5	148.6	99.7	82.6	54.9	26.4	22.9	158.2	150.2	154.2
Stop/Veh	1.90	1.29	1.44	1.46	0.76	0.87	1.04	0.65	0.60	2.12	1.88	1.81
Avg Speed (mph)	4	6	7	2	5	6	7	11	14	3	3	3
Fuel Used (gal)	18.1	183.5	37.2	20.4	56.9	8.2	16.4	19.7	14.3	12.1	31.9	10.2
HC Emissions (g)	0	5	1	1	3	0	1	1	1	1	1	1
CO Emissions (g)	118	1722	362	217	809	115	249	346	288	162	374	143
NOx Emissions (g)	1	12	3	2	9	1	3	5	3	1	4	1

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	142.9
Delay / Veh (s)	189.4
St Del/Veh (s)	180.5
Stop/Veh	1.12
Avg Speed (mph)	5
Fuel Used (gal)	428.7
HC Emissions (g)	16
CO Emissions (g)	4905
NOx Emissions (g)	44

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.3	0.8	0.5	0.5	0.8	4.8	6.9	1.7	0.1	0.1	6.3	0.4
Delay / Veh (s)	56.6	54.2	49.0	44.4	40.0	32.0	47.1	14.7	10.9	47.8	58.4	34.2
St Del/Veh (s)	54.0	50.9	47.4	42.2	35.2	25.7	43.9	12.3	9.7	39.0	46.0	25.5
Stop/Veh	0.90	0.93	0.91	0.82	0.78	1.02	0.82	0.39	0.41	1.33	0.96	0.68
Avg Speed (mph)	5	5	5	12	13	13	4	11	11	13	11	15
Fuel Used (gal)	1.4	3.8	2.3	3.9	6.1	39.6	26.3	12.3	0.4	0.8	39.3	2.9
HC Emissions (g)	0	0	0	0	1	4	1	1	0	0	3	0
CO Emissions (g)	20	70	64	151	257	1521	369	266	4	15	917	103
NOx Emissions (g)	0	1	1	1	2	11	4	3	0	0	11	1

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	23.1
Delay / Veh (s)	38.5
St Del/Veh (s)	32.9
Stop/Veh	0.81
Avg Speed (mph)	10
Fuel Used (gal)	139.0
HC Emissions (g)	11
CO Emissions (g)	3757
NOx Emissions (g)	36

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	All
Total Delay (hr)	0.1	1.1	0.0	0.0	3.1	0.3	0.5	0.1	0.2	0.4	0.1	5.9
Delay / Veh (s)	16.2	5.9	3.8	16.4	19.5	14.2	45.4	43.9	9.8	27.0	23.3	13.8
St Del/Veh (s)	12.8	2.2	2.2	13.6	15.7	12.3	43.5	41.1	8.2	25.3	21.4	10.5
Stop/Veh	1.00	0.25	0.36	1.00	0.44	0.46	0.95	1.00	0.36	0.92	0.87	0.40
Avg Speed (mph)	11	20	18	8	11	11	5	6	13	8	9	13
Fuel Used (gal)	0.4	12.4	0.2	0.1	16.0	1.8	2.0	0.5	2.3	2.7	0.6	39.0
HC Emissions (g)	0	1	0	0	1	0	0	0	0	0	0	3
CO Emissions (g)	5	329	4	1	283	33	28	7	77	43	6	815
NOx Emissions (g)	0	4	0	0	4	0	0	0	1	0	0	10

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.3	0.0	0.0	4.9	0.1	5.3
Delay / Veh (s)	1.1	0.2	22.7	23.2	9.5	11.3
St Del/Veh (s)	0.0	0.0	20.1	20.0	9.3	9.3
Stop/Veh	0.00	0.00	0.57	0.15	1.00	0.08
Avg Speed (mph)	36	31	13	14	10	24
Fuel Used (gal)	29.5	0.0	0.3	41.1	0.5	71.3
HC Emissions (g)	4	0	0	5	0	8
CO Emissions (g)	934	1	7	2188	5	3134
NOx Emissions (g)	14	0	0	16	0	30

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.7	0.4	1.1
Delay / Veh (s)	4.6	2.1	3.2
St Del/Veh (s)	2.1	0.9	1.5
Stop/Veh	0.19	0.07	0.12
Avg Speed (mph)	29	32	30
Fuel Used (gal)	26.8	16.9	43.8
HC Emissions (g)	3	2	5
CO Emissions (g)	1436	293	1729
NOx Emissions (g)	12	7	18

39: Parkway Ave & Saratoga Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.1	0.3	0.4
Delay / Veh (s)	0.3	1.6	1.0
St Del/Veh (s)	0.0	0.8	0.4
Stop/Veh	0.00	0.03	0.02
Avg Speed (mph)	28	26	26
Fuel Used (gal)	8.3	18.3	26.6
HC Emissions (g)	1	2	3
CO Emissions (g)	190	340	530
NOx Emissions (g)	3	5	8

44: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.1	0.1
Delay / Veh (s)	0.3	0.5	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	35	37	36
Fuel Used (gal)	6.7	9.5	16.2
HC Emissions (g)	1	1	2
CO Emissions (g)	286	199	485
NOx Emissions (g)	4	4	8

Total Network Performance

Total Delay (hr)	215.9
Delay / Veh (s)	136.7
St Del/Veh (s)	119.5
Stop/Veh	1.47
Avg Speed (mph)	17
Fuel Used (gal)	1849.9
HC Emissions (g)	177
CO Emissions (g)	62311
NOx Emissions (g)	623

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.2	0.1	37
	11	0.4	4.0	0.0	30
Parkside Ave	12	22.2	26.5	0.0	6
	10	2.1	6.4	0.0	24
Berwyn Ave	15	0.9	16.8	0.2	45
	8	0.6	15.1	0.2	38
Vannest Ave	44	0.5	9.3	0.1	38
Sutherland Rd	9	0.8	5.3	0.0	34
N Olden Ave	27	58.4	82.3	0.3	13
Ewing High Entrance	6	2.3	13.4	0.1	24
Saratoga Ave	39	1.6	11.9	0.1	29
Ewing High Exit	5	2.4	7.1	0.0	20
Farrell Ave	30	20.1	26.4	0.1	12
NJDOT Driveway	34	23.7	30.1	0.1	17
	4	34.2	47.5	0.1	11
Lower Ferry Rd	24	107.8	114.3	0.1	5
	3	3.8	19.1	0.2	32
	22	0.3	4.1	0.0	37
	2	2.8	20.5	0.2	34
Scotch Rd	20	13.5	18.9	0.1	12
	1	3.7	22.6	0.2	33
Shopping Center	37	2.1	10.5	0.1	32
	36	1.4	13.9	0.1	36
Total		305.9	533.2	2.5	20

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	4.6	17.4	0.1	28
	1	1.3	9.7	0.1	35
Sylvia St	20	10.7	29.4	0.2	25
	2	1.7	7.8	0.1	30
	22	1.5	19.1	0.2	37
	3	1.4	5.2	0.0	29
Lower Ferry Rd	24	445.7	459.8	0.2	6
	4	3.3	10.5	0.1	26
NJDOT Driveway	34	1.1	12.6	0.1	41
	30	5.9	12.3	0.1	22
Ewing High Exit	5	1.1	7.7	0.1	27
Saratoga Ave	39	0.3	5.2	0.0	27
Ewing High Entrance	6	0.5	10.9	0.1	31
Lexington Ave	27	14.7	22.7	0.1	15
Sutherland Rd	9	2.5	27.0	0.3	39
Vannest Ave	44	0.2	4.8	0.0	37
	8	0.5	9.3	0.1	38
Berwyn Ave	15	0.9	14.4	0.2	40
	10	3.2	21.9	0.2	34
Parkside Ave	12	26.9	30.6	0.0	5
	11	2.4	7.2	0.0	22
	41	0.1	3.6	0.0	33
Total		530.7	749.1	2.4	23

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.1	3.8	0.3	0.7	4.9
Delay / Veh (s)	32.8	70.8	1.7	3.3	10.6
St Del/Veh (s)	32.7	73.1	0.9	1.7	9.8
Stop/Veh	1.00	0.90	0.04	0.09	0.17
Avg Speed (mph)	4	2	23	18	13
Fuel Used (gal)	0.2	9.9	17.6	8.0	35.6

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.4	0.2	0.9	0.2	1.7
Delay / Veh (s)	15.2	1.2	4.6	3.5	3.7
St Del/Veh (s)	13.0	0.5	1.5	1.7	1.7
Stop/Veh	0.79	0.00	0.00	0.01	0.04
Avg Speed (mph)	12	28	20	18	21
Fuel Used (gal)	2.4	17.9	28.8	6.6	55.7

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.2	0.1	0.0	0.4
Delay / Veh (s)	6.7	4.4	3.8	2.2	0.9	0.2	1.6
St Del/Veh (s)	5.5	4.4	2.2	0.2	0.0	0.0	0.4
Stop/Veh	1.00	1.00	0.50	0.00	0.00	0.00	0.06
Avg Speed (mph)	7	8	29	35	33	21	32
Fuel Used (gal)	0.3	0.1	0.4	28.6	6.9	0.3	36.6

11: Saratoga Ave & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.4	0.4
Delay / Veh (s)	0.2	1.9	1.1
St Del/Veh (s)	0.0	0.2	0.1
Stop/Veh	0.00	0.02	0.01
Avg Speed (mph)	28	26	26
Fuel Used (gal)	6.8	24.5	31.3

12: Parkway Ave & Parkside Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	1.1	0.3	0.4	0.8	0.0	1.4	1.5	0.2	0.0	2.7	0.2
Delay / Veh (s)	27.7	23.6	7.9	26.9	19.0	9.4	27.6	16.1	11.9	29.1	26.0	19.6
St Del/Veh (s)	25.4	18.8	6.0	25.1	15.3	8.3	23.8	12.1	9.6	25.6	20.5	16.5
Stop/Veh	0.83	0.65	0.25	0.87	0.60	0.60	0.92	0.49	0.50	0.83	0.73	0.74
Avg Speed (mph)	4	5	10	7	10	13	10	13	14	11	11	12
Fuel Used (gal)	2.3	3.9	1.5	1.5	4.1	0.2	8.8	13.3	1.8	0.3	20.5	1.9

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	9.2
Delay / Veh (s)	21.0
St Del/Veh (s)	17.0
Stop/Veh	0.64
Avg Speed (mph)	10
Fuel Used (gal)	60.0

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBR	WBL	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Delay / Veh (s)	10.4	4.3	7.2	5.3	3.1	0.9	0.4	3.4	0.9	0.6	1.2
St Del/Veh (s)	9.1	4.2	5.7	5.1	1.7	0.1	0.1	2.2	0.2	0.0	0.4
Stop/Veh	1.00	1.00	1.00	1.00	0.33	0.00	0.00	0.25	0.00	0.00	0.04
Avg Speed (mph)	14	17	17	18	29	37	31	30	38	31	36
Fuel Used (gal)	0.3	0.3	0.2	0.2	0.1	12.2	0.2	0.2	25.8	0.2	39.7

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.3	0.6	0.0	0.3	0.1	0.1	0.0	2.1	0.1	0.1	3.8
Delay / Veh (s)	9.7	6.4	12.3	3.9	2.6	54.6	86.5	47.8	43.0	2.7	11.0
St Del/Veh (s)	6.3	2.8	10.5	2.6	0.1	52.8	86.0	43.9	38.0	0.7	8.2
Stop/Veh	0.54	0.22	0.50	0.13	0.00	0.75	1.00	0.91	0.80	0.02	0.27
Avg Speed (mph)	24	30	13	25	21	4	4	12	13	31	22
Fuel Used (gal)	5.9	19.6	0.2	8.3	1.0	0.2	0.1	13.9	0.8	7.3	57.3

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	0.6	0.0	0.3	0.8	0.1	0.7	2.0	0.2	0.4	1.0	0.4
Delay / Veh (s)	9.1	4.5	1.9	9.0	7.0	3.0	37.8	41.1	8.5	42.0	39.2	37.1
St Del/Veh (s)	7.1	2.6	1.3	6.6	3.9	1.9	35.7	37.6	8.1	38.7	36.1	35.8
Stop/Veh	0.50	0.11	0.29	0.61	0.26	0.37	0.83	0.86	0.76	1.18	0.84	0.85
Avg Speed (mph)	22	29	28	14	18	19	10	9	19	7	7	7
Fuel Used (gal)	0.9	16.4	1.5	2.8	9.5	1.8	4.5	12.4	4.8	2.2	5.6	2.0

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	6.5
Delay / Veh (s)	14.1
St Del/Veh (s)	11.8
Stop/Veh	0.43
Avg Speed (mph)	15
Fuel Used (gal)	64.3

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.1	0.5	0.3	0.4	0.4	2.0	3.2	0.7	0.0	0.2	3.1	0.1
Delay / Veh (s)	50.8	49.9	51.5	36.5	30.9	17.8	41.1	6.8	6.6	20.9	28.6	19.9
St Del/Veh (s)	48.7	47.2	50.4	34.9	26.8	15.2	38.4	5.1	5.7	15.2	21.6	13.7
Stop/Veh	1.00	0.94	1.00	0.77	0.69	0.70	0.83	0.25	0.41	0.87	0.61	0.54
Avg Speed (mph)	5	6	5	14	15	17	6	17	16	20	18	21
Fuel Used (gal)	0.6	2.4	1.2	2.7	3.6	27.1	13.4	8.1	0.5	3.2	32.7	1.0

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	11.0
Delay / Veh (s)	23.9
St Del/Veh (s)	20.4
Stop/Veh	0.62
Avg Speed (mph)	14
Fuel Used (gal)	96.5

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.1	1.0	0.0	0.2	2.5	0.3	0.3	0.1	0.1	1.0	0.2	0.1
Delay / Veh (s)	32.9	6.5	3.2	17.5	11.0	8.6	36.2	34.8	5.9	38.0	34.3	17.3
St Del/Veh (s)	30.0	3.5	2.2	13.8	6.6	5.9	34.5	32.5	4.5	35.8	32.2	16.8
Stop/Veh	1.00	0.20	0.20	0.89	0.37	0.41	0.81	0.83	0.36	0.86	0.80	0.76
Avg Speed (mph)	6	21	19	8	11	11	6	6	15	7	7	10
Fuel Used (gal)	0.4	12.3	0.2	1.1	23.3	2.8	1.5	0.3	1.0	5.2	1.0	1.2

30: Parkway Ave & Farrell Ave Performance by movement

Movement	All
Total Delay (hr)	5.8
Delay / Veh (s)	11.9
St Del/Veh (s)	8.4
Stop/Veh	0.38
Avg Speed (mph)	12
Fuel Used (gal)	50.4

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.3	0.0	0.3	0.6	0.0	1.1
Delay / Veh (s)	2.1	1.1	7.6	2.7	6.2	2.9
St Del/Veh (s)	0.7	0.6	4.0	0.1	6.0	0.7
Stop/Veh	0.00	0.04	0.55	0.00	1.00	0.05
Avg Speed (mph)	35	28	15	25	14	27
Fuel Used (gal)	15.7	1.3	4.5	37.7	0.0	59.2

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.6	0.4	1.1
Delay / Veh (s)	4.6	3.5	4.1
St Del/Veh (s)	2.3	2.0	2.2
Stop/Veh	0.20	0.15	0.17
Avg Speed (mph)	29	28	28
Fuel Used (gal)	20.4	10.8	31.2

43: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.2	0.2
Delay / Veh (s)	0.3	1.1	0.8
St Del/Veh (s)	0.1	0.5	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	34	37	36
Fuel Used (gal)	5.3	13.1	18.4

Total Network Performance

Total Delay (hr)	50.3
Delay / Veh (s)	39.9
St Del/Veh (s)	28.7
Stop/Veh	1.00
Avg Speed (mph)	22
Fuel Used (gal)	1151.0

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.3	0.1	37
Parkside Ave	12	19.0	26.8	0.1	10
	10	2.2	6.5	0.0	24
Berwyn Ave	15	0.9	18.2	0.2	41
	8	0.6	15.1	0.2	38
Vannest Ave	43	1.1	9.1	0.1	41
Sutherland Rd	9	0.9	5.1	0.0	35
N Olden Ave	27	28.7	52.2	0.3	20
Ewing High Entrance	6	6.1	15.6	0.1	25
Saratoga Ave	11	1.9	13.5	0.1	25
Ewing High Exit	5	3.3	7.4	0.0	20
Farrell Ave	30	10.6	17.7	0.1	12
NJDOT Driveway	34	2.9	9.9	0.1	27
	4	1.2	14.5	0.1	36
Lower Ferry Rd	24	7.0	12.8	0.1	22
	3	2.4	17.7	0.2	34
	22	0.2	3.9	0.0	38
	2	1.0	17.3	0.2	37
Scotch Rd	20	3.9	10.4	0.1	28
	1	1.7	20.5	0.2	36
Shopping Center	37	3.5	11.9	0.1	28
	36	1.4	13.9	0.1	36
Total		100.7	327.4	2.5	28

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	4.6	17.4	0.1	28
	1	1.3	9.7	0.1	35
Sylvia St	20	6.4	25.1	0.2	30
	2	1.3	8.7	0.1	33
	22	0.9	17.2	0.2	38
	3	0.2	4.0	0.0	37
Lower Ferry Rd	24	4.5	16.1	0.2	38
	4	1.4	8.6	0.1	32
NJDOT Driveway	34	2.1	13.1	0.1	42
	30	6.5	12.9	0.1	22
Ewing High Exit	5	0.8	7.8	0.1	27
Saratoga Ave	11	0.2	4.7	0.0	28
Ewing High Entrance	6	1.2	11.8	0.1	30
Lexington Ave	27	6.8	15.4	0.1	21
Sutherland Rd	9	2.5	29.1	0.3	36
Vannest Ave	43	0.2	4.7	0.0	38
	8	0.4	9.2	0.1	39
Berwyn Ave	15	0.9	14.4	0.2	40
	10	2.5	21.2	0.2	35
Parkside Ave	12	23.6	27.1	0.0	6
	41	2.7	10.7	0.1	26
Total		71.0	288.9	2.4	30

5: Ewing High Exit & Parkway Ave Performance by movement

Movement	WBL	WBR	SET	NWT	All
Total Delay (hr)	0.0	0.1	0.6	0.1	0.7
Delay / Veh (s)	5.8	6.3	2.6	0.5	2.0
St Del/Veh (s)	5.7	6.9	1.6	0.0	1.2
Stop/Veh	0.97	1.00	0.07	0.00	0.09
Avg Speed (mph)	6	6	20	27	21
Fuel Used (gal)	0.2	0.3	21.7	4.9	27.1
HC Emissions (g)	0	0	2	0	3
CO Emissions (g)	2	5	831	69	906
NOx Emissions (g)	0	0	9	1	11

6: Ewing High Entrance & Parkway Ave Performance by movement

Movement	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.3	0.0	0.5
Delay / Veh (s)	0.5	1.3	1.4	1.0
St Del/Veh (s)	0.0	0.1	0.1	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (mph)	28	22	20	24
Fuel Used (gal)	18.1	43.7	0.3	62.0
HC Emissions (g)	2	5	0	7
CO Emissions (g)	360	1888	9	2258
NOx Emissions (g)	5	21	0	25

9: Sutherland Rd & Parkway Ave Performance by movement

Movement	WBL	WBR	SEL	SET	NWT	NWR	All
Total Delay (hr)	0.1	0.0	0.0	0.3	0.1	0.0	0.5
Delay / Veh (s)	5.6	3.5	7.2	2.4	0.8	0.1	1.9
St Del/Veh (s)	4.4	3.4	3.4	0.1	0.0	0.0	0.3
Stop/Veh	1.00	1.00	0.50	0.00	0.00	0.00	0.06
Avg Speed (mph)	8	9	28	34	33	21	33
Fuel Used (gal)	0.3	0.1	0.5	52.4	4.8	0.2	58.3
HC Emissions (g)	0	0	0	7	0	0	8
CO Emissions (g)	3	1	19	2809	117	3	2952
NOx Emissions (g)	0	0	0	27	2	0	29

12: Parkway Ave & Parkside Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	1.5	0.3	0.8	1.1	0.0	0.6	2.3	0.4	0.0	2.8	0.2
Delay / Veh (s)	32.3	28.9	10.6	33.0	22.7	11.3	26.3	19.5	15.8	33.3	25.1	19.6
St Del/Veh (s)	29.3	23.8	8.2	31.0	19.4	10.5	22.1	14.1	12.4	29.6	19.7	16.5
Stop/Veh	0.87	0.70	0.36	0.86	0.61	0.67	0.95	0.55	0.57	1.00	0.66	0.67
Avg Speed (mph)	4	5	8	4	6	8	10	11	12	10	11	12
Fuel Used (gal)	2.1	5.3	1.4	2.6	4.5	0.1	4.0	18.1	3.7	0.3	22.0	1.7
HC Emissions (g)	0	0	0	0	0	0	0	1	0	0	2	0
CO Emissions (g)	20	79	16	28	79	1	145	467	108	8	627	48
NOx Emissions (g)	0	1	0	0	1	0	1	5	1	0	6	0

12: Parkway Ave & Parkside Ave Performance by movement

Movement	All
Total Delay (hr)	10.7
Delay / Veh (s)	23.0
St Del/Veh (s)	18.6
Stop/Veh	0.64
Avg Speed (mph)	9
Fuel Used (gal)	65.8
HC Emissions (g)	5
CO Emissions (g)	1627
NOx Emissions (g)	16

15: Berwyn Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3
Delay / Veh (s)	6.3	7.9	4.0	12.7	4.2	3.5	1.0	0.4	2.6	1.0	0.5	1.2
St Del/Veh (s)	5.4	5.9	3.9	10.7	3.9	2.0	0.0	0.0	1.2	0.2	0.1	0.3
Stop/Veh	1.00	1.00	1.00	1.00	1.00	0.33	0.00	0.00	0.00	0.00	0.00	0.03
Avg Speed (mph)	14	15	17	15	19	28	37	31	32	38	32	36
Fuel Used (gal)	0.0	0.1	0.3	0.1	0.2	0.2	15.5	0.4	0.2	21.6	0.3	38.9
HC Emissions (g)	0	0	0	0	0	0	2	0	0	3	0	5
CO Emissions (g)	0	1	2	1	2	4	341	3	9	1051	10	1424
NOx Emissions (g)	0	0	0	0	0	0	7	0	0	11	0	18

20: Parkway Ave & Scotch Rd Performance by movement

Movement	SEL	SET	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	All
Total Delay (hr)	0.9	1.1	0.1	2.3	0.2	0.1	0.3	0.5	4.1	0.1	0.2	9.9
Delay / Veh (s)	18.4	10.7	19.7	13.3	3.2	57.6	58.5	56.2	62.0	43.7	4.4	18.8
St Del/Veh (s)	15.3	7.0	16.7	9.5	0.0	56.4	55.7	55.4	56.2	37.9	2.0	15.1
Stop/Veh	0.79	0.35	0.75	0.32	0.01	0.86	0.94	0.94	0.95	0.83	0.10	0.42
Avg Speed (mph)	19	25	8	12	19	4	4	4	10	13	30	16
Fuel Used (gal)	9.9	20.2	0.4	18.2	1.7	0.4	1.1	1.9	23.4	0.5	10.8	88.6
HC Emissions (g)	1	2	0	1	0	0	0	0	2	0	1	8
CO Emissions (g)	209	414	9	640	38	3	16	35	762	14	469	2609
NOx Emissions (g)	3	8	0	6	0	0	0	0	7	0	4	29

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	1.7	18.3	3.5	4.5	6.0	0.8	9.0	8.3	5.1	5.1	11.4	3.5
Delay / Veh (s)	110.9	100.6	95.1	91.7	34.9	23.6	181.4	99.0	79.9	198.7	188.2	188.5
St Del/Veh (s)	99.1	86.6	85.0	86.8	28.7	20.7	174.9	91.7	75.8	189.3	178.2	180.3
Stop/Veh	1.59	0.96	1.14	1.29	0.58	0.66	1.75	1.17	1.19	2.20	1.61	1.65
Avg Speed (mph)	7	8	9	3	8	10	3	6	8	3	3	3
Fuel Used (gal)	5.7	68.1	12.9	13.8	29.5	4.1	29.2	33.5	22.7	15.1	34.2	10.3
HC Emissions (g)	0	3	1	0	2	0	1	1	1	1	2	1
CO Emissions (g)	63	983	205	155	647	78	342	430	390	188	464	129
NOx Emissions (g)	1	12	2	1	7	1	3	5	4	2	4	1

24: Parkway Ave & Lower Ferry Rd Performance by movement

Movement	All
Total Delay (hr)	77.1
Delay / Veh (s)	97.6
St Del/Veh (s)	89.1
Stop/Veh	1.10
Avg Speed (mph)	5
Fuel Used (gal)	279.0
HC Emissions (g)	14
CO Emissions (g)	4073
NOx Emissions (g)	43

27: Lexington Ave & Parkway Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Total Delay (hr)	0.4	1.0	0.7	0.5	0.9	5.0	7.1	2.2	0.1	0.1	6.3	0.4
Delay / Veh (s)	64.8	62.8	64.1	42.9	40.9	33.6	47.0	18.1	15.5	53.7	60.1	33.9
St Del/Veh (s)	61.7	59.1	62.2	40.6	35.9	27.1	43.6	15.3	13.9	42.9	47.8	25.6
Stop/Veh	1.00	1.00	1.03	0.76	0.78	1.07	0.84	0.46	0.45	1.50	0.97	0.75
Avg Speed (mph)	5	5	5	12	12	13	4	10	9	12	11	15
Fuel Used (gal)	1.5	4.5	2.9	4.0	6.6	39.9	27.0	13.6	0.6	0.8	38.8	3.1
HC Emissions (g)	0	0	0	0	0	4	1	1	0	0	3	0
CO Emissions (g)	21	84	88	153	236	1516	382	249	5	15	877	75
NOx Emissions (g)	0	1	1	1	2	12	4	3	0	0	10	1

27: Lexington Ave & Parkway Ave Performance by movement

Movement	All
Total Delay (hr)	24.5
Delay / Veh (s)	40.3
St Del/Veh (s)	34.7
Stop/Veh	0.84
Avg Speed (mph)	9
Fuel Used (gal)	143.2
HC Emissions (g)	11
CO Emissions (g)	3700
NOx Emissions (g)	35

30: Parkway Ave & Farrell Ave Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	All
Total Delay (hr)	0.1	1.3	0.0	0.0	1.2	0.1	0.3	0.1	0.1	0.5	0.1	3.8
Delay / Veh (s)	13.4	6.4	4.0	17.5	7.6	5.4	31.5	39.4	5.7	27.4	19.2	8.5
St Del/Veh (s)	10.0	2.2	2.0	15.0	4.5	3.8	29.5	37.0	4.2	25.7	17.5	5.2
Stop/Veh	0.82	0.24	0.32	0.80	0.36	0.38	0.95	0.86	0.33	0.92	0.75	0.36
Avg Speed (mph)	11	20	18	8	14	14	7	6	16	8	10	15
Fuel Used (gal)	0.5	14.1	0.4	0.1	11.5	1.2	1.8	0.4	2.1	2.9	0.5	35.4
HC Emissions (g)	0	1	0	0	1	0	0	0	0	0	0	3
CO Emissions (g)	7	357	5	1	223	22	30	5	59	55	5	771
NOx Emissions (g)	0	4	0	0	3	0	0	0	1	1	0	9

34: Parkway Ave & NJDOT Driveway Performance by movement

Movement	SET	SER	NWL	NWT	NER	All
Total Delay (hr)	0.4	0.0	0.0	0.5	0.1	1.0
Delay / Veh (s)	1.3	0.6	13.9	2.4	11.3	2.0
St Del/Veh (s)	0.0	0.0	11.1	0.7	11.2	0.5
Stop/Veh	0.00	0.00	0.86	0.00	1.04	0.02
Avg Speed (mph)	36	30	12	28	10	32
Fuel Used (gal)	30.3	0.1	0.2	37.4	0.6	68.5
HC Emissions (g)	4	0	0	5	0	9
CO Emissions (g)	899	1	6	2748	6	3662
NOx Emissions (g)	14	0	0	19	0	32

37: Shopping Center & Parkway Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.7	0.4	1.1
Delay / Veh (s)	4.6	2.1	3.2
St Del/Veh (s)	2.1	0.9	1.4
Stop/Veh	0.19	0.07	0.12
Avg Speed (mph)	29	32	30
Fuel Used (gal)	26.1	17.3	43.4
HC Emissions (g)	3	1	5
CO Emissions (g)	1435	263	1698
NOx Emissions (g)	12	6	18

39: Parkway Ave & Saratoga Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.1	0.1	0.2
Delay / Veh (s)	0.3	0.5	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	28	28	28
Fuel Used (gal)	9.0	17.6	26.7
HC Emissions (g)	1	2	3
CO Emissions (g)	185	315	500
NOx Emissions (g)	3	5	7

44: Parkway Ave & Vannest Ave Performance by movement

Movement	SET	NWT	All
Total Delay (hr)	0.0	0.1	0.1
Delay / Veh (s)	0.3	0.6	0.4
St Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	35	37	36
Fuel Used (gal)	7.0	9.3	16.3
HC Emissions (g)	1	1	2
CO Emissions (g)	290	186	476
NOx Emissions (g)	3	4	8

Total Network Performance

Total Delay (hr)	138.5
Delay / Veh (s)	85.7
St Del/Veh (s)	69.7
Stop/Veh	1.37
Avg Speed (mph)	17
Fuel Used (gal)	1692.9
HC Emissions (g)	169
CO Emissions (g)	61182
NOx Emissions (g)	614

Arterial Level of Service: NW Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	41	0.3	7.2	0.1	36
	11	0.4	4.0	0.0	30
Parkside Ave	12	22.7	27.1	0.0	6
	10	2.2	6.5	0.0	24
Berwyn Ave	15	1.0	17.1	0.2	44
	8	0.6	15.2	0.2	38
Vannest Ave	44	0.6	9.4	0.1	38
Sutherland Rd	9	0.8	5.3	0.0	33
N Olden Ave	27	60.3	84.2	0.3	12
Ewing High Entrance	6	2.3	13.4	0.1	24
Saratoga Ave	39	0.5	10.8	0.1	32
Ewing High Exit	5	0.5	5.2	0.0	27
Farrell Ave	30	7.7	14.0	0.1	16
NJDOT Driveway	34	2.5	8.9	0.1	33
	4	3.7	17.1	0.1	30
Lower Ferry Rd	24	34.9	41.2	0.1	9
	3	3.3	18.6	0.2	33
	22	0.3	4.0	0.0	37
	2	2.8	20.5	0.2	34
Scotch Rd	20	13.3	18.8	0.1	13
	1	3.9	22.8	0.2	33
Shopping Center	37	2.1	10.5	0.1	32
	36	1.4	14.0	0.1	35
Total		168.1	395.8	2.5	23

Arterial Level of Service: SE Parkway Ave

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shopping Center	37	4.6	17.4	0.1	28
	1	1.3	9.6	0.1	35
Sylvia St	20	10.7	29.3	0.2	26
	2	1.7	7.7	0.1	31
	22	1.4	19.0	0.2	37
	3	0.8	4.6	0.0	33
Lower Ferry Rd	24	100.6	113.8	0.2	9
	4	2.9	10.2	0.1	27
NJDOT Driveway	34	1.3	12.9	0.1	41
	30	6.5	12.9	0.1	21
Ewing High Exit	5	1.3	7.8	0.1	26
Saratoga Ave	39	0.3	5.3	0.0	27
Ewing High Entrance	6	0.5	10.8	0.1	31
Lexington Ave	27	18.1	26.2	0.1	13
Sutherland Rd	9	2.7	26.9	0.3	39
Vannest Ave	44	0.3	4.8	0.0	37
	8	0.5	9.4	0.1	38
Berwyn Ave	15	1.0	14.3	0.2	40
	10	3.2	21.8	0.2	34
Parkside Ave	12	28.9	32.6	0.0	5
	11	2.4	7.2	0.0	22
	41	0.1	3.6	0.0	33
Total		191.1	408.2	2.4	24

1: Firestone/Bank Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.1	0.3	0.4
Delay / Veh (s)	0.5	2.3	1.2
St Del/Veh (s)	0.1	0.2	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	41	34	38
HC Emissions (g)	5	6	11
CO Emissions (g)	1798	3468	5266
NOx Emissions (g)	17	22	39

2: Unnamed Street & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.1	0.1	0.2
Delay / Veh (s)	0.8	0.6	0.8
St Del/Veh (s)	0.5	0.1	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	31	28	30
HC Emissions (g)	1	2	3
CO Emissions (g)	587	741	1329
NOx Emissions (g)	4	6	10

4: Shopping Center Driveway & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.1	0.3
Delay / Veh (s)	8.5	4.6	0.6	0.3	4.3	0.5	0.7
St Del/Veh (s)	7.3	4.3	0.0	0.0	3.3	0.0	0.2
Stop/Veh	1.00	1.00	0.00	0.00	0.48	0.00	0.04
Avg Speed (mph)	13	16	36	22	25	43	36
HC Emissions (g)	0	0	5	0	0	2	6
CO Emissions (g)	1	15	2686	34	19	454	3209
NOx Emissions (g)	0	0	14	0	0	8	23

6: Bristol Drive & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.3	0.0	0.0	0.1	0.4
Delay / Veh (s)	7.9	5.0	1.4	1.0	3.1	0.4	1.2
St Del/Veh (s)	6.4	4.7	0.1	0.1	2.2	0.0	0.2
Stop/Veh	1.00	1.00	0.00	0.00	0.43	0.00	0.03
Avg Speed (mph)	17	18	31	27	21	41	32
HC Emissions (g)	0	0	6	0	0	1	7
CO Emissions (g)	2	7	2065	27	5	282	2388
NOx Emissions (g)	0	0	20	0	0	3	23

8: Green Tree Road & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	1.5	0.1	0.8	0.1	0.1	0.2	2.6
Delay / Veh (s)	41.9	3.3	5.2	3.3	10.4	2.0	8.0
St Del/Veh (s)	39.6	3.0	2.4	1.9	8.7	1.0	6.1
Stop/Veh	0.96	0.88	0.22	0.28	0.68	0.12	0.33
Avg Speed (mph)	7	19	18	16	20	31	18
HC Emissions (g)	0	0	1	0	0	1	3
CO Emissions (g)	148	65	233	18	11	272	746
NOx Emissions (g)	2	1	3	0	0	5	11

12: Heston Road & Delsea Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.2	2.0	0.5	0.5	2.2	0.7	0.4	2.1	0.3	0.3	1.6	0.2
Delay / Veh (s)	32.3	34.0	23.3	29.4	36.8	27.9	13.5	13.6	10.0	15.8	16.1	10.7
St Del/Veh (s)	29.2	29.7	20.8	25.6	32.2	24.8	10.8	8.2	7.2	13.8	11.5	8.9
Stop/Veh	0.93	0.83	0.82	1.03	0.89	0.91	0.71	0.43	0.49	0.81	0.51	0.58
Avg Speed (mph)	9	8	10	10	9	10	18	20	19	18	19	20
HC Emissions (g)	1	1	0	0	1	0	0	3	0	0	2	0
CO Emissions (g)	193	227	68	42	156	66	75	882	89	37	491	63
NOx Emissions (g)	2	3	1	1	2	1	1	9	1	1	6	1

12: Heston Road & Delsea Drive Performance by movement

Movement	All
Total Delay (hr)	11.9
Delay / Veh (s)	21.2
St Del/Veh (s)	17.0
Stop/Veh	0.66
Avg Speed (mph)	14
HC Emissions (g)	8
CO Emissions (g)	2388
NOx Emissions (g)	27

Total Network Performance

Total Delay (hr)	16.8
Delay / Veh (s)	25.9
St Del/Veh (s)	18.4
Stop/Veh	0.77
Avg Speed (mph)	23
HC Emissions (g)	62
CO Emissions (g)	25774
NOx Emissions (g)	220

Arterial Level of Service: NB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Unnamed Street	2	0.8	6.8	0.1	34
Green Tree Road	8	5.2	11.2	0.1	18
Bristol Drive	6	1.5	18.3	0.2	34
Shopping Center Driv	4	0.6	6.5	0.1	37
Firestone/Bank Drive	1	0.5	9.9	0.1	46
William Dalton Drive	12	13.6	25.1	0.1	20
	3	3.0	16.0	0.2	36
Total		25.2	93.7	0.8	30

Arterial Level of Service: SB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	3	0.2	6.5	0.1	45
Heston Road	12	16.1	28.9	0.2	20
Firestone/Bank Drive	1	2.9	14.5	0.1	35
Shopping Center Driv	4	0.5	10.1	0.1	45
Bristol Drive	6	0.4	5.5	0.1	44
Green Tree Road	8	2.0	19.3	0.2	32
Unnamed Street	2	0.6	6.9	0.1	29
Total		22.7	91.7	0.8	31

1: Firestone/Bank Driveway & Delsea Drive Performance by approach

Approach	NB	SB	All
Total Delay (hr)	0.2	0.7	0.8
Delay / Veh (s)	0.6	3.1	1.8
St Del/Veh (s)	0.1	0.2	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	39	32	35
Fuel Used (gal)	40.4	68.1	108.4
HC Emissions (g)	6	10	17
CO Emissions (g)	2804	5770	8573
NOx Emissions (g)	23	36	59

2: Unnamed Street & Delsea Drive Performance by approach

Approach	NB	SB	All
Total Delay (hr)	0.3	1.0	1.4
Delay / Veh (s)	1.4	3.5	2.6
St Del/Veh (s)	0.7	0.8	0.8
Stop/Veh	0.01	0.12	0.07
Avg Speed (mph)	29	21	24
Fuel Used (gal)	12.7	33.0	45.7
HC Emissions (g)	2	4	6
CO Emissions (g)	634	1716	2350
NOx Emissions (g)	5	15	19

4: Shopping Center Driveway & Delsea Drive Performance by approach

Approach	WB	NB	SB	All
Total Delay (hr)	0.4	0.3	1.0	1.6
Delay / Veh (s)	11.4	1.1	3.6	2.9
St Del/Veh (s)	10.8	0.0	1.6	1.4
Stop/Veh	1.01	0.00	0.13	0.12
Avg Speed (mph)	12	32	32	29
Fuel Used (gal)	3.2	32.3	31.8	67.4
HC Emissions (g)	0	5	4	9
CO Emissions (g)	95	2962	1539	4595
NOx Emissions (g)	1	16	16	32

6: Bristol Drive & Delsea Drive Performance by approach

Approach	WB	NB	SB	All
Total Delay (hr)	0.0	0.4	0.3	0.8
Delay / Veh (s)	12.0	1.7	1.1	1.5
St Del/Veh (s)	11.0	0.1	0.1	0.2
Stop/Veh	1.09	0.00	0.01	0.01
Avg Speed (mph)	17	31	36	32
Fuel Used (gal)	0.5	58.2	18.5	77.2
HC Emissions (g)	0	7	3	10
CO Emissions (g)	4	2818	1297	4120
NOx Emissions (g)	0	25	9	34

8: Green Tree Road & Delsea Drive Performance by approach

Approach	WB	NB	SB	All
Total Delay (hr)	2.6	1.5	2.2	6.3
Delay / Veh (s)	34.9	6.7	8.2	11.1
St Del/Veh (s)	32.4	3.1	4.6	7.6
Stop/Veh	0.98	0.28	0.30	0.38
Avg Speed (mph)	8	16	23	17
Fuel Used (gal)	15.9	16.1	40.3	72.3
HC Emissions (g)	2	1	4	6
CO Emissions (g)	488	357	864	1709
NOx Emissions (g)	5	5	12	22

12: Heston Road & Delsea Drive Performance by approach

Approach	EB	WB	NB	SB	All
Total Delay (hr)	10.0	5.9	5.6	5.7	27.4
Delay / Veh (s)	64.5	40.1	27.6	24.6	36.9
St Del/Veh (s)	56.2	33.6	21.8	18.4	30.3
Stop/Veh	1.25	1.02	0.76	0.74	0.91
Avg Speed (mph)	6	9	13	14	10
Fuel Used (gal)	43.0	31.8	32.0	37.2	144.0
HC Emissions (g)	3	2	3	3	11
CO Emissions (g)	905	441	853	996	3195
NOx Emissions (g)	9	6	9	11	35

Total Network Performance

Total Delay (hr)	40.4
Delay / Veh (s)	40.9
St Del/Veh (s)	28.8
Stop/Veh	1.03
Avg Speed (mph)	20
Fuel Used (gal)	798.5
HC Emissions (g)	96
CO Emissions (g)	40633
NOx Emissions (g)	333

Arterial Level of Service: NB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Unnamed Street	2	1.4	7.3	0.1	32
Green Tree Road	8	6.9	13.0	0.1	16
Bristol Drive	6	1.8	18.3	0.2	34
Shopping Center Driv	4	1.2	7.1	0.1	34
Firestone/Bank Drive	1	0.7	9.8	0.1	46
William Dalton Drive	12	28.3	39.6	0.1	13
	3	3.9	16.8	0.2	34
Total		44.0	112.0	0.8	25

Arterial Level of Service: SB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	3	0.4	6.7	0.1	44
Heston Road	12	24.8	37.7	0.2	15
Firestone/Bank Drive	1	3.9	15.5	0.1	32
Shopping Center Driv	4	2.8	11.8	0.1	40
Bristol Drive	6	1.0	6.6	0.1	37
Green Tree Road	8	7.0	23.7	0.2	26
Unnamed Street	2	4.1	10.5	0.1	20
Total		43.9	112.5	0.8	26

1: Firestone/Bank Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.3	0.1	0.4
Delay / Veh (s)	1.6	0.4	1.1
St Del/Veh (s)	0.6	0.0	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	39	42	40
Fuel Used (gal)	30.6	12.9	43.5
Fuel Eff. (mpg)	2.9	2.9	2.9
HC Emissions (g)	4	2	6
CO Emissions (g)	1760	840	2600
NOx Emissions (g)	17	8	25

2: Unnamed Street & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.2	0.1	0.3
Delay / Veh (s)	0.9	0.7	0.8
St Del/Veh (s)	0.5	0.1	0.3
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	31	28	29
Fuel Used (gal)	10.4	14.7	25.1
Fuel Eff. (mpg)	3.3	2.0	2.6
HC Emissions (g)	1	2	3
CO Emissions (g)	543	759	1302
NOx Emissions (g)	3	7	10

4: Shopping Center Driveway & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.1	0.4
Delay / Veh (s)	9.1	7.0	0.6	0.1	4.4	0.9	1.1
St Del/Veh (s)	7.8	6.8	0.0	0.0	3.4	0.0	0.3
Stop/Veh	1.00	1.00	0.00	0.00	0.47	0.00	0.04
Avg Speed (mph)	13	14	34	17	25	41	35
Fuel Used (gal)	0.2	0.8	9.2	0.1	0.7	14.4	25.5
Fuel Eff. (mpg)	3.3	3.4	1.9	6.4	4.9	4.2	3.3
HC Emissions (g)	0	0	1	0	0	2	3
CO Emissions (g)	2	19	685	2	17	491	1216
NOx Emissions (g)	0	0	5	0	0	8	13

6: Bristol Drive & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.1	0.4
Delay / Veh (s)	8.2	4.8	1.3	1.2	5.5	0.7	1.2
St Del/Veh (s)	7.0	4.6	0.9	1.2	3.9	0.0	0.7
Stop/Veh	1.00	1.00	0.00	0.00	0.57	0.00	0.03
Avg Speed (mph)	17	19	30	17	12	36	30
Fuel Used (gal)	0.2	0.7	5.8	0.1	0.1	9.6	16.6
Fuel Eff. (mpg)	3.4	3.5	3.0	5.3	3.7	1.8	2.3
HC Emissions (g)	0	0	0	0	0	1	2
CO Emissions (g)	2	7	114	0	2	1027	1152
NOx Emissions (g)	0	0	2	0	0	4	6

8: Green Tree Road & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	1.6	0.2	0.9	0.1	0.1	0.3	3.1
Delay / Veh (s)	41.8	7.3	6.2	3.5	12.3	2.6	9.0
St Del/Veh (s)	39.4	6.9	3.0	2.2	10.1	1.2	6.7
Stop/Veh	0.95	0.85	0.25	0.25	0.67	0.12	0.33
Avg Speed (mph)	7	16	17	16	17	29	17
Fuel Used (gal)	9.0	2.6	9.9	1.2	0.8	16.5	40.0
Fuel Eff. (mpg)	1.7	3.2	3.1	4.7	3.0	3.1	2.8
HC Emissions (g)	0	0	1	0	0	2	3
CO Emissions (g)	169	65	188	17	30	684	1153
NOx Emissions (g)	2	1	3	0	0	6	11

12: Heston Road & Delsea Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.3	2.1	0.5	0.6	2.3	0.7	0.5	2.0	0.2	0.3	1.9	0.1
Delay / Veh (s)	33.7	35.2	26.0	28.4	39.6	30.0	15.9	13.0	8.2	18.5	18.4	2.7
St Del/Veh (s)	30.5	30.7	23.4	24.7	34.6	26.6	13.3	8.8	6.6	14.8	12.4	2.6
Stop/Veh	0.96	0.84	0.86	1.01	0.95	0.92	0.77	0.42	0.50	0.86	0.53	0.53
Avg Speed (mph)	8	8	9	10	8	10	10	13	14	16	18	29
Fuel Used (gal)	7.8	12.0	3.8	4.3	13.2	4.9	2.3	15.5	1.7	2.4	15.7	2.5
Fuel Eff. (mpg)	1.9	1.9	2.2	2.4	2.2	2.4	3.1	2.5	4.2	4.2	3.8	4.7
HC Emissions (g)	1	1	0	0	1	0	0	2	0	0	1	0
CO Emissions (g)	201	211	82	63	186	81	45	697	35	31	390	106
NOx Emissions (g)	2	2	1	1	2	1	0	5	0	0	5	1

12: Heston Road & Delsea Drive Performance by movement

Movement	All
Total Delay (hr)	12.6
Delay / Veh (s)	21.8
St Del/Veh (s)	17.7
Stop/Veh	0.67
Avg Speed (mph)	12
Fuel Used (gal)	86.1
Fuel Eff. (mpg)	2.7
HC Emissions (g)	7
CO Emissions (g)	2127
NOx Emissions (g)	23

21: Blockbuster/Gas Station Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.2	0.3	0.6
Delay / Veh (s)	1.0	2.3	1.6
St Del/Veh (s)	0.0	0.1	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	38	27	32
Fuel Used (gal)	10.0	30.3	40.4
Fuel Eff. (mpg)	5.3	1.3	2.3
HC Emissions (g)	1	4	6
CO Emissions (g)	362	2487	2849
NOx Emissions (g)	4	15	20

Total Network Performance

Total Delay (hr)	19.3
Delay / Veh (s)	28.8
St Del/Veh (s)	19.8
Stop/Veh	0.78
Avg Speed (mph)	23
Fuel Used (gal)	527.8
Fuel Eff. (mpg)	2.6
HC Emissions (g)	61
CO Emissions (g)	25878
NOx Emissions (g)	221

Arterial Level of Service: NB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Unnamed Street	2	0.9	6.9	0.1	34
Green Tree Road	8	6.2	12.2	0.1	17
	17	2.3	17.3	0.1	30
Bristol Drive	6	1.3	4.0	0.0	33
	16	0.7	4.5	0.0	31
Shopping Center Driv	4	0.6	2.8	0.0	36
Firestone/Bank Drive	1	1.6	11.0	0.1	43
Blockbuster/Gas Stat	21	1.0	6.7	0.1	37
William Dalton Drive	12	13.0	18.7	0.1	14
	3	3.0	15.8	0.2	36
Total		30.6	100.0	0.8	29

Arterial Level of Service: SB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	3	0.5	6.7	0.1	44
Heston Road	12	18.4	31.3	0.2	18
Blockbuster/Gas Stat	21	3.0	9.0	0.1	28
Firestone/Bank Drive	1	0.4	6.1	0.1	41
Shopping Center Driv	4	0.9	10.6	0.1	42
	16	0.5	2.9	0.0	35
Bristol Drive	6	0.7	3.6	0.0	39
	17	0.2	3.0	0.0	34
Green Tree Road	8	2.6	17.2	0.1	30
Unnamed Street	2	0.7	7.0	0.1	29
Total		27.8	97.4	0.8	30

1: Firestone/Bank Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.5	0.1	0.6
Delay / Veh (s)	2.0	0.6	1.4
St Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	35	40	36
Fuel Used (gal)	52.1	18.9	71.0
Fuel Eff. (mpg)	2.0	2.7	2.2
HC Emissions (g)	8	3	11
CO Emissions (g)	3926	1382	5308
NOx Emissions (g)	29	12	41

2: Unnamed Street & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.4	0.4	0.7
Delay / Veh (s)	1.6	1.4	1.5
St Del/Veh (s)	0.8	0.1	0.4
Stop/Veh	0.01	0.00	0.01
Avg Speed (mph)	28	27	27
Fuel Used (gal)	12.7	31.9	44.6
Fuel Eff. (mpg)	3.4	2.0	2.4
HC Emissions (g)	1	4	5
CO Emissions (g)	608	1407	2015
NOx Emissions (g)	4	16	20

4: Shopping Center Driveway & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.3	0.4	0.4	0.0	0.5	1.0	2.7
Delay / Veh (s)	38.5	14.4	1.9	0.7	17.6	4.5	4.9
St Del/Veh (s)	36.9	14.2	0.2	0.4	15.2	2.5	3.2
Stop/Veh	1.03	1.00	0.00	0.04	0.75	0.00	0.11
Avg Speed (mph)	6	11	25	16	15	36	25
Fuel Used (gal)	1.3	2.9	10.5	0.6	3.4	26.3	45.0
Fuel Eff. (mpg)	1.9	2.5	2.1	4.8	3.6	3.4	3.0
HC Emissions (g)	0	0	1	0	0	4	6
CO Emissions (g)	23	78	499	8	67	1208	1882
NOx Emissions (g)	0	1	5	0	1	14	21

6: Bristol Drive & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.7	0.0	0.0	0.2	1.0
Delay / Veh (s)	15.1	8.4	2.6	2.5	6.9	1.0	2.0
St Del/Veh (s)	13.5	8.4	2.0	2.4	5.1	0.0	1.2
Stop/Veh	1.00	1.00	0.00	0.00	0.64	0.00	0.01
Avg Speed (mph)	15	18	28	17	11	34	30
Fuel Used (gal)	0.3	0.3	7.4	0.1	0.1	16.5	24.8
Fuel Eff. (mpg)	3.4	3.6	3.0	4.5	3.8	2.0	2.4
HC Emissions (g)	0	0	1	0	0	2	3
CO Emissions (g)	3	3	132	1	2	1399	1540
NOx Emissions (g)	0	0	2	0	0	8	10

8: Green Tree Road & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	2.2	0.3	1.5	0.1	0.4	1.5	6.0
Delay / Veh (s)	45.5	11.7	7.5	5.1	25.9	6.4	10.9
St Del/Veh (s)	42.1	11.4	3.4	3.0	21.9	2.5	7.2
Stop/Veh	0.98	0.84	0.29	0.37	0.95	0.16	0.34
Avg Speed (mph)	7	14	15	14	12	25	17
Fuel Used (gal)	12.3	3.0	14.2	1.4	2.9	36.8	70.6
Fuel Eff. (mpg)	1.6	2.9	3.0	3.9	2.8	3.2	2.8
HC Emissions (g)	1	0	1	0	0	4	6
CO Emissions (g)	354	118	261	19	73	1351	2177
NOx Emissions (g)	3	1	4	0	1	13	22

10: Blockbuster/Gas Station Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.2	0.7	0.9
Delay / Veh (s)	1.2	3.2	2.2
St Del/Veh (s)	0.0	0.1	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	37	25	30
Fuel Used (gal)	8.0	46.0	54.0
Fuel Eff. (mpg)	6.4	1.2	2.0
HC Emissions (g)	1	7	8
CO Emissions (g)	299	3665	3964
NOx Emissions (g)	3	25	29

12: Heston Road & Delsea Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	3.0	8.2	1.2	2.5	3.9	0.5	1.4	3.6	0.3	6.5	16.2	0.4
Delay / Veh (s)	81.9	80.7	71.2	57.5	44.3	33.6	32.0	25.4	18.1	117.2	108.4	20.4
St Del/Veh (s)	73.3	70.3	63.4	51.0	36.8	28.5	28.5	19.5	15.9	96.9	86.8	16.8
Stop/Veh	1.68	1.35	1.33	1.42	1.02	0.96	1.01	0.69	0.73	2.46	1.93	1.08
Avg Speed (mph)	5	5	5	7	8	9	6	8	9	4	5	15
Fuel Used (gal)	11.9	31.8	5.0	11.1	20.2	2.9	5.5	17.0	1.6	23.5	62.7	4.2
Fuel Eff. (mpg)	1.2	1.2	1.3	1.9	2.2	2.5	2.1	2.1	2.9	1.3	1.3	2.4
HC Emissions (g)	0	2	0	1	1	0	0	1	0	1	4	1
CO Emissions (g)	210	553	75	177	278	44	79	502	30	335	1101	271
NOx Emissions (g)	2	6	1	2	4	1	1	4	0	4	13	2

12: Heston Road & Delsea Drive Performance by movement

Movement	All
Total Delay (hr)	47.7
Delay / Veh (s)	65.5
St Del/Veh (s)	54.6
Stop/Veh	1.36
Avg Speed (mph)	6
Fuel Used (gal)	197.3
Fuel Eff. (mpg)	1.6
HC Emissions (g)	12
CO Emissions (g)	3656
NOx Emissions (g)	39

Total Network Performance

Total Delay (hr)	77.1
Delay / Veh (s)	79.3
St Del/Veh (s)	61.2
Stop/Veh	1.42
Avg Speed (mph)	16
Fuel Used (gal)	878.7
Fuel Eff. (mpg)	2.2
HC Emissions (g)	96
CO Emissions (g)	38018
NOx Emissions (g)	334

Arterial Level of Service: NB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Unnamed Street	2	1.6	7.5	0.1	31
Green Tree Road	8	7.5	13.7	0.1	15
	22	3.0	18.1	0.1	29
Bristol Drive	6	2.6	5.3	0.0	32
	21	1.6	5.3	0.0	26
Shopping Center Driv	4	1.9	4.1	0.0	26
Firestone/Bank Drive	1	2.1	11.3	0.1	40
Blockbuster/Gas Stat	10	1.2	6.9	0.1	36
William Dalton Drive	12	25.4	31.0	0.1	8
	3	4.1	16.9	0.2	34
Total		50.9	120.1	0.8	24

Arterial Level of Service: SB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	3	62.8	69.6	0.1	8
Heston Road	12	108.4	121.2	0.2	5
Blockbuster/Gas Stat	10	4.3	10.4	0.1	25
Firestone/Bank Drive	1	0.6	6.1	0.1	41
Shopping Center Driv	4	4.5	13.4	0.1	41
	21	0.8	3.2	0.0	32
Bristol Drive	6	1.0	4.2	0.0	33
	22	0.3	3.2	0.0	32
Green Tree Road	8	6.4	20.4	0.1	27
Unnamed Street	2	1.5	7.9	0.1	26
Total		190.5	259.6	0.8	13

1: Firestone/Bank Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.4	0.2	0.6
Delay / Veh (s)	1.7	1.4	1.6
St Del/Veh (s)	0.7	0.0	0.4
Stop/Veh	0.00	0.01	0.01
Avg Speed (mph)	39	35	38
Fuel Used (gal)	31.0	18.5	49.5
Fuel Eff. (mpg)	2.8	2.0	2.5
HC Emissions (g)	5	2	7
CO Emissions (g)	1852	1278	3130
NOx Emissions (g)	18	10	28

2: Unnamed Street & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.2	0.1	0.3
Delay / Veh (s)	0.9	0.7	0.8
St Del/Veh (s)	0.5	0.1	0.4
Stop/Veh	0.00	0.00	0.00
Avg Speed (mph)	31	28	29
Fuel Used (gal)	10.7	14.0	24.7
Fuel Eff. (mpg)	3.3	2.1	2.6
HC Emissions (g)	1	2	3
CO Emissions (g)	573	679	1252
NOx Emissions (g)	4	6	10

4: Shopping Center Driveway & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.1	0.3
Delay / Veh (s)	11.3	5.7	0.7	0.1	4.5	0.8	1.0
St Del/Veh (s)	10.0	5.5	0.0	0.0	3.3	0.0	0.3
Stop/Veh	1.00	1.00	0.00	0.00	0.48	0.00	0.04
Avg Speed (mph)	12	15	34	17	25	41	36
Fuel Used (gal)	0.3	0.7	9.2	0.1	0.7	16.2	27.2
Fuel Eff. (mpg)	3.2	3.4	1.9	6.7	4.2	3.7	3.1
HC Emissions (g)	0	0	1	0	0	2	3
CO Emissions (g)	2	14	708	2	28	639	1393
NOx Emissions (g)	0	0	5	0	0	9	14

6: Bristol Drive & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.1	0.4
Delay / Veh (s)	8.8	6.2	1.3	0.7	4.9	0.6	1.1
St Del/Veh (s)	7.3	6.0	0.8	0.7	3.2	0.0	0.6
Stop/Veh	1.00	1.00	0.00	0.00	0.40	0.00	0.02
Avg Speed (mph)	17	18	30	17	13	37	30
Fuel Used (gal)	0.3	0.7	5.7	0.1	0.1	9.5	16.3
Fuel Eff. (mpg)	3.3	3.5	3.0	5.8	3.7	1.8	2.4
HC Emissions (g)	0	0	1	0	0	1	2
CO Emissions (g)	3	6	122	0	2	1025	1158
NOx Emissions (g)	0	0	2	0	0	4	6

8: Green Tree Road & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	1.4	0.2	0.9	0.1	0.1	0.2	2.8
Delay / Veh (s)	40.8	8.1	5.6	3.1	15.4	2.4	8.3
St Del/Veh (s)	38.6	7.8	2.5	1.7	13.1	1.1	6.1
Stop/Veh	0.92	0.86	0.23	0.25	0.75	0.12	0.31
Avg Speed (mph)	7	15	18	16	16	30	17
Fuel Used (gal)	8.1	2.6	9.7	1.2	0.8	16.8	39.1
Fuel Eff. (mpg)	1.7	3.1	3.2	4.9	3.0	3.0	2.9
HC Emissions (g)	1	0	1	0	0	2	3
CO Emissions (g)	166	64	210	19	26	678	1164
NOx Emissions (g)	2	1	3	0	0	5	11

10: Blockbuster/Gas Station Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.2	0.4	0.6
Delay / Veh (s)	1.0	2.5	1.6
St Del/Veh (s)	0.0	0.2	0.1
Stop/Veh	0.00	0.01	0.00
Avg Speed (mph)	38	26	32
Fuel Used (gal)	10.4	26.7	37.1
Fuel Eff. (mpg)	5.1	1.4	2.5
HC Emissions (g)	1	4	5
CO Emissions (g)	393	2209	2602
NOx Emissions (g)	5	13	18

12: Heston Road & Delsea Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.2	2.0	0.5	0.6	2.1	0.6	0.4	1.8	0.2	0.3	1.6	0.2
Delay / Veh (s)	32.2	32.7	22.8	27.4	37.7	28.0	12.9	11.6	6.2	15.3	15.3	10.2
St Del/Veh (s)	29.1	28.4	20.4	24.1	33.1	24.9	10.6	7.6	4.9	13.3	10.9	8.5
Stop/Veh	0.96	0.83	0.82	0.93	0.90	0.93	0.71	0.38	0.43	0.82	0.48	0.58
Avg Speed (mph)	9	8	10	10	9	10	11	15	15	18	20	20
Fuel Used (gal)	7.5	11.9	3.6	4.2	12.5	4.5	2.3	15.0	1.5	2.3	15.7	2.1
Fuel Eff. (mpg)	1.9	2.0	2.2	2.4	2.2	2.5	3.4	2.6	4.6	4.2	3.7	4.6
HC Emissions (g)	0	1	0	0	1	0	0	2	0	0	1	0
CO Emissions (g)	167	230	62	55	154	74	50	724	37	49	499	37
NOx Emissions (g)	2	3	1	1	2	1	0	6	0	1	6	0

12: Heston Road & Delsea Drive Performance by movement

Movement	All
Total Delay (hr)	11.3
Delay / Veh (s)	20.0
St Del/Veh (s)	16.4
Stop/Veh	0.64
Avg Speed (mph)	12
Fuel Used (gal)	83.1
Fuel Eff. (mpg)	2.7
HC Emissions (g)	6
CO Emissions (g)	2138
NOx Emissions (g)	22

Total Network Performance

Total Delay (hr)	17.9
Delay / Veh (s)	27.1
St Del/Veh (s)	18.4
Stop/Veh	0.75
Avg Speed (mph)	23
Fuel Used (gal)	522.3
Fuel Eff. (mpg)	2.6
HC Emissions (g)	61
CO Emissions (g)	26212
NOx Emissions (g)	220

Arterial Level of Service: NB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Unnamed Street	2	0.9	6.9	0.1	34
Green Tree Road	8	5.6	11.7	0.1	17
	17	2.3	17.3	0.1	30
Bristol Drive	6	1.3	3.9	0.0	33
	16	0.8	4.6	0.0	31
Shopping Center Driv	4	0.7	2.9	0.0	36
Firestone/Bank Drive	1	1.8	11.1	0.1	43
Blockbuster/Gas Stat	10	1.0	6.7	0.1	37
William Dalton Drive	12	11.6	17.2	0.1	15
	3	2.8	15.7	0.2	36
Total		28.7	98.0	0.8	29

Arterial Level of Service: SB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	3	0.2	6.5	0.1	45
Heston Road	12	15.3	28.1	0.2	20
Blockbuster/Gas Stat	10	3.3	9.3	0.1	28
Firestone/Bank Drive	1	1.4	7.2	0.1	35
Shopping Center Driv	4	0.8	10.6	0.1	43
	16	0.4	2.8	0.0	36
Bristol Drive	6	0.6	3.6	0.0	39
	17	0.2	3.0	0.0	34
Green Tree Road	8	2.4	17.0	0.1	31
Unnamed Street	2	0.6	6.9	0.1	29
Total		25.2	95.0	0.8	30

1: Firestone/Bank Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.5	0.6	1.1
Delay / Veh (s)	2.0	2.8	2.4
St Del/Veh (s)	0.1	0.2	0.1
Stop/Veh	0.00	0.04	0.02
Avg Speed (mph)	35	29	33
Fuel Used (gal)	52.7	32.6	85.4
Fuel Eff. (mpg)	2.0	1.6	1.8
HC Emissions (g)	8	5	13
CO Emissions (g)	4107	2275	6382
NOx Emissions (g)	30	18	48

2: Unnamed Street & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.4	0.4	0.8
Delay / Veh (s)	1.7	1.4	1.5
St Del/Veh (s)	0.8	0.1	0.4
Stop/Veh	0.02	0.00	0.01
Avg Speed (mph)	28	27	27
Fuel Used (gal)	12.9	34.5	47.4
Fuel Eff. (mpg)	3.4	1.9	2.3
HC Emissions (g)	1	4	6
CO Emissions (g)	611	1522	2133
NOx Emissions (g)	4	17	21

4: Shopping Center Driveway & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.3	0.4	0.4	0.0	0.6	1.2	2.9
Delay / Veh (s)	35.2	14.3	1.9	0.6	20.0	5.0	5.2
St Del/Veh (s)	33.8	14.1	0.2	0.3	17.5	2.9	3.4
Stop/Veh	1.00	1.00	0.00	0.06	0.80	0.00	0.11
Avg Speed (mph)	6	11	24	16	14	36	25
Fuel Used (gal)	1.4	2.9	10.6	0.6	3.9	29.9	49.2
Fuel Eff. (mpg)	1.9	2.5	2.1	4.7	3.1	3.1	2.8
HC Emissions (g)	0	0	1	0	0	4	6
CO Emissions (g)	31	102	515	9	107	1464	2229
NOx Emissions (g)	0	1	5	0	1	15	22

6: Bristol Drive & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.8	0.0	0.0	0.2	1.1
Delay / Veh (s)	18.6	14.7	3.0	2.2	7.8	1.0	2.2
St Del/Veh (s)	16.9	14.6	2.3	2.1	6.1	0.0	1.4
Stop/Veh	1.00	1.00	0.00	0.00	0.64	0.00	0.01
Avg Speed (mph)	14	15	27	17	10	34	29
Fuel Used (gal)	0.3	0.3	7.7	0.1	0.2	16.9	25.5
Fuel Eff. (mpg)	3.3	3.3	2.9	4.6	3.4	2.0	2.3
HC Emissions (g)	0	0	1	0	0	2	3
CO Emissions (g)	2	2	154	1	2	1448	1609
NOx Emissions (g)	0	0	2	0	0	7	10

8: Green Tree Road & Delsea Drive Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Total Delay (hr)	3.2	0.2	1.6	0.1	0.5	1.8	7.5
Delay / Veh (s)	58.8	11.8	7.9	4.8	26.2	7.6	13.2
St Del/Veh (s)	54.6	11.5	3.7	2.7	21.8	3.3	9.2
Stop/Veh	1.14	0.84	0.29	0.35	0.90	0.20	0.38
Avg Speed (mph)	5	14	15	15	12	24	15
Fuel Used (gal)	15.7	2.9	14.6	1.4	3.1	37.6	75.4
Fuel Eff. (mpg)	1.4	2.9	3.0	4.0	2.7	3.1	2.7
HC Emissions (g)	1	0	1	0	0	3	6
CO Emissions (g)	454	101	281	20	79	1291	2225
NOx Emissions (g)	4	1	4	0	1	12	22

10: Blockbuster/Gas Station Driveway & Delsea Drive Performance by movement

Movement	NBT	SBT	All
Total Delay (hr)	0.2	1.0	1.2
Delay / Veh (s)	1.2	4.6	3.0
St Del/Veh (s)	0.0	0.6	0.3
Stop/Veh	0.00	0.09	0.05
Avg Speed (mph)	37	22	27
Fuel Used (gal)	7.9	38.2	46.1
Fuel Eff. (mpg)	6.5	1.5	2.4
HC Emissions (g)	1	6	7
CO Emissions (g)	303	2947	3250
NOx Emissions (g)	4	19	23

12: Heston Road & Delsea Drive Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	2.4	6.5	1.0	1.7	3.5	0.5	1.0	3.6	0.3	1.6	3.8	0.3
Delay / Veh (s)	65.5	65.2	55.8	43.1	38.9	30.4	23.8	25.5	19.1	27.1	24.4	17.4
St Del/Veh (s)	58.3	56.2	49.6	37.4	32.1	25.6	20.5	19.6	16.8	22.5	17.6	13.7
Stop/Veh	1.46	1.19	1.19	1.28	0.90	0.93	0.90	0.69	0.77	0.98	0.65	0.69
Avg Speed (mph)	5	5	6	8	9	10	8	8	9	13	15	16
Fuel Used (gal)	10.7	27.2	4.5	8.8	19.2	2.8	4.5	17.0	1.6	9.1	24.6	2.3
Fuel Eff. (mpg)	1.3	1.4	1.5	2.2	2.3	2.6	2.4	2.1	2.8	3.7	3.6	4.2
HC Emissions (g)	1	2	0	1	1	0	0	1	0	1	2	0
CO Emissions (g)	263	510	88	124	234	47	92	505	29	176	670	56
NOx Emissions (g)	2	5	1	2	3	1	1	4	0	2	7	1

12: Heston Road & Delsea Drive Performance by movement

Movement	All
Total Delay (hr)	26.2
Delay / Veh (s)	35.8
St Del/Veh (s)	29.5
Stop/Veh	0.90
Avg Speed (mph)	9
Fuel Used (gal)	132.3
Fuel Eff. (mpg)	2.4
HC Emissions (g)	9
CO Emissions (g)	2796
NOx Emissions (g)	29

Total Network Performance

Total Delay (hr)	44.0
Delay / Veh (s)	44.6
St Del/Veh (s)	30.5
Stop/Veh	0.99
Avg Speed (mph)	20
Fuel Used (gal)	808.9
Fuel Eff. (mpg)	2.4
HC Emissions (g)	95
CO Emissions (g)	39337
NOx Emissions (g)	335

Arterial Level of Service: NB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Unnamed Street	2	1.7	7.6	0.1	31
Green Tree Road	8	7.9	14.1	0.1	15
	22	3.2	18.2	0.1	29
Bristol Drive	6	3.0	5.6	0.0	31
	21	1.6	5.4	0.0	26
Shopping Center Driv	4	1.9	4.1	0.0	26
Firestone/Bank Drive	1	2.2	11.4	0.1	40
Blockbuster/Gas Stat	10	1.2	6.9	0.1	36
William Dalton Drive	12	25.5	31.2	0.1	8
	3	4.0	16.9	0.2	34
Total		52.3	121.5	0.8	24

Arterial Level of Service: SB Delsea Drive

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	3	0.4	6.7	0.1	44
Heston Road	12	24.4	37.4	0.2	15
Blockbuster/Gas Stat	10	6.0	12.1	0.1	21
Firestone/Bank Drive	1	2.8	8.4	0.1	30
Shopping Center Driv	4	5.0	14.0	0.1	40
	21	0.8	3.2	0.0	32
Bristol Drive	6	1.0	4.2	0.0	33
	22	0.3	3.2	0.0	32
Green Tree Road	8	7.6	21.6	0.1	25
Unnamed Street	2	1.5	8.0	0.1	26
Total		49.8	118.6	0.8	25

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.0	0.4	0.4	0.0	1.1
Delay / Veh (s)	16.1	6.3	8.1	3.4	2.1	1.1	3.3
St Del/Veh (s)	14.6	5.5	6.7	1.1	0.8	0.8	1.7
Stop/Veh	0.88	0.89	0.73	0.16	0.12	0.19	0.20
Avg Speed (mph)	15	19	30	39	31	23	33
Fuel Used (gal)	2.7	2.1	1.5	31.0	11.3	0.2	48.8
HC Emissions (g)	0	0	0	4	1	0	6
CO Emissions (g)	28	56	25	927	494	2	1531
NOx Emissions (g)	0	1	0	18	6	0	25

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.6
Delay / Veh (s)	4.9	7.6	3.7	5.0	2.6	2.7	2.3	1.3	1.1	1.9
St Del/Veh (s)	4.7	5.9	3.4	2.9	0.2	0.2	1.3	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.01
Avg Speed (mph)	15	14	15	32	39	35	37	42	36	40
Fuel Used (gal)	0.1	0.0	0.0	0.2	53.0	0.4	0.1	58.1	0.1	112.2
HC Emissions (g)	0	0	0	0	8	0	0	8	0	16
CO Emissions (g)	1	0	0	11	3347	18	1	2834	4	6218
NOx Emissions (g)	0	0	0	0	31	0	0	34	0	65

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.2	0.9	0.0	0.1	1.2	0.1	0.5	0.7	0.1	1.1	1.2	0.3
Delay / Veh (s)	16.6	7.4	3.6	13.7	7.7	5.0	38.2	37.3	7.8	49.3	47.1	35.5
St Del/Veh (s)	13.5	2.2	1.1	12.2	3.6	3.5	36.1	34.4	5.4	46.2	43.3	33.8
Stop/Veh	0.89	0.30	0.36	0.69	0.30	0.40	1.00	0.94	1.00	1.13	1.05	1.07
Avg Speed (mph)	24	33	33	27	34	32	7	7	19	8	8	10
Fuel Used (gal)	4.3	37.6	2.2	2.1	47.0	3.9	2.6	4.0	1.5	6.5	7.5	2.0
HC Emissions (g)	0	5	0	0	6	0	0	0	0	0	0	0
CO Emissions (g)	200	2171	96	61	1569	110	47	85	54	130	126	55
NOx Emissions (g)	2	20	1	1	25	2	0	1	1	2	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	6.4
Delay / Veh (s)	15.2
St Del/Veh (s)	11.3
Stop/Veh	0.51
Avg Speed (mph)	24
Fuel Used (gal)	121.1
HC Emissions (g)	14
CO Emissions (g)	4703
NOx Emissions (g)	56

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.7	0.0	1.9	0.2	0.0	2.9
Delay / Veh (s)	5.2	12.3	9.4	20.7	4.8	8.1
St Del/Veh (s)	2.9	8.1	3.4	19.8	5.3	3.8
Stop/Veh	0.26	0.82	0.17	0.72	0.67	0.24
Avg Speed (mph)	33	26	31	9	15	30
Fuel Used (gal)	28.6	1.1	77.8	1.4	0.5	109.3
HC Emissions (g)	3	0	12	0	0	15
CO Emissions (g)	1482	58	4990	35	9	6574
NOx Emissions (g)	14	0	42	0	0	57

Total Network Performance

Total Delay (hr)	11.7
Delay / Veh (s)	24.2
St Del/Veh (s)	13.9
Stop/Veh	0.75
Avg Speed (mph)	31
Fuel Used (gal)	531.0
HC Emissions (g)	69
CO Emissions (g)	27232
NOx Emissions (g)	277

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	5.2	22.0	0.2	36
Park Ave	10	7.4	29.3	0.3	36
Irving Ave	7	3.0	28.1	0.3	42
Wyndam Rd	4	3.4	25.8	0.3	40
	1	1.1	6.3	0.1	37
Total		20.1	111.5	1.2	38

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.3	7.9	0.1	44
Wyndam Rd	4	2.1	7.4	0.1	32
Irving Ave	7	1.3	24.3	0.3	42
Park Ave	10	7.7	33.5	0.3	35
New York Ave	12	5.9	28.9	0.3	37
Total		17.4	101.9	1.1	38

Intersection: 4: Wyndam Rd & Haddonfield Rd

Movement	EB	NB	NB	SB	SB
Directions Served	LR	LT	T	T	TR
Maximum Queue (ft)	96	86	94	66	93
Average Queue (ft)	38	28	35	21	33
95th Queue (ft)	73	70	79	54	73
Link Distance (ft)	988	1451	1451	278	278
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Irving Ave & Haddonfield Rd

Movement	EB	WB	NB	SB
Directions Served	LR	LR	LT	LT
Maximum Queue (ft)	34	26	18	9
Average Queue (ft)	5	3	1	0
95th Queue (ft)	24	18	8	5
Link Distance (ft)	385	337	1617	1451
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Haddonfield Rd & Park Ave

Movement	NB	NB	SB	SB	NE	NE	SW
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	93	60	90	98	165	24	255
Average Queue (ft)	33	25	26	28	67	2	115
95th Queue (ft)	72	54	67	72	134	26	215
Link Distance (ft)	1464	1464	1617	1617	507		851
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)						120	
Storage Blk Time (%)					2	0	
Queuing Penalty (veh)					1	0	

Intersection: 12: Haddonfield Rd & New York Ave

Movement	NB	NB	SB	SB	NW
Directions Served	T	TR	LT	T	LR
Maximum Queue (ft)	81	101	85	121	57
Average Queue (ft)	35	48	34	53	10
95th Queue (ft)	69	86	71	96	35
Link Distance (ft)	1057	1057	1464	1464	390
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.4	0.4	0.0	1.0
Delay / Veh (s)	12.4	4.0	8.8	2.5	1.8	1.0	2.3
St Del/Veh (s)	10.9	3.6	7.1	0.6	0.5	0.5	0.9
Stop/Veh	0.95	0.94	0.72	0.08	0.08	0.11	0.12
Avg Speed (mph)	17	20	29	40	33	23	36
Fuel Used (gal)	1.1	0.9	2.4	39.0	15.7	0.7	59.7
HC Emissions (g)	0	0	0	4	2	0	7
CO Emissions (g)	11	7	49	1080	742	11	1901
NOx Emissions (g)	0	0	1	21	9	0	31

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.3	1.0
Delay / Veh (s)	2.8	11.6	4.3	6.6	3.6	2.8	2.9	1.3	2.4
St Del/Veh (s)	2.6	10.1	4.2	2.6	0.1	0.1	1.7	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	16	11	13	33	38	34	35	42	40
Fuel Used (gal)	0.0	0.0	0.0	0.8	87.6	0.4	0.2	70.7	159.8
HC Emissions (g)	0	0	0	0	12	0	0	10	22
CO Emissions (g)	0	0	0	41	5800	20	5	3224	9089
NOx Emissions (g)	0	0	0	0	48	0	0	42	91

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	2.5	0.2	0.6	3.9	0.3	0.3	1.3	0.1	1.3	1.9	0.6
Delay / Veh (s)	33.9	12.6	7.2	45.2	17.6	9.2	39.2	35.1	7.7	74.1	65.7	51.6
St Del/Veh (s)	29.0	4.3	1.2	42.3	10.2	5.8	36.9	32.0	5.4	70.9	61.4	49.4
Stop/Veh	1.02	0.29	0.22	1.14	0.52	0.50	0.94	0.89	1.00	1.28	1.20	1.24
Avg Speed (mph)	17	29	29	15	26	27	6	7	19	6	7	7
Fuel Used (gal)	4.5	70.3	10.5	4.1	63.4	7.4	1.9	7.3	1.1	6.0	9.7	3.5
HC Emissions (g)	1	9	1	0	8	1	0	0	0	0	1	1
CO Emissions (g)	223	3866	519	82	2159	207	39	162	37	96	168	110
NOx Emissions (g)	2	34	4	1	30	3	0	2	0	1	2	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	13.3
Delay / Veh (s)	21.5
St Del/Veh (s)	14.9
Stop/Veh	0.55
Avg Speed (mph)	21
Fuel Used (gal)	189.7
HC Emissions (g)	21
CO Emissions (g)	7666
NOx Emissions (g)	82

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	1.5	0.0	0.1	2.3	0.1	0.0	4.1
Delay / Veh (s)	6.4	3.0	20.3	9.4	17.8	8.0	8.2
St Del/Veh (s)	3.1	1.3	14.6	2.4	17.0	8.6	3.1
Stop/Veh	0.26	0.00	0.89	0.16	0.68	0.67	0.23
Avg Speed (mph)	31	32	22	31	9	13	31
Fuel Used (gal)	52.1	0.1	2.2	103.5	0.9	0.5	159.5
HC Emissions (g)	7	0	0	15	0	0	22
CO Emissions (g)	2802	10	132	7002	28	8	9981
NOx Emissions (g)	25	0	1	56	0	0	82

Total Network Performance

Total Delay (hr)	20.4
Delay / Veh (s)	30.7
St Del/Veh (s)	17.1
Stop/Veh	0.77
Avg Speed (mph)	29
Fuel Used (gal)	742.5
HC Emissions (g)	94
CO Emissions (g)	37906
NOx Emissions (g)	372

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	6.4	23.3	0.2	34
Park Ave	10	12.6	35.9	0.3	29
Irving Ave	7	3.9	27.7	0.3	42
Wyndam Rd	4	2.5	25.2	0.3	41
	1	0.7	5.9	0.1	40
Total		26.1	117.9	1.2	36

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.4	8.1	0.1	44
Wyndam Rd	4	1.8	7.0	0.1	33
Irving Ave	7	1.3	24.4	0.3	42
Park Ave	10	17.6	42.3	0.3	28
New York Ave	12	7.9	31.0	0.3	34
Total		29.0	112.8	1.1	34

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.1	0.6	0.5	0.0	1.5
Delay / Veh (s)	16.2	8.0	11.4	5.1	2.9	0.4	4.5
St Del/Veh (s)	14.8	7.4	8.2	1.3	1.0	0.3	1.9
Stop/Veh	0.88	0.89	0.73	0.16	0.13	0.23	0.20
Avg Speed (mph)	15	18	27	36	28	26	31
Fuel Used (gal)	2.7	2.1	1.4	29.8	10.7	0.2	47.0
Fuel Eff. (mpg)	3.0	3.1	4.3	4.1	3.6	8.9	3.9
HC Emissions (g)	0	0	0	3	1	0	5
CO Emissions (g)	28	57	16	780	281	2	1164
NOx Emissions (g)	0	1	0	16	5	0	22

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.9
Delay / Veh (s)	6.4	9.1	5.0	7.1	3.6	3.3	3.5	2.4	0.8	2.9
St Del/Veh (s)	6.1	7.4	4.8	4.5	0.2	0.2	0.9	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.01
Avg Speed (mph)	14	13	14	30	38	35	36	40	37	39
Fuel Used (gal)	0.1	0.0	0.0	0.2	51.5	0.4	0.1	57.5	0.1	110.0
Fuel Eff. (mpg)	3.4	3.8	3.8	3.0	2.7	3.0	3.7	3.2	3.7	3.0
HC Emissions (g)	0	0	0	0	8	0	0	8	0	16
CO Emissions (g)	1	0	0	8	3009	20	2	2588	5	5633
NOx Emissions (g)	0	0	0	0	29	0	0	34	0	63

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.3	0.9	0.0	0.1	2.0	0.1	0.5	0.7	0.1	1.2	1.4	0.4
Delay / Veh (s)	22.9	7.8	4.3	17.2	12.4	8.7	38.4	36.7	7.5	55.4	53.3	47.3
St Del/Veh (s)	17.2	1.0	0.6	12.0	4.6	4.8	36.3	33.9	5.1	52.2	49.4	45.4
Stop/Veh	0.89	0.18	0.24	0.69	0.34	0.45	1.00	0.96	1.00	1.16	1.07	1.19
Avg Speed (mph)	21	33	32	24	30	28	7	7	19	7	8	8
Fuel Used (gal)	4.4	37.4	2.2	1.9	42.7	3.7	2.6	4.0	1.5	6.8	7.9	2.2
Fuel Eff. (mpg)	3.0	3.0	3.4	4.3	4.3	4.6	1.8	1.7	2.6	1.9	1.9	2.0
HC Emissions (g)	0	5	0	0	5	0	0	0	0	1	0	0
CO Emissions (g)	185	2032	92	46	1000	95	48	85	53	137	129	60
NOx Emissions (g)	2	20	1	1	19	2	0	1	1	2	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	7.7
Delay / Veh (s)	18.4
St Del/Veh (s)	12.3
Stop/Veh	0.49
Avg Speed (mph)	22
Fuel Used (gal)	117.4
Fuel Eff. (mpg)	3.3
HC Emissions (g)	13
CO Emissions (g)	3963
NOx Emissions (g)	50

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.9	0.1	2.6	0.2	0.0	3.9
Delay / Veh (s)	7.3	21.0	13.0	20.8	7.4	11.1
St Del/Veh (s)	3.6	13.6	4.0	20.0	7.9	4.5
Stop/Veh	0.28	0.82	0.18	0.72	0.67	0.25
Avg Speed (mph)	30	22	28	8	13	28
Fuel Used (gal)	27.6	1.0	77.3	1.4	0.5	107.8
Fuel Eff. (mpg)	3.4	2.8	2.7	2.2	2.7	2.9
HC Emissions (g)	3	0	11	0	0	15
CO Emissions (g)	1366	42	4528	35	10	5981
NOx Emissions (g)	13	0	39	0	0	53

Total Network Performance

Total Delay (hr)	15.2
Delay / Veh (s)	31.5
St Del/Veh (s)	15.6
Stop/Veh	0.75
Avg Speed (mph)	29
Fuel Used (gal)	525.0
Fuel Eff. (mpg)	3.0
HC Emissions (g)	66
CO Emissions (g)	24866
NOx Emissions (g)	262

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	7.3	24.0	0.2	33
Park Ave	10	7.9	29.9	0.3	35
Irving Ave	7	4.1	29.3	0.3	40
Wyndam Rd	4	5.2	27.6	0.3	37
	1	1.4	6.6	0.1	35
Total		25.9	117.5	1.2	36

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.8	8.5	0.1	42
Wyndam Rd	4	2.9	8.2	0.1	29
Irving Ave	7	2.5	25.4	0.3	40
Park Ave	10	12.4	38.1	0.3	31
New York Ave	12	9.7	32.5	0.3	33
Total		28.3	112.7	1.1	34

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.5	0.5	0.0	1.3
Delay / Veh (s)	12.5	4.7	13.1	3.6	2.2	0.3	3.0
St Del/Veh (s)	11.0	4.7	10.3	0.7	0.6	0.2	1.0
Stop/Veh	0.95	0.94	0.72	0.08	0.08	0.12	0.12
Avg Speed (mph)	17	20	26	39	31	26	34
Fuel Used (gal)	1.1	0.9	2.3	37.4	14.0	0.5	56.2
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	11	7	23	945	399	9	1394
NOx Emissions (g)	0	0	1	19	7	0	27

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.6	1.7
Delay / Veh (s)	4.8	16.4	4.6	10.2	5.4	4.1	3.3	2.6	3.9
St Del/Veh (s)	4.6	14.9	4.5	3.7	0.1	0.1	0.8	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.67	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	14	10	13	30	36	33	34	40	38
Fuel Used (gal)	0.0	0.1	0.0	0.8	91.8	0.5	0.2	67.4	160.9
HC Emissions (g)	0	0	0	0	13	0	0	9	22
CO Emissions (g)	0	0	0	42	5848	24	6	2565	8485
NOx Emissions (g)	0	0	0	0	49	0	0	38	89

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	3.9	0.5	1.0	13.8	1.7	0.3	1.3	0.1	1.2	2.1	0.7
Delay / Veh (s)	50.0	19.7	14.9	86.4	63.4	58.3	40.4	36.4	8.2	72.1	72.0	59.8
St Del/Veh (s)	37.9	4.8	4.1	68.2	39.8	41.1	37.9	33.2	5.9	68.9	67.7	57.7
Stop/Veh	1.10	0.31	0.34	2.00	1.30	1.30	1.00	0.92	1.03	1.23	1.27	1.24
Avg Speed (mph)	14	24	24	10	14	15	6	7	18	6	6	7
Fuel Used (gal)	4.8	70.8	11.3	4.8	75.3	9.9	1.9	7.5	1.1	5.9	10.2	3.8
HC Emissions (g)	1	8	1	0	6	1	0	0	0	0	1	1
CO Emissions (g)	193	3298	483	57	1300	153	39	164	39	98	173	115
NOx Emissions (g)	2	31	4	1	20	2	0	2	0	1	2	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	27.3
Delay / Veh (s)	44.3
St Del/Veh (s)	28.6
Stop/Veh	0.90
Avg Speed (mph)	15
Fuel Used (gal)	207.4
HC Emissions (g)	19
CO Emissions (g)	6111
NOx Emissions (g)	67

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	3.3	0.0	0.2	2.8	0.1	0.1	6.5
Delay / Veh (s)	13.9	0.9	30.1	11.6	18.1	13.5	13.0
St Del/Veh (s)	5.9	0.8	20.6	2.1	17.2	14.0	4.5
Stop/Veh	0.40	0.00	0.94	0.12	0.68	0.67	0.28
Avg Speed (mph)	24	39	18	29	9	10	26
Fuel Used (gal)	48.7	0.1	2.3	106.3	0.9	0.6	158.9
HC Emissions (g)	5	0	0	15	0	0	21
CO Emissions (g)	2064	2	107	6710	29	8	8921
NOx Emissions (g)	18	0	1	56	0	0	75

Total Network Performance

Total Delay (hr)	38.0
Delay / Veh (s)	57.7
St Del/Veh (s)	31.1
Stop/Veh	1.13
Avg Speed (mph)	25
Fuel Used (gal)	753.0
HC Emissions (g)	88
CO Emissions (g)	33413
NOx Emissions (g)	341

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	13.9	30.7	0.2	26
Park Ave	10	19.6	42.8	0.3	25
Irving Ave	7	5.9	29.7	0.3	40
Wyndam Rd	4	3.6	26.3	0.3	39
	1	0.9	6.1	0.1	38
Total		43.9	135.7	1.2	32

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	1.1	8.8	0.1	42
Wyndam Rd	4	2.2	7.5	0.1	31
Irving Ave	7	2.6	25.7	0.3	40
Park Ave	10	63.4	88.1	0.3	15
New York Ave	12	10.1	33.2	0.3	32
Total		79.4	163.2	1.1	25

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.1	0.6	0.5	0.0	1.5
Delay / Veh (s)	16.2	8.0	11.4	5.3	2.9	0.4	4.5
St Del/Veh (s)	14.8	7.4	8.1	1.3	1.0	0.3	1.9
Stop/Veh	0.88	0.89	0.73	0.16	0.13	0.23	0.20
Avg Speed (mph)	15	18	27	36	28	26	31
Fuel Used (gal)	2.7	2.1	1.4	29.8	10.7	0.2	47.0
HC Emissions (g)	0	0	0	3	1	0	5
CO Emissions (g)	28	57	17	781	282	2	1167
NOx Emissions (g)	0	1	0	16	5	0	22

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.9
Delay / Veh (s)	5.7	8.9	5.0	6.7	3.4	2.8	3.5	2.4	0.8	2.8
St Del/Veh (s)	5.5	7.2	4.8	4.1	0.2	0.2	0.9	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.01
Avg Speed (mph)	15	13	14	30	38	35	36	40	37	39
Fuel Used (gal)	0.1	0.0	0.0	0.2	50.1	0.4	0.1	57.5	0.1	108.6
HC Emissions (g)	0	0	0	0	7	0	0	8	0	15
CO Emissions (g)	1	0	0	8	2828	15	2	2588	5	5448
NOx Emissions (g)	0	0	0	0	29	0	0	34	0	63

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.2	0.9	0.0	0.1	1.7	0.1	0.5	0.7	0.1	1.2	1.3	0.3
Delay / Veh (s)	18.4	7.4	3.7	15.8	10.3	4.7	39.3	38.0	8.1	53.2	51.1	45.3
St Del/Veh (s)	13.2	1.0	0.4	11.4	3.9	1.5	37.1	35.1	5.6	50.0	47.3	43.2
Stop/Veh	0.86	0.18	0.16	0.69	0.30	0.40	1.00	0.96	1.00	1.16	1.09	1.15
Avg Speed (mph)	23	33	32	25	32	32	7	7	18	8	8	8
Fuel Used (gal)	4.3	38.1	2.3	2.0	44.3	3.8	2.6	4.0	1.5	6.7	7.8	2.2
HC Emissions (g)	0	5	0	0	5	0	0	0	0	1	0	0
CO Emissions (g)	186	2079	96	46	1139	105	49	86	54	133	128	57
NOx Emissions (g)	2	20	1	1	21	2	0	1	1	2	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	7.1
Delay / Veh (s)	17.0
St Del/Veh (s)	11.6
Stop/Veh	0.48
Avg Speed (mph)	23
Fuel Used (gal)	119.6
HC Emissions (g)	13
CO Emissions (g)	4156
NOx Emissions (g)	52

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.9	0.1	2.6	0.2	0.0	3.9
Delay / Veh (s)	7.3	19.0	12.8	20.8	7.4	11.0
St Del/Veh (s)	3.6	11.4	3.9	20.0	7.9	4.4
Stop/Veh	0.28	0.73	0.18	0.72	0.67	0.24
Avg Speed (mph)	30	23	28	8	13	28
Fuel Used (gal)	27.6	1.0	72.8	1.4	0.5	103.2
HC Emissions (g)	3	0	10	0	0	14
CO Emissions (g)	1366	37	3922	35	10	5370
NOx Emissions (g)	13	0	36	0	0	50

Total Network Performance

Total Delay (hr)	14.6
Delay / Veh (s)	30.3
St Del/Veh (s)	15.0
Stop/Veh	0.73
Avg Speed (mph)	30
Fuel Used (gal)	522.7
HC Emissions (g)	66
CO Emissions (g)	24396
NOx Emissions (g)	261

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	7.3	24.0	0.2	33
Park Ave	10	7.4	29.5	0.3	36
Irving Ave	7	3.8	29.0	0.3	41
Wyndam Rd	4	5.3	27.7	0.3	37
	1	1.5	6.7	0.1	35
Total		25.3	116.9	1.2	37

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.8	8.5	0.1	42
Wyndam Rd	4	2.9	8.2	0.1	29
Irving Ave	7	2.5	25.4	0.3	40
Park Ave	10	10.3	35.9	0.3	33
New York Ave	12	9.7	32.6	0.3	33
Total		26.2	110.7	1.1	35

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.6	0.5	0.0	1.3
Delay / Veh (s)	12.4	4.7	12.2	4.0	2.2	0.3	3.1
St Del/Veh (s)	11.0	4.7	9.0	0.6	0.6	0.2	1.0
Stop/Veh	0.95	0.94	0.78	0.08	0.08	0.12	0.12
Avg Speed (mph)	17	20	26	38	31	26	34
Fuel Used (gal)	1.1	0.9	2.3	37.3	14.0	0.5	56.0
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	11	7	24	950	393	8	1394
NOx Emissions (g)	0	0	1	19	7	0	27

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.6	1.2
Delay / Veh (s)	4.8	19.2	2.3	7.0	3.2	2.4	4.2	2.5	2.9
St Del/Veh (s)	4.6	17.7	2.3	3.3	0.1	0.1	1.6	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.33	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	14	9	15	32	38	35	33	40	39
Fuel Used (gal)	0.0	0.1	0.0	0.6	76.0	0.4	0.2	68.0	145.5
HC Emissions (g)	0	0	0	0	10	0	0	9	19
CO Emissions (g)	0	0	0	22	4001	20	5	2591	6640
NOx Emissions (g)	0	0	0	0	42	0	0	39	81

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	2.1	0.2	0.4	4.6	0.4	0.3	1.2	0.1	1.1	1.8	0.6
Delay / Veh (s)	35.0	10.5	7.5	33.4	20.5	12.7	34.1	34.5	7.4	65.6	63.8	51.6
St Del/Veh (s)	27.1	1.4	1.2	25.5	9.0	5.9	31.7	31.4	5.0	62.4	59.7	49.7
Stop/Veh	0.98	0.11	0.17	1.11	0.54	0.59	0.97	0.91	1.00	1.23	1.14	1.12
Avg Speed (mph)	17	31	29	18	25	26	7	7	19	7	7	8
Fuel Used (gal)	4.6	76.9	11.5	3.4	59.4	7.2	1.7	7.4	1.1	5.6	9.6	3.5
HC Emissions (g)	0	9	1	0	6	1	0	0	0	0	1	1
CO Emissions (g)	193	3848	526	46	1393	147	33	165	38	98	168	109
NOx Emissions (g)	2	38	5	1	24	3	0	2	0	1	2	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	13.2
Delay / Veh (s)	21.3
St Del/Veh (s)	12.7
Stop/Veh	0.49
Avg Speed (mph)	21
Fuel Used (gal)	191.9
HC Emissions (g)	20
CO Emissions (g)	6762
NOx Emissions (g)	79

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	3.1	0.0	0.2	3.1	0.2	0.1	6.6
Delay / Veh (s)	12.9	1.3	30.6	12.8	22.8	14.4	13.2
St Del/Veh (s)	5.4	1.6	20.8	2.3	21.8	15.0	4.4
Stop/Veh	0.38	0.50	1.00	0.16	0.82	0.67	0.29
Avg Speed (mph)	25	37	18	28	8	10	26
Fuel Used (gal)	47.6	0.1	2.0	94.2	1.0	0.6	145.6
HC Emissions (g)	5	0	0	13	0	0	18
CO Emissions (g)	1963	3	79	5044	29	8	7126
NOx Emissions (g)	18	0	1	47	0	0	66

Total Network Performance

Total Delay (hr)	24.0
Delay / Veh (s)	36.3
St Del/Veh (s)	16.2
Stop/Veh	0.76
Avg Speed (mph)	28
Fuel Used (gal)	720.3
HC Emissions (g)	86
CO Emissions (g)	31429
NOx Emissions (g)	342

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	12.9	29.8	0.2	27
Park Ave	10	10.4	33.5	0.3	31
Irving Ave	7	3.4	27.3	0.3	43
Wyndam Rd	4	3.9	26.5	0.3	39
	1	1.0	6.2	0.1	38
Total		31.7	123.5	1.2	35

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	1.1	8.8	0.1	42
Wyndam Rd	4	2.2	7.5	0.1	31
Irving Ave	7	2.6	25.7	0.3	40
Park Ave	10	20.5	45.0	0.3	27
New York Ave	12	11.6	35.0	0.3	30
Total		38.0	121.9	1.1	32

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.1	0.6	0.5	0.0	1.5
Delay / Veh (s)	16.2	8.0	11.4	5.1	2.9	0.4	4.5
St Del/Veh (s)	14.8	7.4	8.2	1.3	1.0	0.3	1.9
Stop/Veh	0.88	0.89	0.73	0.16	0.13	0.23	0.20
Avg Speed (mph)	15	18	27	36	28	26	31
Fuel Used (gal)	2.7	2.1	1.5	29.8	10.7	0.2	47.0
HC Emissions (g)	0	0	0	3	1	0	5
CO Emissions (g)	28	57	17	782	282	2	1168
NOx Emissions (g)	0	1	0	16	5	0	22

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.9
Delay / Veh (s)	5.7	9.1	5.1	7.3	3.6	3.1	3.5	2.4	0.8	2.9
St Del/Veh (s)	5.5	7.4	4.9	4.7	0.2	0.2	0.9	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.01
Avg Speed (mph)	15	13	14	30	38	35	36	40	37	39
Fuel Used (gal)	0.1	0.0	0.0	0.2	51.5	0.4	0.1	57.5	0.1	110.0
HC Emissions (g)	0	0	0	0	8	0	0	8	0	16
CO Emissions (g)	1	0	0	8	3008	19	2	2590	5	5633
NOx Emissions (g)	0	0	0	0	30	0	0	34	0	63

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.2	0.9	0.0	0.1	1.7	0.1	0.5	0.7	0.1	1.1	1.3	0.3
Delay / Veh (s)	18.6	7.8	4.3	16.8	10.3	4.7	40.1	38.3	8.2	51.8	50.1	43.6
St Del/Veh (s)	13.0	1.0	0.6	12.4	3.9	1.5	37.9	35.4	5.7	48.7	46.3	41.9
Stop/Veh	0.86	0.18	0.24	0.69	0.30	0.40	1.00	0.96	1.02	1.15	1.08	1.11
Avg Speed (mph)	23	33	32	25	32	32	7	7	18	8	8	8
Fuel Used (gal)	4.3	37.3	2.2	2.0	44.3	3.8	2.7	4.1	1.5	6.6	7.7	2.2
HC Emissions (g)	0	5	0	0	5	0	0	0	0	0	0	0
CO Emissions (g)	185	2028	93	46	1140	105	48	86	54	131	128	56
NOx Emissions (g)	2	19	1	1	21	2	0	1	1	2	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	7.1
Delay / Veh (s)	17.0
St Del/Veh (s)	11.5
Stop/Veh	0.48
Avg Speed (mph)	23
Fuel Used (gal)	118.7
HC Emissions (g)	13
CO Emissions (g)	4099
NOx Emissions (g)	51

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.9	0.1	2.6	0.2	0.0	3.9
Delay / Veh (s)	7.3	19.0	12.9	20.8	7.4	11.0
St Del/Veh (s)	3.6	11.4	4.0	20.0	7.9	4.4
Stop/Veh	0.28	0.73	0.18	0.72	0.67	0.24
Avg Speed (mph)	30	23	28	8	13	28
Fuel Used (gal)	27.6	1.0	72.8	1.4	0.5	103.3
HC Emissions (g)	3	0	10	0	0	14
CO Emissions (g)	1366	37	3922	35	10	5370
NOx Emissions (g)	13	0	36	0	0	50

Total Network Performance

Total Delay (hr)	14.7
Delay / Veh (s)	30.3
St Del/Veh (s)	14.9
Stop/Veh	0.73
Avg Speed (mph)	30
Fuel Used (gal)	523.0
HC Emissions (g)	66
CO Emissions (g)	24501
NOx Emissions (g)	261

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	7.3	24.0	0.2	33
Park Ave	10	7.9	29.9	0.3	35
Irving Ave	7	4.1	29.3	0.3	40
Wyndam Rd	4	5.1	27.6	0.3	37
	1	1.4	6.6	0.1	35
Total		25.8	117.5	1.2	36

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.8	8.5	0.1	42
Wyndam Rd	4	2.9	8.2	0.1	29
Irving Ave	7	2.5	25.4	0.3	40
Park Ave	10	10.3	35.9	0.3	33
New York Ave	12	9.6	32.6	0.3	33
Total		26.1	110.6	1.1	35

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.5	0.5	0.0	1.3
Delay / Veh (s)	12.4	4.8	13.7	3.5	2.2	0.3	3.0
St Del/Veh (s)	11.0	4.7	10.8	0.6	0.6	0.2	1.0
Stop/Veh	0.95	0.94	0.75	0.08	0.08	0.11	0.12
Avg Speed (mph)	17	20	25	39	31	26	34
Fuel Used (gal)	1.1	0.9	2.3	37.0	14.1	0.5	55.9
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	11	7	24	947	400	8	1396
NOx Emissions (g)	0	0	1	19	7	0	27

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.6	1.7
Delay / Veh (s)	4.8	19.7	3.9	9.6	5.3	4.4	4.4	2.5	3.8
St Del/Veh (s)	4.6	18.2	3.8	3.3	0.1	0.1	1.9	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	14	9	13	30	36	33	33	40	38
Fuel Used (gal)	0.0	0.1	0.0	0.8	91.1	0.5	0.2	68.0	160.7
HC Emissions (g)	0	0	0	0	13	0	0	9	22
CO Emissions (g)	0	0	0	42	5745	25	6	2577	8395
NOx Emissions (g)	0	0	0	0	49	0	0	39	89

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	3.8	0.5	0.6	4.6	0.4	0.3	1.2	0.1	1.1	1.9	0.6
Delay / Veh (s)	39.3	18.8	14.4	52.4	20.7	12.9	35.6	34.4	7.4	67.8	66.4	55.3
St Del/Veh (s)	27.9	4.5	4.2	44.1	9.1	6.0	33.1	31.3	5.0	64.5	62.3	53.5
Stop/Veh	1.07	0.26	0.31	1.16	0.54	0.60	0.97	0.89	1.00	1.27	1.18	1.15
Avg Speed (mph)	16	24	24	14	25	26	7	7	19	6	7	7
Fuel Used (gal)	4.5	70.2	11.1	3.9	59.3	7.2	1.8	7.4	1.1	5.7	9.8	3.6
HC Emissions (g)	0	8	1	0	6	1	0	0	0	0	1	1
CO Emissions (g)	187	3252	481	52	1374	148	34	165	39	98	173	110
NOx Emissions (g)	2	31	4	1	24	3	0	2	0	1	2	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	15.6
Delay / Veh (s)	25.2
St Del/Veh (s)	14.6
Stop/Veh	0.56
Avg Speed (mph)	20
Fuel Used (gal)	185.5
HC Emissions (g)	19
CO Emissions (g)	6112
NOx Emissions (g)	71

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	3.1	0.0	0.2	2.9	0.2	0.1	6.4
Delay / Veh (s)	12.9	1.3	30.3	11.9	22.8	14.5	12.7
St Del/Veh (s)	5.3	1.6	21.0	1.8	21.8	15.0	4.1
Stop/Veh	0.38	0.50	0.94	0.11	0.82	0.67	0.26
Avg Speed (mph)	25	37	18	29	8	10	27
Fuel Used (gal)	47.6	0.1	2.0	94.1	1.0	0.6	145.4
HC Emissions (g)	5	0	0	13	0	0	18
CO Emissions (g)	1959	3	79	5062	29	8	7140
NOx Emissions (g)	18	0	1	48	0	0	67

Total Network Performance

Total Delay (hr)	26.5
Delay / Veh (s)	40.0
St Del/Veh (s)	17.8
Stop/Veh	0.80
Avg Speed (mph)	27
Fuel Used (gal)	726.8
HC Emissions (g)	87
CO Emissions (g)	32321
NOx Emissions (g)	341

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	12.9	29.8	0.2	27
Park Ave	10	18.7	41.7	0.3	25
Irving Ave	7	5.7	29.7	0.3	40
Wyndam Rd	4	3.6	26.1	0.3	39
	1	1.0	6.1	0.1	38
Total		41.8	133.6	1.2	32

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	1.1	8.8	0.1	42
Wyndam Rd	4	2.2	7.5	0.1	31
Irving Ave	7	2.6	25.7	0.3	40
Park Ave	10	20.7	45.2	0.3	27
New York Ave	12	10.6	33.9	0.3	31
Total		37.2	121.0	1.1	32

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.1	0.6	0.5	0.0	1.4
Delay / Veh (s)	16.2	8.0	10.5	4.6	2.9	0.4	4.3
St Del/Veh (s)	14.8	7.4	7.5	1.2	1.0	0.3	1.9
Stop/Veh	0.88	0.89	0.64	0.14	0.13	0.23	0.20
Avg Speed (mph)	15	18	28	37	28	26	31
Fuel Used (gal)	2.7	2.1	1.5	30.1	10.8	0.2	47.3
HC Emissions (g)	0	0	0	4	1	0	5
CO Emissions (g)	28	57	16	808	298	2	1208
NOx Emissions (g)	0	1	0	16	5	0	23

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.9
Delay / Veh (s)	6.3	12.7	5.2	4.7	3.2	2.7	6.3	2.4	0.8	2.8
St Del/Veh (s)	6.1	11.0	5.0	2.4	0.2	0.1	3.7	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	1.00	0.00	0.00	0.01
Avg Speed (mph)	14	11	14	32	38	35	33	40	37	39
Fuel Used (gal)	0.1	0.0	0.0	0.2	49.9	0.4	0.1	57.5	0.1	108.4
HC Emissions (g)	0	0	0	0	7	0	0	8	0	15
CO Emissions (g)	1	0	0	9	2846	20	2	2588	4	5470
NOx Emissions (g)	0	0	0	0	29	0	0	33	0	63

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	1.2	0.0	0.1	2.4	0.1	0.5	0.6	0.1	0.8	0.9	0.2
Delay / Veh (s)	35.1	10.7	6.4	20.7	14.8	10.0	36.4	32.3	7.6	38.5	36.2	25.9
St Del/Veh (s)	30.7	5.2	3.8	15.1	6.4	5.3	34.3	29.4	5.2	35.7	32.8	24.6
Stop/Veh	0.93	0.32	0.44	0.77	0.41	0.44	0.98	0.90	1.00	1.00	0.92	0.93
Avg Speed (mph)	17	30	30	23	28	28	7	8	19	9	10	11
Fuel Used (gal)	4.3	35.3	2.1	2.0	43.2	3.7	2.6	3.8	1.5	6.0	6.8	1.8
HC Emissions (g)	0	5	0	0	5	0	0	0	0	0	0	0
CO Emissions (g)	137	1658	70	45	1019	87	46	83	53	125	119	51
NOx Emissions (g)	1	18	1	1	19	2	0	1	1	1	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	7.5
Delay / Veh (s)	18.0
St Del/Veh (s)	12.2
Stop/Veh	0.54
Avg Speed (mph)	22
Fuel Used (gal)	113.1
HC Emissions (g)	12
CO Emissions (g)	3492
NOx Emissions (g)	48

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.4	0.0	1.6	0.3	0.1	2.5
Delay / Veh (s)	3.5	13.6	8.0	31.9	12.2	7.2
St Del/Veh (s)	1.3	8.3	2.4	30.8	12.8	3.1
Stop/Veh	0.14	0.64	0.09	0.90	0.89	0.15
Avg Speed (mph)	37	26	32	6	11	32
Fuel Used (gal)	26.2	1.1	81.9	1.7	0.6	111.4
HC Emissions (g)	3	0	12	0	0	16
CO Emissions (g)	1175	47	4916	40	11	6188
NOx Emissions (g)	13	0	46	0	0	61

Total Network Performance

Total Delay (hr)	13.2
Delay / Veh (s)	27.2
St Del/Veh (s)	14.4
Stop/Veh	0.71
Avg Speed (mph)	30
Fuel Used (gal)	506.8
HC Emissions (g)	64
CO Emissions (g)	23099
NOx Emissions (g)	258

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	3.5	20.0	0.2	39
Park Ave	10	10.9	32.9	0.3	32
Irving Ave	7	3.7	28.7	0.3	41
Wyndam Rd	4	4.6	27.1	0.3	38
	1	1.3	6.5	0.1	36
Total		23.9	115.2	1.2	37

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.8	8.5	0.1	42
Wyndam Rd	4	2.9	8.2	0.1	29
Irving Ave	7	2.5	25.4	0.3	40
Park Ave	10	14.8	40.5	0.3	29
New York Ave	12	5.8	28.5	0.3	37
Total		26.9	111.2	1.1	35

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.6	0.5	0.0	1.3
Delay / Veh (s)	12.4	4.7	13.3	3.8	2.2	0.3	3.1
St Del/Veh (s)	11.0	4.7	10.7	0.7	0.6	0.2	1.0
Stop/Veh	0.95	0.94	0.72	0.09	0.08	0.11	0.12
Avg Speed (mph)	17	20	26	38	31	26	34
Fuel Used (gal)	1.1	0.9	2.3	37.0	14.0	0.5	55.9
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	11	7	25	965	395	8	1412
NOx Emissions (g)	0	0	1	19	7	0	27

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.6	1.6
Delay / Veh (s)	5.1	20.8	5.0	9.8	5.0	3.9	4.1	2.5	3.7
St Del/Veh (s)	4.9	19.3	4.9	3.7	0.1	0.1	1.5	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	14	8	12	30	36	34	33	40	38
Fuel Used (gal)	0.0	0.1	0.0	0.8	88.5	0.5	0.2	67.9	158.0
HC Emissions (g)	0	0	0	0	12	0	0	9	21
CO Emissions (g)	0	0	0	39	5470	25	4	2578	8118
NOx Emissions (g)	0	0	0	0	48	0	0	39	88

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.8	4.3	0.6	0.9	8.0	0.9	0.4	1.6	0.1	1.3	2.1	0.8
Delay / Veh (s)	70.7	21.4	18.0	70.2	36.2	31.8	44.5	44.5	8.8	75.8	73.2	66.4
St Del/Veh (s)	61.5	9.7	9.9	57.2	18.5	19.7	42.0	41.3	6.4	72.2	68.5	64.0
Stop/Veh	1.22	0.43	0.51	1.45	0.69	0.74	1.00	0.90	1.03	1.21	1.17	1.15
Avg Speed (mph)	11	23	23	11	19	19	6	6	17	6	6	6
Fuel Used (gal)	4.6	60.7	9.6	4.4	61.5	8.1	2.0	8.3	1.2	6.1	10.2	3.9
HC Emissions (g)	0	7	1	0	6	1	0	1	0	0	1	1
CO Emissions (g)	113	2226	316	50	1192	127	37	176	43	103	175	115
NOx Emissions (g)	1	25	3	1	20	2	0	2	0	1	2	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	21.7
Delay / Veh (s)	35.1
St Del/Veh (s)	22.9
Stop/Veh	0.69
Avg Speed (mph)	17
Fuel Used (gal)	180.5
HC Emissions (g)	17
CO Emissions (g)	4674
NOx Emissions (g)	59

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	1.2	0.0	0.1	2.5	0.4	0.1	4.3
Delay / Veh (s)	4.9	0.6	24.6	10.3	45.0	23.1	8.5
St Del/Veh (s)	1.5	0.5	16.2	2.3	43.9	23.8	2.9
Stop/Veh	0.11	0.00	0.89	0.14	0.93	0.89	0.15
Avg Speed (mph)	35	39	20	30	5	7	31
Fuel Used (gal)	44.9	0.1	2.3	109.2	1.5	0.7	158.7
HC Emissions (g)	5	0	0	16	0	0	21
CO Emissions (g)	1682	1	109	6807	43	11	8652
NOx Emissions (g)	21	0	1	60	0	0	82

Total Network Performance

Total Delay (hr)	30.1
Delay / Veh (s)	45.4
St Del/Veh (s)	24.6
Stop/Veh	0.84
Avg Speed (mph)	26
Fuel Used (gal)	716.6
HC Emissions (g)	85
CO Emissions (g)	30877
NOx Emissions (g)	336

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	4.9	21.5	0.2	37
Park Ave	10	21.5	44.7	0.3	24
Irving Ave	7	5.5	29.4	0.3	40
Wyndam Rd	4	3.8	26.5	0.3	39
	1	1.0	6.2	0.1	38
Total		36.7	128.3	1.2	33

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	1.1	8.8	0.1	42
Wyndam Rd	4	2.2	7.5	0.1	31
Irving Ave	7	2.6	25.7	0.3	40
Park Ave	10	36.2	60.7	0.3	20
New York Ave	12	9.3	32.5	0.3	32
Total		51.4	135.1	1.1	29

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.1	0.5	0.5	0.0	1.4
Delay / Veh (s)	15.9	8.0	11.4	4.4	2.9	0.4	4.2
St Del/Veh (s)	14.5	7.4	8.3	1.0	1.0	0.3	1.8
Stop/Veh	0.88	0.89	0.68	0.13	0.13	0.23	0.19
Avg Speed (mph)	15	18	27	37	28	26	31
Fuel Used (gal)	2.7	2.1	1.5	30.1	10.8	0.2	47.3
HC Emissions (g)	0	0	0	4	1	0	5
CO Emissions (g)	27	57	15	825	292	2	1219
NOx Emissions (g)	0	1	0	16	5	0	23

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.9
Delay / Veh (s)	5.7	10.3	3.7	7.1	3.3	3.3	7.8	2.4	0.8	2.8
St Del/Veh (s)	5.5	8.6	3.4	4.2	0.2	0.2	4.8	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.01
Avg Speed (mph)	15	13	15	30	38	35	32	40	37	39
Fuel Used (gal)	0.1	0.0	0.0	0.2	50.4	0.5	0.1	57.4	0.1	108.8
HC Emissions (g)	0	0	0	0	8	0	0	8	0	16
CO Emissions (g)	1	0	0	9	2916	23	1	2596	4	5550
NOx Emissions (g)	0	0	0	0	30	0	0	34	0	64

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	1.3	0.0	0.1	2.0	0.1	0.4	0.6	0.1	0.8	0.9	0.2
Delay / Veh (s)	31.4	11.4	4.4	20.5	12.5	5.3	31.9	33.1	7.4	37.6	34.7	29.6
St Del/Veh (s)	27.0	5.7	1.9	15.9	5.7	2.0	29.6	30.2	5.0	34.7	31.3	28.0
Stop/Veh	0.95	0.37	0.48	0.77	0.37	0.44	0.94	0.89	1.00	1.03	0.94	1.04
Avg Speed (mph)	18	29	31	23	30	31	8	8	19	10	10	11
Fuel Used (gal)	4.2	35.4	2.1	2.0	44.8	3.7	2.4	3.8	1.5	5.9	6.7	1.9
HC Emissions (g)	0	4	0	0	5	0	0	0	0	0	0	0
CO Emissions (g)	129	1579	72	50	1127	104	46	83	57	123	114	51
NOx Emissions (g)	1	18	1	1	21	2	0	1	1	1	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	7.1
Delay / Veh (s)	16.9
St Del/Veh (s)	11.7
Stop/Veh	0.54
Avg Speed (mph)	23
Fuel Used (gal)	114.7
HC Emissions (g)	12
CO Emissions (g)	3535
NOx Emissions (g)	49

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.4	0.0	1.5	0.4	0.1	2.3
Delay / Veh (s)	3.3	11.8	7.1	33.8	11.7	6.6
St Del/Veh (s)	1.2	7.0	2.2	32.7	12.3	2.9
Stop/Veh	0.12	0.64	0.07	0.90	0.94	0.13
Avg Speed (mph)	37	27	33	6	11	32
Fuel Used (gal)	26.3	1.0	78.2	1.7	0.6	107.8
HC Emissions (g)	3	0	12	0	0	15
CO Emissions (g)	1195	37	4398	42	11	5683
NOx Emissions (g)	14	0	44	0	0	59

Total Network Performance

Total Delay (hr)	12.5
Delay / Veh (s)	25.8
St Del/Veh (s)	13.8
Stop/Veh	0.70
Avg Speed (mph)	31
Fuel Used (gal)	503.4
HC Emissions (g)	64
CO Emissions (g)	22524
NOx Emissions (g)	258

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	3.3	19.8	0.2	40
Park Ave	10	11.6	33.6	0.3	31
Irving Ave	7	3.8	28.9	0.3	41
Wyndam Rd	4	4.4	26.9	0.3	38
	1	1.2	6.4	0.1	36
Total		24.3	115.6	1.2	37

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.8	8.5	0.1	42
Wyndam Rd	4	2.9	8.2	0.1	29
Irving Ave	7	2.5	25.4	0.3	40
Park Ave	10	12.5	38.1	0.3	31
New York Ave	12	5.0	27.8	0.3	38
Total		23.7	108.0	1.1	36

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.6	0.5	0.0	1.4
Delay / Veh (s)	12.4	4.7	13.1	4.2	2.2	0.3	3.3
St Del/Veh (s)	11.0	4.7	10.2	0.8	0.6	0.2	1.1
Stop/Veh	0.95	0.94	0.78	0.10	0.08	0.12	0.13
Avg Speed (mph)	17	20	26	38	31	26	34
Fuel Used (gal)	1.1	0.9	2.3	37.3	14.0	0.5	56.1
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	11	7	22	956	392	8	1396
NOx Emissions (g)	0	0	1	19	7	0	27

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.6	1.3
Delay / Veh (s)	5.1	19.5	4.3	7.3	3.3	2.4	5.0	2.5	2.9
St Del/Veh (s)	4.9	18.0	4.3	3.2	0.1	0.1	2.4	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.50	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	14	9	13	32	38	35	32	40	39
Fuel Used (gal)	0.0	0.1	0.0	0.7	76.7	0.4	0.2	68.1	146.3
HC Emissions (g)	0	0	0	0	10	0	0	9	19
CO Emissions (g)	0	0	0	26	4141	18	5	2597	6787
NOx Emissions (g)	0	0	0	0	43	0	0	39	82

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.5	2.9	0.3	0.4	4.5	0.4	0.4	1.5	0.1	1.1	1.8	0.6
Delay / Veh (s)	41.3	14.6	7.9	34.7	20.1	11.9	42.1	41.4	8.7	63.5	61.4	51.8
St Del/Veh (s)	35.0	6.7	2.9	27.0	9.5	5.7	39.6	38.2	6.3	60.1	57.1	49.6
Stop/Veh	1.02	0.35	0.45	1.07	0.45	0.53	0.97	0.88	1.03	1.15	1.08	1.05
Avg Speed (mph)	15	27	28	18	25	27	6	6	18	7	7	8
Fuel Used (gal)	4.1	66.2	9.6	3.5	61.3	7.3	1.9	8.0	1.1	5.6	9.4	3.5
HC Emissions (g)	0	8	1	0	6	1	0	1	0	0	1	1
CO Emissions (g)	119	2705	347	47	1505	149	37	171	42	100	166	111
NOx Emissions (g)	2	31	4	1	25	3	0	2	0	1	2	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	14.3
Delay / Veh (s)	23.0
St Del/Veh (s)	15.3
Stop/Veh	0.55
Avg Speed (mph)	21
Fuel Used (gal)	181.6
HC Emissions (g)	19
CO Emissions (g)	5499
NOx Emissions (g)	72

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	1.2	0.0	0.1	1.9	0.3	0.1	3.7
Delay / Veh (s)	4.9	0.6	23.1	8.0	45.0	23.1	7.4
St Del/Veh (s)	1.5	0.5	16.8	2.1	43.8	23.8	2.8
Stop/Veh	0.11	0.00	0.89	0.11	0.93	0.89	0.14
Avg Speed (mph)	35	39	21	33	5	7	32
Fuel Used (gal)	44.9	0.1	2.0	96.9	1.5	0.7	146.1
HC Emissions (g)	5	0	0	14	0	0	19
CO Emissions (g)	1674	1	72	5100	43	11	6902
NOx Emissions (g)	21	0	1	54	0	0	76

Total Network Performance

Total Delay (hr)	21.8
Delay / Veh (s)	32.8
St Del/Veh (s)	17.5
Stop/Veh	0.70
Avg Speed (mph)	29
Fuel Used (gal)	691.3
HC Emissions (g)	82
CO Emissions (g)	28371
NOx Emissions (g)	336

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	4.9	21.5	0.2	37
Park Ave	10	14.7	37.9	0.3	28
Irving Ave	7	3.6	27.4	0.3	43
Wyndam Rd	4	4.2	26.8	0.3	38
	1	1.1	6.3	0.1	37
Total		28.3	119.9	1.2	36

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	1.1	8.8	0.1	42
Wyndam Rd	4	2.2	7.5	0.1	31
Irving Ave	7	2.6	25.7	0.3	40
Park Ave	10	20.1	44.6	0.3	27
New York Ave	12	6.8	30.1	0.3	35
Total		32.9	116.6	1.1	33

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.2	0.1	0.1	0.5	0.5	0.0	1.4
Delay / Veh (s)	15.9	8.0	11.3	4.4	2.9	0.4	4.2
St Del/Veh (s)	14.5	7.4	8.4	1.1	1.0	0.3	1.8
Stop/Veh	0.88	0.89	0.68	0.13	0.13	0.23	0.19
Avg Speed (mph)	15	18	27	37	28	26	31
Fuel Used (gal)	2.7	2.1	1.5	30.1	10.8	0.2	47.3
HC Emissions (g)	0	0	0	4	1	0	5
CO Emissions (g)	27	57	15	825	291	2	1218
NOx Emissions (g)	0	1	0	16	5	0	23

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.9
Delay / Veh (s)	5.7	9.6	3.7	7.3	3.5	3.7	7.7	2.4	0.8	2.9
St Del/Veh (s)	5.5	7.9	3.5	4.5	0.2	0.2	4.8	0.1	0.0	0.2
Stop/Veh	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.01
Avg Speed (mph)	15	13	15	30	38	34	32	40	37	39
Fuel Used (gal)	0.1	0.0	0.0	0.2	51.1	0.5	0.1	57.4	0.1	109.6
HC Emissions (g)	0	0	0	0	8	0	0	8	0	16
CO Emissions (g)	1	0	0	9	3012	25	1	2596	4	5648
NOx Emissions (g)	0	0	0	0	30	0	0	34	0	64

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.4	1.4	0.1	0.2	2.0	0.1	0.4	0.6	0.1	0.8	0.9	0.2
Delay / Veh (s)	32.1	11.9	8.4	21.3	12.4	5.3	32.2	33.1	7.4	37.1	34.4	29.0
St Del/Veh (s)	27.5	6.0	5.5	16.6	5.6	2.0	29.9	30.3	5.0	34.3	31.0	27.6
Stop/Veh	0.95	0.37	0.48	0.77	0.37	0.44	0.94	0.89	1.00	1.01	0.92	1.07
Avg Speed (mph)	18	29	28	23	30	31	8	7	19	10	10	11
Fuel Used (gal)	4.2	35.1	2.1	2.1	44.8	3.7	2.4	3.8	1.5	5.9	6.7	1.9
HC Emissions (g)	0	4	0	0	5	0	0	0	0	0	0	0
CO Emissions (g)	129	1555	70	49	1128	104	46	83	57	123	113	51
NOx Emissions (g)	1	17	1	1	21	2	0	1	1	1	1	1

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	7.1
Delay / Veh (s)	17.1
St Del/Veh (s)	11.8
Stop/Veh	0.54
Avg Speed (mph)	23
Fuel Used (gal)	114.3
HC Emissions (g)	12
CO Emissions (g)	3508
NOx Emissions (g)	49

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	SBL	SBT	NWL	NWR	All
Total Delay (hr)	0.4	0.0	1.5	0.4	0.1	2.3
Delay / Veh (s)	3.3	13.1	7.1	33.8	11.7	6.6
St Del/Veh (s)	1.2	8.2	2.2	32.7	12.3	3.0
Stop/Veh	0.12	0.64	0.07	0.90	0.94	0.13
Avg Speed (mph)	37	26	33	6	11	32
Fuel Used (gal)	26.3	1.0	78.1	1.7	0.6	107.8
HC Emissions (g)	3	0	12	0	0	15
CO Emissions (g)	1195	37	4396	42	11	5681
NOx Emissions (g)	14	0	44	0	0	59

Total Network Performance

Total Delay (hr)	12.6
Delay / Veh (s)	26.0
St Del/Veh (s)	13.9
Stop/Veh	0.70
Avg Speed (mph)	31
Fuel Used (gal)	503.9
HC Emissions (g)	64
CO Emissions (g)	22603
NOx Emissions (g)	258

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	3.3	19.8	0.2	40
Park Ave	10	12.1	34.1	0.3	31
Irving Ave	7	4.0	29.1	0.3	41
Wyndam Rd	4	4.4	26.9	0.3	38
	1	1.2	6.4	0.1	36
Total		25.0	116.4	1.2	37

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	0.8	8.5	0.1	42
Wyndam Rd	4	2.9	8.2	0.1	29
Irving Ave	7	2.5	25.4	0.3	40
Park Ave	10	12.4	38.1	0.3	31
New York Ave	12	5.0	27.8	0.3	38
Total		23.6	108.0	1.1	36

4: Wyndam Rd & Haddonfield Rd Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.6	0.5	0.0	1.3
Delay / Veh (s)	12.4	4.7	13.9	3.8	2.2	0.3	3.1
St Del/Veh (s)	11.0	4.7	11.2	0.7	0.6	0.2	1.0
Stop/Veh	0.95	0.94	0.78	0.08	0.08	0.12	0.12
Avg Speed (mph)	17	20	25	38	31	26	34
Fuel Used (gal)	1.1	0.9	2.3	37.2	14.0	0.5	56.0
HC Emissions (g)	0	0	0	4	2	0	6
CO Emissions (g)	11	7	23	942	395	8	1386
NOx Emissions (g)	0	0	1	19	7	0	27
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

7: Irving Ave & Haddonfield Rd Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Total Delay (hr)	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.6	1.6
Delay / Veh (s)	4.8	17.1	6.0	10.4	5.1	3.7	3.9	2.5	3.8
St Del/Veh (s)	4.6	15.6	6.0	3.8	0.1	0.1	1.3	0.0	0.1
Stop/Veh	1.00	1.00	1.00	0.67	0.00	0.00	0.33	0.00	0.01
Avg Speed (mph)	14	9	11	30	36	33	34	40	38
Fuel Used (gal)	0.0	0.1	0.0	0.8	89.2	0.5	0.2	68.0	158.8
HC Emissions (g)	0	0	0	0	12	0	0	9	21
CO Emissions (g)	0	0	0	41	5529	25	6	2585	8186
NOx Emissions (g)	0	0	0	0	48	0	0	39	88
Denied Entry Before	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0

10: Haddonfield Rd & Park Ave Performance by movement

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Total Delay (hr)	0.6	4.7	0.6	0.7	4.7	0.4	0.4	1.5	0.1	1.0	1.6	0.6
Delay / Veh (s)	50.4	23.3	18.8	59.6	21.1	12.6	45.6	40.5	9.0	56.8	56.1	47.8
St Del/Veh (s)	40.4	11.0	10.2	51.9	9.9	6.0	43.1	37.4	6.5	53.6	52.0	46.1
Stop/Veh	1.27	0.48	0.50	1.20	0.49	0.55	0.97	0.86	1.05	1.11	1.03	1.02
Avg Speed (mph)	14	22	22	12	24	26	6	6	17	7	7	8
Fuel Used (gal)	4.0	60.2	9.6	4.1	61.2	7.2	2.0	8.0	1.2	5.3	9.1	3.4
HC Emissions (g)	0	6	1	0	7	1	0	1	0	0	1	1
CO Emissions (g)	108	2142	313	47	1511	150	39	172	43	97	165	103
NOx Emissions (g)	1	24	3	1	25	3	0	2	0	1	2	1
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	1	0	0	0	0	0	0	0

10: Haddonfield Rd & Park Ave Performance by movement

Movement	All
Total Delay (hr)	16.7
Delay / Veh (s)	27.0
St Del/Veh (s)	17.3
Stop/Veh	0.61
Avg Speed (mph)	19
Fuel Used (gal)	175.2
HC Emissions (g)	17
CO Emissions (g)	4890
NOx Emissions (g)	64
Denied Entry Before	0
Denied Entry After	1

12: Haddonfield Rd & New York Ave Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWR	All
Total Delay (hr)	1.1	0.0	0.1	2.1	0.4	0.1	3.7
Delay / Veh (s)	4.5	0.8	22.2	8.5	46.4	23.7	7.5
St Del/Veh (s)	1.4	0.9	15.6	2.0	45.3	24.4	2.8
Stop/Veh	0.10	0.00	0.83	0.14	0.96	0.89	0.14
Avg Speed (mph)	35	39	21	32	5	7	32
Fuel Used (gal)	45.1	0.1	2.1	98.0	1.5	0.7	147.5
HC Emissions (g)	5	0	0	14	0	0	19
CO Emissions (g)	1696	1	83	5167	36	11	6994
NOx Emissions (g)	21	0	1	54	0	0	77
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

Total Network Performance

Total Delay (hr)	24.6
Delay / Veh (s)	37.1
St Del/Veh (s)	19.3
Stop/Veh	0.76
Avg Speed (mph)	28
Fuel Used (gal)	700.8
HC Emissions (g)	83
CO Emissions (g)	29466
NOx Emissions (g)	335
Denied Entry Before	0
Denied Entry After	1

Arterial Level of Service: NB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
New York Ave	12	4.5	21.1	0.2	38
Park Ave	10	23.4	46.5	0.3	23
Irving Ave	7	5.5	29.4	0.3	40
Wyndam Rd	4	3.8	26.4	0.3	39
	1	1.0	6.2	0.1	38
Total		38.2	129.6	1.2	33

Arterial Level of Service: SB Haddonfield Rd

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	1	1.1	8.8	0.1	42
Wyndam Rd	4	2.2	7.5	0.1	31
Irving Ave	7	2.6	25.7	0.3	40
Park Ave	10	21.2	45.6	0.3	26
New York Ave	12	7.6	30.8	0.3	34
Total		34.6	118.4	1.1	33

APPENDIX D

FEASIBILITY DETERMINATION FACTOR CHARACTERISTICS AND SAMPLE EVALUATIVE QUESTIONS

Reproduced from Knapp, Keith, *Guidelines for the Conversion of Urban Four-lane Undivided Roadways to Three-Lane Two-way Left-turn Lane Facilities*

Feasibility Determination Factor Characteristics and Sample Evaluative Questions

Factor	Characteristics	Sample Evaluative Questions
Roadway Function and Environment	• Actual, Expected, and Desired Primary Function (Access, Mobility, or a Combination of the Two) • Community Objectives/Goals for the Roadway • Available Right-of-Way • Current and Expected Adjacent Land Use	• What is the primary current, expected, and desired function of the roadway? • Is the roadway primarily a collector or minor arterial roadway? • Does the current roadway primarily operate as a "defacto" three-lane cross section? • Is the goal for the roadway improvement increased safety with somewhat lower mobility? • Is the right-of-way limited? • Will the adjacent land use remain relatively stable throughout the design period? • Will the proposed cross section match the desired function of the roadway? • Will the answers to the above questions remain the same throughout the design period of the project?
Overall Traffic Volume and Level of Service	• Total Daily Volume • Peak-Hour Volume (Morning/Noon/Evening) • Directional Split • Intersection and Arterial Level of Service • Side Street and Driveway Vehicle Delay • Volume of Frequent-Stop and/or Slow-Moving Vehicles • Signal Timing/Phasing • Arterial Travel Speeds and Vehicle Delays • Existence of Turn Lanes	• What is an acceptable increase in minor street or signal-related delay due to the conversion? • Is a decrease in arterial travel speed of 5 miles per hour or less acceptable? • What is an acceptable reduction in intersection level of service? • What level of daily traffic volume exists (for Iowa roadways and assuming a 50/50 split and 10 percent of daily volume occurs during peak-hour): ≤ 15,000 vpd (feasibility probable) 15,000 to 17,500 vpd (exercise caution) ≥ 17,500 vpd (feasibility less likely) • Does the signal timing/phasing need to be changed? • Does the current roadway primarily operate as a "defacto" three-lane cross section?

Turning Volumes and Patterns	• Number and Location of Turn Volumes and Access Points • Peak time period of Turn Volumes • Existence of Left-Turn and Right-Turn Lanes • Design of Access Points and Intersections • Turn Volume of Frequent-Stop and/or Slow-Moving Vehicles • Minor Street and Access Point Vehicle Delay • Signal Timing/Phasing	• Does the signal timing/phasing need to changes/optimized? • How important is it that right-turn vehicles quickly enter/exit the roadway? • Do the access point and intersections need to be redesigned (e.g., radii, approach slopes, location)? • Are right-turn lanes needed at particular locations? • Does the proposed marking allow the design vehicle (e.g., tractor-trailer) to turn properly? • What is an acceptable increase in minor street and/or left-turn vehicle delay? • Does the current roadway primarily operate as a "defacto" three-lane cross section?
Frequent-Stop and/or Slow-Moving Vehicles (e.g., agricultural vehicles, mail carriers, school buses, tractor-trailers, and buggies)	• Volume, Location, and Time of Frequent-Stop and/or Slow-Moving Vehicles • Type, Design (Length, Width, Turning Radius, etc.) and Speed of Vehicles • Arterial Travel Speeds and Vehicle Delays • Level of Enforcement for Proper TWLTL Use (i.e., No Passing Allowed)	• What is acceptable delay with respect to frequent-stop or slow-moving vehicles? • Can these vehicles turn properly at the access points and intersections? • Can no passing of these vehicles be enforced? • Are there locations for pull-outs for these vehicles? • Can some or all of the stop locations for the frequent-stop vehicles be combined?

Weaving, Speed, and Queues	• Signal Timing/Phasing • Number of Existing Lane Changes • Turn Volume and Location • Arterial Travel Speeds and Vehicle Delays • Level of Enforcement for Proper TWLTL Use (i.e., No Passing Allowed) • Number and Location of Turn Volumes and Access Points • Peak Time Period of Turn Volumes • Existence of Left-Turn and Right-Turn Lanes • Design of Access Points and Intersections • Turn Volume of Frequent-Stop and/or Slow-Moving Vehicles • Minor Street and Access Point Vehicle Delay • Queue Length • Number of Speeders (i.e., greater than 5 mph over the posted speed limit)	• Does the signal timing/phasing need to changes/optimized? • How important is it that right-turn vehicles quickly enter/exit the roadway? • Do the access point and intersections need to be redesigned (e.g., radii, approach slopes, location)? • Are right-turn lanes needed at particular locations? • What is an acceptable increase in minor street and/or left-turn vehicle delay? • Is a decrease in arterial travel speed of 5 miles per hour or less acceptable? • What is an acceptable change in queues? • Are there safety concerns related to weaving? • Can no passing be enforced? • Can drivers be educated about proper use of TWLTL? • Is a reduction in speeders and speed variability preferred? • Can all the old markings be completely removed? • Does the current roadway primarily operate as a "defacto" three-lane cross section?
Crash Types and Patterns	• Type of Crashes • Location of Crashes • Number and Location of Pedestrians and Bicyclists • Parallel Parking Need	• Can the crashes that are occurring be reduced with a conversion? • Will a reduction in speed and speed variability increase safety? • Are there safety concerns related to parallel parking maneuvers? • Do pedestrians and bicyclists have safety concerns?
Pedestrian and Bike Activity	• Number and Location of Pedestrians • Number and Location of Bicyclist Use • Characteristics of Pedestrians and Bicyclists (e.g., Age) • Bike and Pedestrian Friendliness of Roadway • Cross Section Width • Parallel Parking Need	• What is the pedestrian and bicyclist friendliness of the roadway? • Do pedestrians and bicyclists have safety concerns? • Will the addition of a TWLTL assist pedestrians and bicyclists? • How will pedestrians and bicyclists interact with parallel parking? • Can a bike lane be added after the conversion?

Right-of-Way Availability, Cost, and Acquisition Impacts	• Available Right-of-Way • Cost of Right-of-Way • Existence of Left-Turn and Right-Turn Lanes • Design of Access Points and Intersections • Number of Properties Needed and Environmental Impacts (e.g., Tree Removal) • Cross Section Width • Parallel Parking Need	• Is the right-of-way limited? • Will the cost of right-of-way acquisition be significant? • Do the access point and intersections need to be redesigned (e.g., radii, approach slopes, location)? • Are right-turn lanes needed at particular locations? • What is necessary in the cross section (e.g., bike lane, parallel parking, etc.)?
General Characteristics		
Parallel Roadways	• Roadway Network Layout • Volume and Characteristics of Through Vehicles Diverted • Impact of Diversion on Parallel Roadways	• Is a decrease in arterial travel speed of 5 miles per hour or less acceptable? • Does the signal timing/phasing need to changes/optimized? • Will conversion divert through vehicles to parallel roadways? • Is it possible to avoid or reroute the diverted traffic? • What is the impact on the parallel roadway environment?
Offset Minor Street Intersections	• Volume and Time of Left Turns • Queue Lengths • Distance between Minor Street Approaches	• Do left turns occur into both minor street/access point approaches at a similar time? • Are the left-turn volumes significant? • Will the left-turn volumes produce queues in the through lanes of a three-lane roadway?
Parallel Parking	• Parallel Parking Need • Number of Parking Maneuvers • Operational and Safety Impacts of Parallel Parking • Design of Existing/Proposed Parallel Parking	• Does parallel parking exist? • How many parking maneuvers occur during peak travel times? • What are the safety and delay concerns related to parallel parking maneuvers? • Is it possible to design these spaces for easy enter/exit (i.e., to minimize delay)? • Will it be necessary to reduce the number of parking spaces? • Does parallel parking reduce the ability of vehicles to turn in and out of minor streets and access points?

Corner Radii	• Design of Access Points and Intersections • Number and Location of Turn Volumes and Access Points • Peak time period of Turn Volumes • Existence of Left-Turn and Right-Turn Lanes • Turn Volume of Frequent-Stop and/or Slow-Moving Vehicles • Minor Street and Access Point Vehicle Delay	• How important is it that right-turn vehicles quickly enter/exit the roadway? • Do the access point and intersections need to be redesigned (e.g., radii, approach slopes, location)? • Are right-turn lanes needed at particular locations? • Does the proposed marking allow the design vehicle (e.g., tractor-trailer) to turn properly? • Do parallel parking spaces need to be removed to allow proper turning?
At-Grade Railroad Crossing	• Volume, Location, and Time of Train Crossing • Length of Crossing Train • Delay Impacts of Train Crossing • Queue Impacts of Train Crossing • Total Daily Vehicle Volume • Peak-Hour Vehicle Volume (Morning/Noon/Evening) • Directional Split of Vehicles	• Do trains cross during peak travel periods? What is the typical delay from train crossing? • Is double the current queue length (with four-lane undivided cross section) at a railroad at-grade crossing acceptable? • Would the delay impacts of double the current queue be acceptable?

Title of Report: ***Regional Road Diet Analysis – A Feasibility Assessment***

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Geographic Area Covered:
Sections of Parkway Avenue in Ewing Township, NJ 47 in Glassboro Borough, and Haddonfield Road in Pennsauken Township in New Jersey

Key Words:
Level of service, traffic calming, intersection, safety, crashes, crash types, statewide, road diet, mobility, pedestrian, speed, roadway, driveway, potential, deficiency, scenario, bicycle, two-way left-turn lane, average annual daily traffic volumes (AADT), peak-hour, approach, left-turn, access, peak-hour.

ABSTRACT: The goal of this project is to examine the effectiveness of road diet conversions on transportation safety while maintaining adequate traffic flow. In cooperation with our planning partners and other stakeholders, this project has identified guidelines for the conditions in which road diets are appropriate to accomplish the goal of increasing safety while preserving mobility. This is documented in *Road Diets: Primer* and *Municipal Implementation Tool #16*, *Road Diets* which discusses – what is a road diet, its effects and guidelines for application. This document showcases the feasibility assessment of select locations in the region for road diet application. An objective of this project is to show that the concept can be applied in many other projects and programs, and included in the toolbox of strategies for corridor studies and congestion management.

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